8-2024

Exploring Peer-Assisted Learning in a High-School-Based Suicide Prevention Intervention

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EXPLORING PEER-ASSISTED LEARNING IN A HIGH-SCHOOL-BASED

SUICIDE PREVENTION INTERVENTION

by

Sterling R. Morris

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Instructional Technology & Learning Sciences

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UTAH STATE UNIVERSITY
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2024

ABSTRACT

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Major Professor: Dr. Andrew E. Walker
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This dissertation explores peer-assisted learning in the context of a high-school-based organization that aims to help prevent suicide through gatekeeper training through a series of studies presented as a multi-paper dissertation. The presented studies include a literature review on peer-assisted learning, suicide prevention, and the Hope Squad organization, as well as two qualitative studies the author conducted involving high-school-aged Hope Squad members in Hope Squad chapters using peer-assisted learning for curriculum instruction. The author provided implications of this dissertation for peer-assisted learning researchers, Hope Squad, and other similar organizations.

Content Warning

This dissertation involves the topic of suicide, which some readers might find disturbing. If you are experiencing a mental health emergency and live in the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. The

hotline provides support 24 hours per day, seven days per week, and the support is confidential and free.

(466 pages)

PUBLIC ABSTRACT

Exploring Peer-Assisted Learning in a High-School-Based

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This dissertation evaluated a form of teaching called peer-assisted learning in which

people of similar ages and knowledge teach each other a subject. In this dissertation,

peer-assisted teaching occurred in a suicide prevention organization called Hope

Squad, which operates as individual chapters in high schools. The author first shared

details from other researchers' studies on peer-assisted learning, then conducted two

studies on this form of instruction in Hope Squad: The first study reported on the

experiences peers have from learning from their peers, and the second study reported

on peers' experiences teaching their peers. This dissertation may give researchers

further insight into the experiences of peer-assisted learning participants. Reported

results from this dissertation's studies could also help to guide Hope Squad and other

comparable organizations in the resources and support they might provide to their

peer-assisted learning participants.

DEDICATION

This dissertation is dedicated to those who are striving to prevent suicide and to survivors. I am glad you are here.

ACKNOWLEDGMENTS

The *Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad* study in Chapter IV was partly supported by a Graduate Student Research Award from the Emma Eccles Jones College of Education and Human Services at Utah State University and its Department of Instructional Technology and Learning Sciences.

Sterling R. Morris

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CHAPTER I

INTRODUCTION OF MULTIPLE-PAPER DISSERTATION

Peer-assisted learning (PAL) is an instructional method involving two or more students learning together when one student tutors the other student or students (Topping, 2001). Learning science research has established that PAL can promote positive learning outcomes for tutors (Lockspeiser et al., 2008) and those they are tutoring, hereafter referred to as tutees (Oliveira et al., 2015; Williams et al., 2014). Further, implementing PAL does not require the dedication of significant resources or time for administrators and thus may have fewer barriers preventing its implementation than more costly instructional methodologies (Topping, 2001). Much research exists on PAL's effectiveness in compulsory settings where students are tested and graded on learning outcomes (see Brierley et al., 2022; Cole et al., 2018; and Kassab et al., 2005). However, there is an overall lack of research on PAL in environments in which educators do not examine and grade students on the curriculum and in settings where students volunteer their participation to learn a curriculum that is nonetheless critical to master (for example, PAL's use in suicide prevention training programs).

Research Problem

Much is known and documented on PAL, as is discussed in further detail in Chapter II. However, although researchers have begun investigating suicide prevention training, including gatekeeper training among youth (Stuart et al., 2003; Walker et al., 2009), and others have examined it in college settings (Samuolis et al., 2020), no research has investigated the use of PAL in high school suicide prevention training settings.

This dissertation reviews PAL in the literature and contributes new research, documenting guidance on how educators might successfully apply it in suicide prevention training. Additionally, it will investigate PAL's use in a nationwide high school suicide prevention program from both tutee and tutor perspectives. This chapter introduces the topic of PAL, why researchers might want to study it in suicide prevention where it has not yet been thoroughly studied, the dissertation's research aims and objectives, and finally, why I selected a multi-paper dissertation format to present my work.

Background

Writers, historians, and scholars have documented peer learning in various education settings for centuries. Aristotle (384–322 BCE) assigned his best students, named archons, to lead and teach others (Sturdivant & Souhan, 2011). Evidence of peer teaching later appeared in Seneca the Younger's (65 CE) letters in which he wrote that we "learn while [we] teach" as we associate with others (1917, p. 35). Peer instruction was perhaps first systematically used and documented by the Scottish educationalist Andrew Bell, the superintendent of the charity school at Madras in India, who oversaw the education of orphaned children of soldiers during a period in which there was a shortage of teachers (Bell, 1797; Topping, 2001). Bell assigned older students to teach various subjects to younger classmates and noted that student satisfaction and behavior were favorable with peer teaching (see Figure I.1). Bell wrote:

> By the means of a few good boys, selected for the purpose, as teachers of the respective classes, form the whole school, teach their pupils to think rightly, and mixing in all their little amusements and versions, secure them against the contagion of ill example, or the force of ill habits; and, by

seeing that they treat one another kindly, render their condition contented and happy (Bell, 1797, pp. 26–27).

Figure 0.1

PAL Roles and Responsibilities at Madras in India

Class.	Teachers.	Age.	Time in school.	Assistants.	Age.	Time in school.	No. of boys in each class.	Total.	DAILY TASKS.
1	Char. Hancock	14 1	6 7	Tho. Adamson	11 11	4 6	34		Enfield's Speaker, Bible, Spectator, Writing, Arithmetic vulgar and decimal, Book-keeping, Grammar, Geography, Geometry, Mensuration, Navigation, and Astronomy *.
2	Geo. Stevens	14 3	7 4				25		Enfield's Speaker, Bible, Spectator, Writing, Arithmetic, and Grammar.
3	Wm. Faulkner	12 8	7 2				25		Enfield's Speaker, Testament, Spectator, Writing, Arithmetic, and Grammar.
4	Rob. Kentish	11 6	3 7				11	95	Select Stories, Writing, Arithmetic, and Tables.
5	John Friskin has charge of the rest of the school as follows.	12 8	7 4	James Shaw	11	3 4 4	12		Testament, Writing, and Tables.
6				Wm. Lantwar	11	6 6 3	9		Spectator, Writing, and Arithmetic.
7				Wm. Anchant	9	8 5 8	9		Psalter, Writing, and Catechism.
8				Fr. Lawrence	9	0 5 10	9		Spelling-book, Writing, and Catechism.
9				Rich. Steele	7	9 1 6	9		Child's Second Book, Stops, Marks, and Hymns.
10				Tho. Jones	9	7 5 5	10		Child's First Book, and Figures.
11				John Gore	9	2 2 2	16		Monosyllables.
12				T. H. Morris	8	9 1 8	17		Great and Small Alphabet.

Under the charge of John Friskin - - - - - - - - - 91

Teachers - - - - - - - - - - - - - 14

Total 24th June, 1796 - - - - - - - - - 200

* In regard to several of these sciences, nothing more is meant, in general, than that some of the boys, for whom it may seem eligible, are initiated in their first elements; so that if their future destination, or profession, or situation, require it, they may hereafter be able to build on the foundation which has been here laid.

Note. Image captured from "An experiment in education, made at the male asylum of madras: Suggesting a system by which a school or family may teach itself under the superintendence [sic] of the master or parent," by Andrew Bell, 1797, Cadell and Davies; W. Creech, Edinburgh, p. 19 [Digital copy available at: https://bit.ly/3JOlzPZ]. The image is in the public domain.

Educators later applied PAL in other settings, including English schools, during the 19th century. For example, Joseph Lancaster (1803) wrote about its success in the London Borough Road School of 350 boys (Lancaster & Corston, 2014). Publicizing the method spread its use to Eastern Europe and the United States in the early 1800s

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Figure 0.2

Suicide Mortality by State From 1999 to 2022 Among 15- to 24-Year-Olds

☐	5.6 – < 9.6	☐	9.7 – < 13.7
☐	13.8 – < 17.8	☐	17.9 – < 21.9
☐	22 – 26	☐	26.1 – 38.7
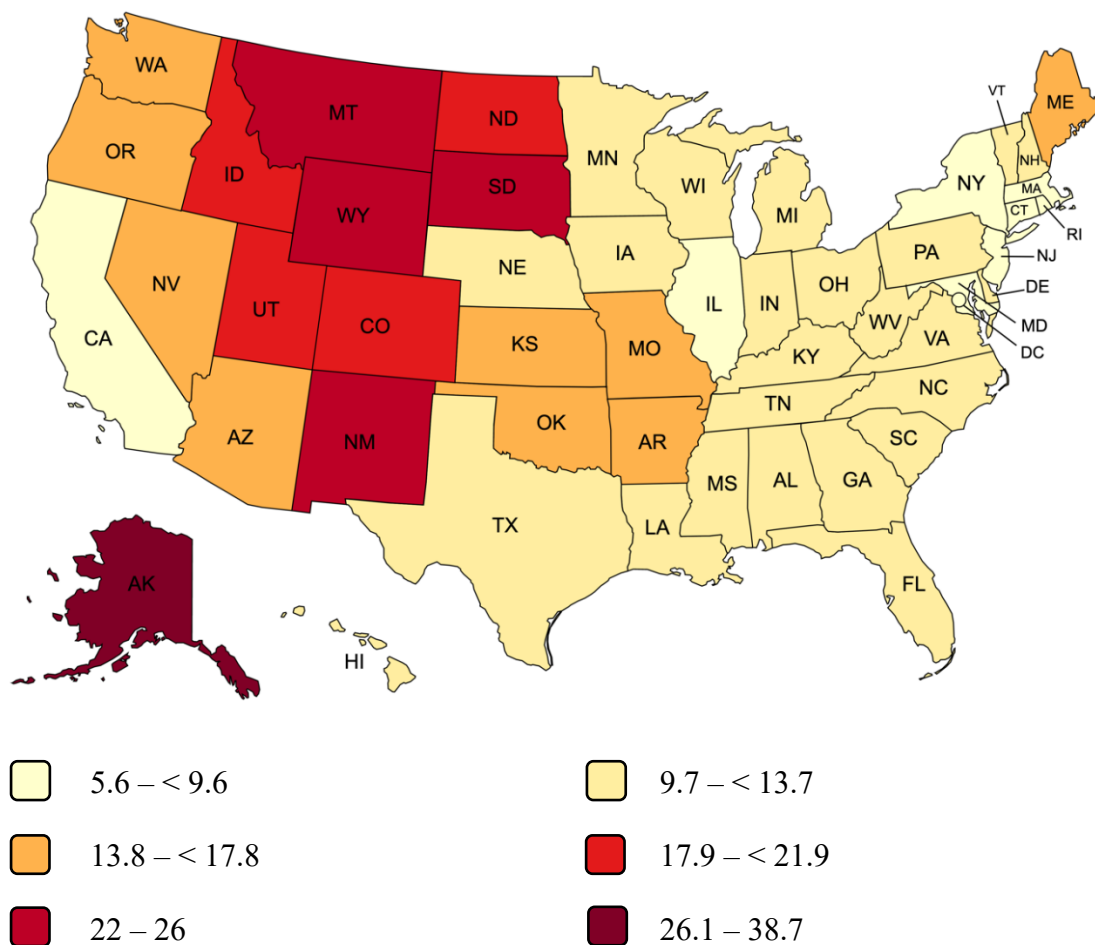
Note. Death rates are calculated per 100,000 total age-adjusted population by state
(Centers for Disease Control and Prevention, 2023).

Suicide is associated with several risks and protective factors at the individual,
relationship, community, and societal levels. Although suicide is prevalent among high-
school-aged youth and other populations, it is preventable (U.S. Public Health Service
Office of the Surgeon General, 1999; U.S. Department of Health and Human Services,
2012; U.S. Office of the Surgeon General, National Action Alliance for Suicide

Prevention, 2021). The U.S. Surgeon General outlined several strategy-aligned actions

high school educators can take to prevent suicide (see Table I.1).

Further, the Centers for Disease Control and Prevention espoused strategies to

prevent suicide, including sharing approaches and programs that address various factors

in preventing suicide (see Table I.2) (Centers for Disease Control and Prevention, 2022).

Table 0.1

Recommended Strategic Directions and Actions to Prevent Suicide by the U.S. Surgeon

General

Strategic Direction	Actions
Healthy and empowered individuals, families, and communities	• Activate a broad-based public health response to suicide. • Address upstream factors that impact suicide.
Clinical and community preventative services	• Ensure lethal means safety.
Treatment and support services	• Support the adoption of evidence-based care for suicide risk. • Enhance crisis care and care transitions.
Surveillance, research, and evaluation	• Improve the quality, timeliness, and use of suicide-related data.

Note. Adapted from *The Surgeon General's Call to Action*, by U.S. Office of the Surgeon

General, National Action Alliance for Suicide Prevention, 2021 (https://bit.ly/3zGFNqs).

Table 0.2

Strategies and Approaches to Achieve and Sustain Substantial Reductions in Suicide

(CDC)

Strategy	Approach
Strengthen economic supports	• Improve household financial security. • Stabilize housing.
Create protective environments	• Reduce access to lethal means among persons at risk of suicide. • Create healthy organizational policies and culture. • Reduce substance use through community-based policies and practices.
Improve access and delivery of suicide care	• Cover mental health conditions in health insurance policies. • Increase provider availability in underserved areas. • Provide rapid and remote access to help. • Create safer suicide care through systems change.
Promote healthy connections	• Promote healthy peer norms. • Engage community members in shared activities.
Teach coping and problem-solving skills	• Support social-emotional learning programs. • Teach parenting skills to improve family relationships. • Support resilience through education programs.
Identify and support people at risk	• Train gatekeepers. • Respond to crises. • Plan for safety and follow-up after an attempt. • Provide therapeutic approaches.
Lessen harms and prevent future risk	• Intervene after a suicide (postvention). • Report and message about suicide safely.

Note. Adapted from the Centers for Disease Control's *Suicide Prevention Resource for*

Action: A Compilation of the Best Available Evidence report, by the CDC, 2022, p. 16.

In the two decades since the U.S. Surgeon General's 1999 call to action to prevent suicide, researchers have investigated the effectiveness of various school-based suicide prevention programs, building the body of evidence consistent with the U.S. Surgeon General's "surveillance, research, and evaluating strategic direction" (p. 16). However, although scholars have investigated the effectiveness of various K–12 school-based suicide prevention programs (Valido et al., 2023; Volungis, 2020), there is a need for research on instruction within those programs.

Investigating instruction and learning outcomes in settings where students learn life-saving skills can support suicide prevention efforts. Moreover, the nature of the PAL pedagogical structure may align well with many of the actions and approaches outlined by the U.S. Surgeon General and CDC. Namely, PAL engages students in shared activities that help to "promote healthy connections" (p. 42) and can contribute to a learning environment where students feel safe, which is aligned with the CDC's strategy of creating protective environments. Furthermore, researchers have found that PAL participants can exercise and develop problem-solving skills (Kassab et al., 2005; Lundmark et al., 2017), also aligned with CDC's strategy to "teach coping and problem-solving skills" to prevent suicide (CDC, 2022, pp. 48–55).

Dissertation Aims and Objectives

Given the lack of research regarding PAL in high school suicide prevention settings, this dissertation reviews the literature on PAL. It adds to the literature by investigating its application in a high school suicide prevention setting, first from tutees' and then tutors' perspectives.

Objectives of this dissertation include:

Objective 1: Review the literature on PAL.

Objective 2: Explore PAL in gatekeeper training from tutees' perspectives.

Objective 3: Investigate PAL in gatekeeper training from tutors' perspectives.

The Multiple-Paper Dissertation as a Possible Solution

In Chapter I, the context of the study is introduced. Additionally, Chapter I outlines research objectives and questions and presents an argument for the value of such research. Chapter II reviews the existing literature to identify critical skills-development approaches and strategies for PAL within the context of suicide prevention instruction. In Chapter III, this dissertation explores the peer tutee experience. Finally, in Chapter IV, this dissertation examines the peer tutor experience.

Researcher Perspective

Andrew was a kind, funny, and intelligent classmate I knew in middle, junior, and high school. A shared classmate of ours, Andrew's neighbor, mentioned she saw he would occasionally mow their elderly neighbor's yard. During his free team, he enjoyed fishing and hunting. Then, one day, followed by another, his classroom seat was empty. We eventually learned he died by suicide, and I experienced the sadness, loss, and confusion that many students in my high school also felt. Our student body wore white ribbons following Andrew's passing to honor and remember him. The effects of suicide touch so many of us. Cerel et al. (2016) estimated that 48 percent of the population had

known at least one person who has died by suicide in their lifetime and that survivors of suicide are more likely to suffer from anxiety and other adverse effects.

I aim to live a happy, healthy, meaningful life with those I love. A meaningful life, for me, is one in which I take steps to reduce harm and suffering while positively impacting this world. In that light, I am motivated by evidence that suicide can be preventable. Students who invest time in suicide prevention training, sometimes in PAL settings, and how that reduces harm and suffering inspire me. Additionally, I have taught peers in PAL settings. Peer tutors have taught me various subjects, including suicide prevention skills. I have reflected on my valued and impactful PAL experiences while conducting this research. With hope, I think about current high school students who may be struggling as Andrew did but who may survive a crisis when someone they trust refers them to appropriate resources and support.

Definition of Terms

This dissertation defines the following terms included in this and subsequent chapters:

Cognitive congruence refers to how closely a learner and teacher or tutor share similar ways of thinking about a concept. An instructor shares cognitive congruence with their student when they have "the ability to express [themselves] in the language of the students, using the concepts they use and explaining things in ways easily grasped by students" (Schmidt & Moust, 1995, p. 5). The expressive ability associated with cognitive congruence is made possible in PAL by students who have recently experienced similar learning processes and challenges (Lockspeiser et al., 2008). Students learn from peers differently than from faculty. For example, students may feel more comfortable asking questions of a near-peer than a senior faculty member (Kumar, 2013).

Gatekeeper training is an interventional and extensively used suicide prevention training that teaches students to identify and refer at-risk individuals to support resources. It involves training individuals to intervene when identifying someone in a suicide crisis and providing them with the necessary resources. Gatekeeping is often associated with inequitable behavior that may limit underrepresented individuals' access to resources, including in educational settings (Janssen et al., 2022). However, gatekeeping in suicide prevention refers to training individuals who can intervene when they spot someone in a suicide crisis and get them the necessary resources. Furthermore, public health authorities and scholars have documented gatekeeper training as an evidence-based approach to preventing suicide (Centers for Disease Control and Prevention, 2022).

Hidden curriculum is "implicit and embedded in educational experiences in contrast with the formal statements about curricula and the surface features of educational interaction," as defined by Sambell and McDowell (1998, pp. 391–392). Students can learn professional behaviors and standards and take on values and behaviors from the hidden curriculum in various educational settings where it exists (Hatipoğlu & Semerci, 2023; Keshtgar et al., 2018). However, some researchers have interpreted hidden curriculum's presence negatively, often when they perceive it is planned (Alsubaie, 2015; Sambell & McDowell, 1998) or when students derive inaccurate conclusions from learning (Høgdal et al., 2021). For example, Elbow (1991) wrote about how timed writing tests might teach students that getting feedback on a draft and making improvements are unnecessary elements of the writing process (p. v). In this dissertation, some PAL researchers have sought to take on the perspective that a hidden curriculum is not planned and generally views its learning outcomes positively in PAL settings (McKenna & Williams, 2017; Trombulak, 1995; Williams & Nguyen, 2017).

Peer-assisted learning (PAL) is an instructional methodology defined as "the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions" (Topping, 2001, p. 2). It involves at least two participants in the same or similar social groups who are not professional teachers. These students learn by "helping each other to learn and learning themselves by doing so" (Topping, 2001, p. 2) in instructional sessions called tutorials (Olaussen et al., 2016).

Social congruence refers to the extent to which a learner and teacher or tutor share similar social roles, backgrounds, and experiences when referenced in this dissertation

(Lockspeiser et al., 2008; Schmidt & Moust, 1995). A tutee, for example, in a high school PAL intervention would have more social congruence with their high-school peer tutor, given their shared roles as high school students, than with their high school teacher, with the teacher's disparate role in the high school setting. In addition, social congruence directly influences the degree of cognitive congruence a student shares with an instructor, according to Schmidt and Moust (1995).

Student peers is a term used in this dissertation concerning schools with Hope Squads. Student peers are any enrolled student in the school and are part of the student body for which Hope Squad members are trained to apply their suicide prevention training where appropriate.

Suicide prevention, when referenced in the context of Hope Squad efforts, refers to the tactic Hope Squad deploys in training individuals to notice signs that someone is at risk, ask them questions, and refer them to support resources where trained professionals can further intervene to prevent suicide. As defined above, individuals are trained in these steps as part of *gatekeeper training*.

Tutees are individuals whom a peer or near-peer tutor teaches during a tutorial in PAL settings.

Tutors are students who teach at least one peer a portion of the curriculum in PAL settings. They can be the same age as tutees or slightly older.

CHAPTER II

PEER-ASSISTED LEARNING FOR GATEKEEPER TRAINING:

A LITERATURE REVIEW

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ABSTRACT

Peer-Assisted Learning for Gatekeeper Training:

A Literature Review

by

Sterling R. Morris, Doctor of Philosophy

Utah State University, 2024

Major Professor: Dr. Andrew E. Walker
Department: Instructional Technology & Learning Sciences

Peer-assisted learning involves two individuals of similar age or skill who are not professional teachers helping each other learn through tutoring. Scholars have investigated peer-assisted learning in many instructional settings. The author conducted this literature review to understand the affordances associated with peer-assisted learning in the various contexts in which scholars have studied it. He evaluated the literature using a social cognitive theory lens. He found that there are opportunities for researchers to document the application of peer-assisted learning in delivering suicide prevention training in high schools. That tutors and tutees benefit from peer-assisted learning is a common theme throughout the reviewed literature; however, scholars have noted that some tutees may feel uncomfortable with subject-matter knowledge their tutors have compared to that of their traditional teachers. The author additionally sought to identify and share instructional considerations educators might consider when implementing peer-assisted learning in high school suicide prevention settings. The author identified and

shared recommended steps educators should take when implementing peer-assisted

learning, including training tutors before asking them to tutor peers.

Introduction

Youth suicide is disruptive to healthy school environments for students, teachers, and other school personnel, with the most devastating cost being the loss of human life (Rishel, 2007). According to data from the Centers for Disease Control and Prevention (CDC; 2022a), suicide is the third leading cause of death among young people aged 15–19 in the United States, with a death rate of 10.6 per 100,000 in 2020, up from 7.9 per 100,000 in 2001 (see Figure II.1). Research by Kann et al. (2018) suggests that a significant portion of students in grades 9–12 have considered attempting suicide within 12 months, with 17% reporting suicidal ideation, totaling 22.4% of young women and 11.6% of young men. Additionally, 8% of students have attempted suicide at least once in the previous 12 months; of that group, 10.6% of young women and 5.4% of young men reported such attempts. The impact of suicide extends beyond the individuals who attempt or die by suicide because it also carries high costs (Shepard et al., 2016) and can have adverse effects on families (Andriessen et al., 2016; Asare-Doku et al., 2017), school counselors (Becnel et al., 2021; Christianson & Everall, 2009), students (Gould et al., 2018), teachers (Kõlves et al., 2017), and the broader community (Cerel et al., 2016; Hall et al., 2014).

Suicide prevention is a critical issue that primary and secondary (K–12) educators strive to address (Stuart et al., 2003; Wyman et al., 2010). However, it is essential to recognize that teachers have a wide range of responsibilities and face numerous demands on their time and resources, despite many feeling that they should have a role in suicide prevention (Hatton et al., 2017).

Figure II.1

Underlying Cause of Death, 2001–2020 for 15-19-Year-Old Youth
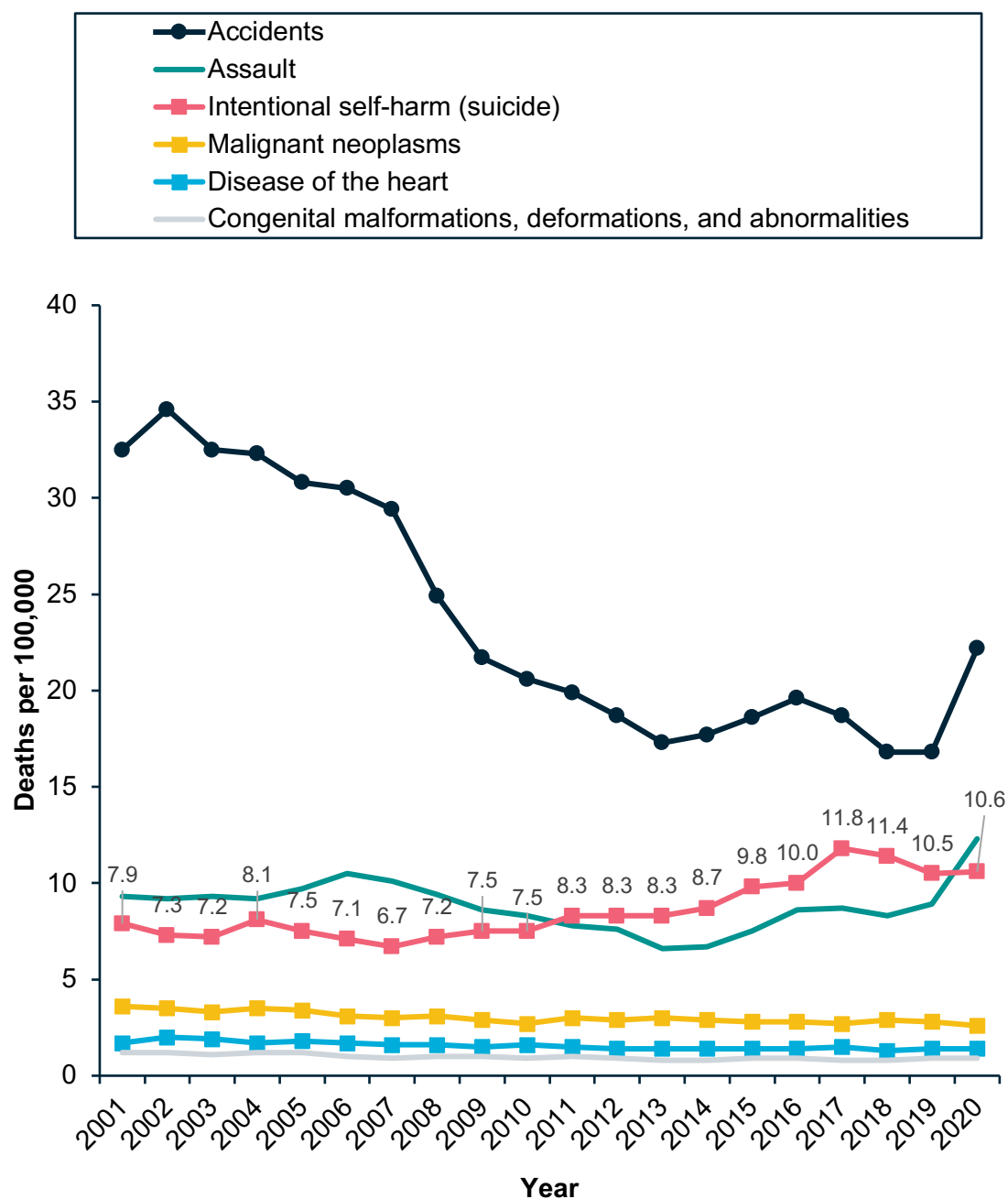
Note. Adapted from *National Vital Statistics System, Mortality 1999–2020 on CDC WONDER Online Database*, by Centers for Disease Control and Prevention, 2022a (https://wonder.cdc.gov/ucd-icd10.html).

In addition to helping students achieve positive learning outcomes and perform well on standardized tests, teachers must also support the development of higher-order thinking skills (Hwang et al., 2018) and 21st-century skills (Kong et al., 2014) and advance science, technology, engineering, and math (STEM) knowledge (Honey et al., 2014). Furthermore, educators are responsible for helping students build college readiness skills (Erdoğan & Stuessy, 2015) and fostering healthy learning environments (Modzeleski et al., 2012). Although suicide prevention efforts can be challenging for educators to incorporate into already time-limited schedules and finite budgets, they are crucial in saving lives (Stuart et al., 2003; Wyman et al., 2010).

School-Based Suicide Prevention Programs and Resources

Educators are not alone in their efforts to prevent suicide, nor are those efforts most effective. K–12 youth experiencing a suicidal crisis are likelier to tell a friend than a counselor (Bell et al., 2018; Rowe et al., 2014) or a healthcare professional (Hom et al., 2017; Husky et al., 2016). For this and other reasons, although mental health resources are often available for adolescents with mental disorders, those resources go underutilized (Barrow & Thomas, 2022; Kim et al., 2018). Therefore, it is essential to equip peers with the knowledge to support peers in need and refer them to available resources. Educating individuals on recognizing the signs of suicide among peers, asking them if they are having thoughts of suicide, and then guiding them to help if needed is called gatekeeper training. Gatekeeper training is one of many strategies the CDC supports (see Table I.2). Evidence demonstrates the effectiveness of gatekeeper programs for K–12 (Stuart et al., 2003; Williford et al., 2022) and college-aged students (Samuolis et al., 2020; Williford

et al., 2022). Although the term "gatekeeping" is often associated with inequitable behavior that limits underrepresented individuals' access to resources, including in educational settings (Janssen et al., 2022, p. 625), gatekeeping in the context of suicide prevention refers to the training of individuals who can intervene when they spot someone in a suicide crisis and get them the resources they need. The evidence suggests that gatekeeper programs can increase gatekeepers' knowledge (Groschwitz et al., 2017; Lamis et al., 2017), intervention skills (Katz et al., 2013; Walsh et al., 2013), and the likelihood of intervening (Lamis et al., 2017; Mo et al., 2018). These programs can also increase the ability of program participants to recognize signs of suicide ideation and improve their self-efficacy in providing recommended support (Holmes et al., 2021; Litteken & Sale, 2018).

Educators can choose from several gatekeeper training programs for high school settings. Programs include the Adolescent Suicide Awareness Program (ASAP), Gatekeeper Training for Suicide Prevention, Hope Squad, Mental Health First Aid (MHFA), Question, Persuade, and Refer (QPR), Suicide Options, Awareness, and Relief (SOAR), Sources of Strength, and teen Mental Health First Aid (tMHFA) programs (Centers for Disease Control and Prevention, 2022b; Katz et al., 2013). Some of these programs are utilized broadly throughout the United States. For example, more than 1,600 schools in 43 states and Canada are running the Hope Squad program in their school (Hope Squad, 2023b).

The evidence supporting each available gatekeeper program is not firmly established, as Katz et al. (2013) outlined in their systematic review of school-based suicide prevention programs. The authors, therefore, evaluated then-published program-

specific studies with the Oxford Centre for Evidence-Based Medicine's Levels of Evidence rubric (Howick, 2009), assigning the ASAP and QPR programs "D" grades for their effectiveness in training participants on proper gatekeepers' behavior. SOAR fared better with a "C" grade, and Sources of Strength fared better with a "B." Katz et al. (2013) did not include Hope Squad in their review, but other researchers have begun investigating it. For example, Wright-Berryman et al. (2022) documented how Hope Squad could promote positive attitudes and reduce suicide stigma. With a core purpose of training a select group of students within a school the skills to identify peers in need and refer them on to support, Hope Squads and Sources of Strength include the QPR program's curriculum in their program instruction (Hope Squad, 2023c; Williford et al., 2022). Understanding instructional effectiveness is essential because these programs rely on instruction to reach program objectives. Unfortunately, researchers have not published any studies investigating instruction in the Hope Squad program. Expanding the body of evidence on gatekeeper training outcomes is warranted, given the broad dissemination of these programs. Research that expands the understanding of instruction in Hope Squad could impact learning throughout North America and thus play a role in preventing suicide.

Peer-Assisted Learning

Topping (1996) defined peer-assisted learning (PAL) as "people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching" (p. 322). Olaussen et al. (2016) refer to PAL as an umbrella term encompassing various instructional methods, such as near-peer mentoring, peer tutoring, and near-peer tutoring.

PAL encompasses a range of approaches, including supplemental instruction, group tutoring, and peer-assisted writing (Topping, 1996). The authors recommend using descriptive language to differentiate between these interventions. This review will use the umbrella term "PAL" to refer to all studies, with plans to use the recommended nomenclature in future research.

Topping (2005) and Turner, White, and Poth (2012) have identified PAL as cost-effective pedagogical support in training settings. It can lighten educators' instructional burden, allowing them to focus on their teaching and professional responsibilities (Cohen et al., 2015). Research has also shown positive learning outcomes for peer mentors (Akinla et al., 2018; Anderson et al., 2015) and peer learners (Bester et al., 2017; Turner, White, Poth, & Rogers, 2012).

Although PAL is used to teach curriculum during compulsory training in some studies (Bonner et al., 2017; Shapiro et al., 2013), it is often a teaching method used in after-hours, supplemental settings (Jayathilake & Huxham, 2022) where participants may practice learning behaviors and have traits conducive to favorable learning outcomes. Thus, the learning outcomes reported in research may be subject to selection bias (Cole et al., 2018). Cummings and Sheeran (2019) found that learner traits, including motivation and personality, significantly affected PAL learning outcomes. However, performance outcomes were still favorable based on PAL study session attendance, regardless of personality and motivation.

Tibingana-Ahimbisibwe and colleagues' (2022) systematic review of PAL in online-exclusive higher education distance learning environments notes that many of PAL's benefits apply in exclusively remote settings. For example, PAL has helped

participants overcome isolation (Huijser & Kimmins, 2006) and increase collaboration with peers (Motzo, 2016; Ruane & Lee, 2016) while deepening their understanding of course content (Huijser & Kimmins, 2006). Further, PAL increased academic studies engagement among PAL participants (Crowley-Cyr & Hevers, 2021; Williams & Kim, 2011).

This manuscript aims to review the corpus of existing literature on PAL and examine how gatekeeper programs can effectively incorporate it into instruction. The review will focus on identifying the benefits of PAL and will inform a future empirical study on the learning and perception outcomes of Hope Squad PAL-based instruction. The following research questions guided the review and analysis of the literature referenced in this paper:

- RQ1: What does the literature reveal about PAL's effectiveness in supporting learning?

- RQ2: What research-informed instructional considerations should guide using PAL for gatekeeper training in the Hope Squad program?

Method

Literature Search

Searches for articles related to PAL were not restricted by publication year. Instead, the search parameter limiting results to full text from scholarly peer-reviewed journals was applied where available. I included databases *Education Source, ERIC, Google Scholar, MEDLINE,* and *PsycINFO*. In addition, search terms, including combinations of peer-assisted learning, near-peer, high school, training, near-peer

instruction, near-peer teaching, and near-peer mentor using a Boolean operator, were used as represented in Table II.1.

Inclusion Criteria

The search terms produced 58,446 article results to consider for inclusion in the literature review. Applying the below primary inclusion criteria limited the list to $n = 1,360$, and using the secondary criteria further reduced it to $n = 73$. The initial articles screened ($n = 1,360$) and considered for review inclusion must have met the following primary and secondary criteria following the table below.

Table 0I.1

Peer-Assisted Learning Literature Search Results and Screening

Database	Search terms	Results	Screened
Education Source			
	"Peer-assisted learn*"	1,871	100
	"Near-peer mentor*"	113	100
	Near-peer AND "high school*"	214	100
	Training AND peer AND "high school*"	53,729	100
	"Near-peer instruction*"	12	12
ERIC			
	"Peer-assisted learn*"	202	100
	"Near-peer mentor*"	27	27

Database	Search terms	Results	Screened
	Near-peer AND "high school*"	22	22
	Training AND peer AND "high school*"	306	100
	"Near-peer instruction*"	13	13
Google Scholar			
	"Peer-assisted learn*"	186	100
	"Near-peer mentor*"	356	100
MEDLINE			
	"Peer-assisted learn*"	0	0
	"Near-peer mentor*"	63	63
	Near-peer AND "high school*"	14	14
	Training AND peer AND "high school*"	589	100
	"Near-peer instruction*"	0	0
PsycINFO			
	"Peer-assisted learn*"	103	100
	"Near-peer mentor*"	5	5
	Near-peer AND "high school*"	4	4
	Training AND peer AND high school*	385	100
	"Near-peer instruction*"	232	100
Total		58,446	1,360

Primary Criteria

1. Language: The authors published the study in English.

2. Focus: The primary theme of the article should be PAL or peer teaching.

Secondary Criteria

After meeting the initial criteria, Akinla et al.'s (2018) hierarchy of evidence was adopted to exclude articles that were not or did not substantively I could not classify as one of the following forms of content:

1. Randomized controlled trials.

2. Systematic reviews.

3. Quantitative studies.

4. Mixed-methods studies.

5. Qualitative studies/policy documents.

6. Expert opinion.

Seventy-three articles met the primary and secondary inclusion criteria and were subjected to further analysis.

Reference Analysis

The sources cited by the initial articles ($n = 73$) for analysis were to ensure foundational works in PAL were captured with the initial search and screening for eligibility using primary and secondary criteria. Additional articles were identified ($n = 1,977$) with this process. Identified articles cited in at least four articles from at minimum three different authors among the 73 manuscripts were isolated ($n = 28$) and screened against the primary and secondary criteria. Through this analysis, additional articles ($n = $

21) were included, and duplicates ($n = 3$) were removed. Along with the articles identified for inclusion, four books visible in the reference-checking process were included (Bandura, 1977; Lave & Wenger, 1991; Topping, 2001; Vygotsky, 1978). A total of 98 publications were included in the literature review. The PRISMA flow diagram (Moher et al., 2009) was adapted to outline the process used to guide the identification, screening, assessment for eligibility, and selection of publications for inclusion (see Figure II.2).

Final Sample

Although publication year search restrictions were not used, 65 articles published within the last decade (2012–2022) were selected. The remaining research articles ($n = 29$) and books ($n = 4$) were published before 2012. Available literature specific to K–12 education- and PAL is limited (highlighting the imperative for academic inquiry into PAL within primary and secondary education contexts); therefore, this literature included articles investigating PAL in higher education, technical, and professional training. The books identified, screened for eligibility, and included were Bandura's (1977) *Social learning theory*, Lave and Wenger's (1991) *Situated learning: Legitimate peripheral participation,* Topping's *Peer assisted learning: A practical guide for teachers,* and Vygotsky's (1978) *Mind in society: The development of higher psychological processes*. These works provide an essential theoretical framework by which articles in this literature review were assessed.

Figure II.2

Modified PRISMA Flow Diagram
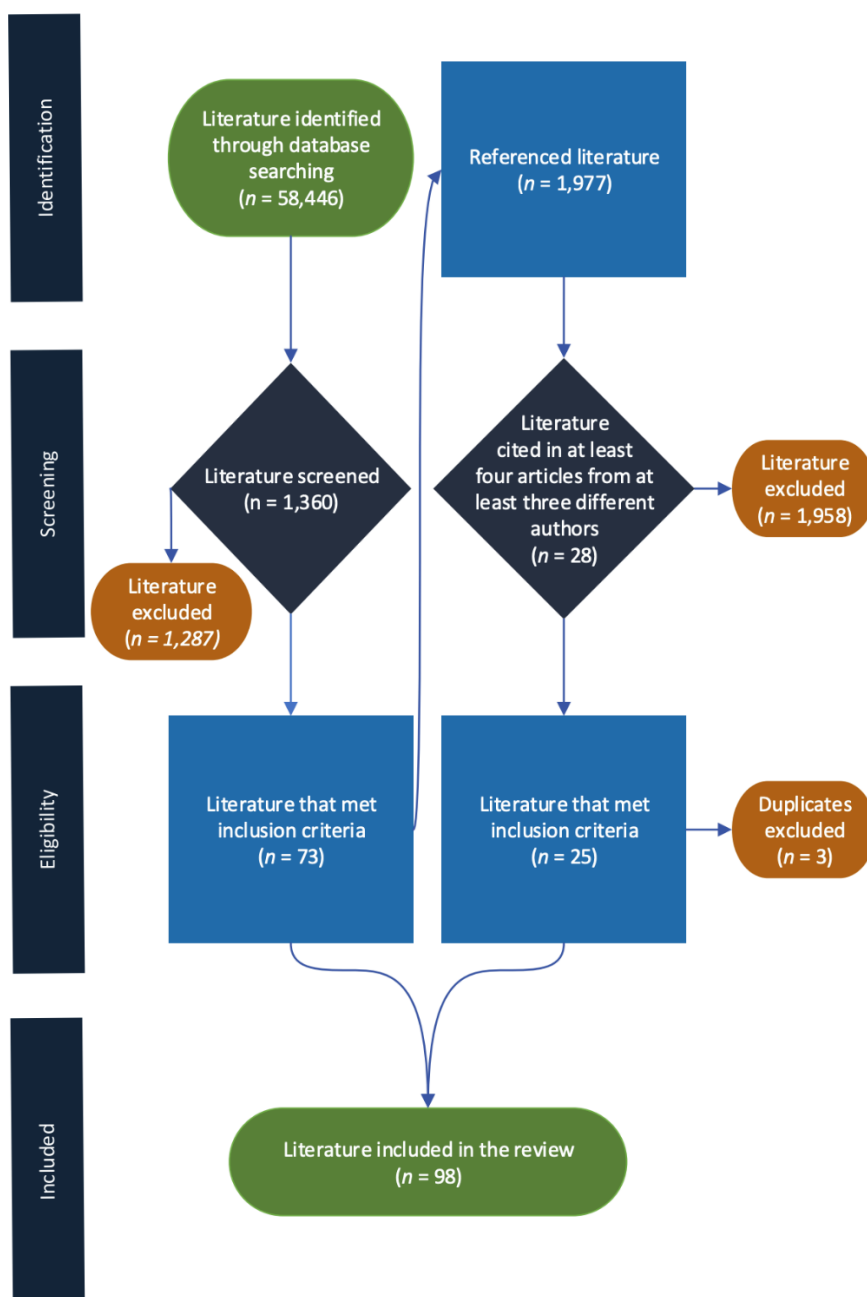
Note. Adapted from "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement," by D. Moher et al., 2009, *BMJ*, *339*(b2535), (https://doi.org/fmvxsp).

Theoretical Framework

In its simplest form, PAL is a mutually beneficial learning relationship. PAL consists of a curriculum, learning objectives, and at least two participants: a tutor (sometimes referred to as a mentor) and a tutee (sometimes referred to as a mentee) (Olaussen et al., 2016; Topping, 1996). The tutor and tutee might be the same age or near in age and near in their abilities. Research findings reported in this literature review will follow Topping's (1996) typology, classifying peer instructors, near-peer tutors, and other peers serving in an instructional role as *tutors.* Students, near-peer learners, and other titles referring to the traditional learner in a PAL scenario will be referred to as *tutees* for consistency.

PAL's social nature can be viewed through the lenses of many possible learning theories, so more than one was considered for this literature review. The Zone of Proximal Development (ZPD) concept in Vygotsky's (1978) social development theory provides insight to those evaluating the tutoring space. The ZPD highlights the gap between the learner's current and potential abilities as they seek to develop knowledge and skills. Vygotsky (1978) wrote that this gap is best identified "through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Further, he wrote that learning occurs in this space "only when the child is interacting with people in his environment and in cooperation with his peers" (p. 90). Researchers have applied this framework to describe how peer tutors and tutees work toward learning in this identified zone (Murphey & Arao, 2001; Niday & Campbell, 2000; Williams & Nguyen, 2017; Williams et al., 2015).

PAL is a process where a tutee is guided by a slightly more knowledgeable tutor along the learning process, often in situated learning environments. Researchers have applied Lave's (1988) situated learning theory to analyze PAL, given its situated learning positioning (Tucker-Raymond et al., 2016; Turner, White, Poth, & Rogers, 2012). In addition, researchers have referenced Lave's and Wenger's (1991) legitimate peripheral participation work as it applies to PAL (Turner, White, Poth, & Rogers, 2012; Turner, White, & Poth, 2012). Tutors and tutees learn from PAL opportunities, and their knowledge changes from their interactions. According to Lave and Wenger (1991), learners evolve from membership in a learning community. Additionally, a core tenet of learning in communities of practice is that learning is not necessarily exclusive to formal learning goals. Researchers have documented that learning may happen independently of formal goals, and both PAL tutees and tutors can achieve learning outcomes not tied to formal goals—often referred to as hidden curriculum (McKenna & Williams, 2017; Williams & Nguyen, 2017).

Though this literature review could apply the above theories to help answer the first research question, Bandura's (1977) social cognitive theory was ultimately identified for primary use in this literature review because PAL research overlaps with the determinants included in Bandura's theory closely. Bandura contends that people learn by observing others and that factors beyond the learner's behavior shape their learning outcomes. The personal, behavioral, and environmental determinants in Bandura's (1977) triadic reciprocal causation model attribute learning to the dynamic environment and unique interactions learners encounter (see Figure II.3).

Figure 0.3

Triadic Reciprocal Causation Model
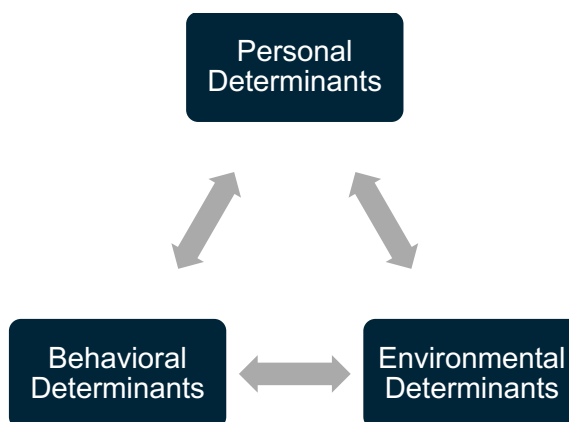
Note. The arrows between each set of determinants represent the concurrent and ongoing interactions, i.e., the reciprocal interactions that prompt learning. Adapted from *Social Learning* Theory (p. 10) by A. Bandura, 1977, Prentice-Hall. Copyright 1977 by Prentice-Hall, Inc.

Because the PAL environment differs from traditional instructional settings, PAL tutees' and tutors' learning behavior is unique. Further, researchers discuss elements of personal determinants like self-efficacy and attitudes in PAL literature. However, researchers have applied Bandura's theory to PAL-based models only sparingly (see Clarke-Midura et al., 2018; Pon-Barry et al., 2017; Sun & Clarke-Midura, 2022, for examples). Therefore, evaluating PAL using the triadic reciprocal causation model may bring unique insight into PAL while revealing answers to the second research question (see Table II.2).

Table II.2

Methods to Address Research Questions

Research question	Data source	Analysis technique
1. What does the literature reveal about PAL's effectiveness in supporting learning?	Total ($n = 94$) articles and books ($n = 4$) that met inclusion criteria.	Classify literature findings on PAL effectiveness within Bandura's (1977) triadic reciprocal causation model, sharing insights illustrating reciprocity between the model's personal, behavioral, and environmental determinants. Secondly, identify and outline the benefits and weaknesses of PAL reported in the literature.

Research question	Data source	Analysis technique
2. What research-informed instructional considerations should guide Hope Squad's use of PAL for gatekeeper training?	Total ($n = 94$) articles and ($n = 1$) book (Topping, 2001).	Classify literature findings within Topping's (2001; 2005) PAL planning and implementation dimensions of context, objectives, curriculum area, selection, and matching of participants, the technique for helping, contact, materials, training, process monitoring, assessment of students, evaluation, and feedback.

Topping (1996; 2005) wrote that the integrity of the PAL program implementation is becoming an increasing focus of educators and researchers. Topping (1996) outlined organizational variables to guide planning a PAL learning intervention, including curriculum content, contact constellation, year of study, ability, role continuity, place, time, tutee and tutor characteristics, and objectives. Topping (2001; 2005) recommended several dimensions to consider when implementing a PAL intervention, including its context, objectives, and participants, among other dimensions. Yu et al. (2011) encouraged future researchers to describe their findings based on Topping's dimensions. This literature review attempted to follow Yu et al.'s recommendations by investigating the selected literature using the lens of each of Topping's (2005) typology dimensions, identifying practices that may be helpful to apply in gatekeeper training activities when PAL is applied.

Results

In discussing his initial social learning theory, Bandura (1977) posited that those regulatory processes shape learning and psychological functioning. These processes occur as interactions between personal, behavioral, and environmental determinants in a learner's world. Interaction between any two determinants occurs concurrently and is ongoing. Bandura identifies that a stimulus from one determinant can trigger an alternative determinant response, triggering a reinforcer (p. 97–101). Thus, the learning conditions not only shape the learner, but the learner simultaneously plays a role in shaping those conditions.

This review has identified interactions and outcomes associated with at least two determinants in the following subsections to answer its first research question. However, these may not represent the full scope of PAL-related learning activities that could be classified within Bandura's model.

What Does the Literature Reveal About PAL's Effectiveness in Supporting Learning?

Reciprocity Between Personal and Behavioral Determinants

Bandura (1977) acknowledged that genetics partly influences behavior but argued that experiential learning and vicarious experience are more impactful factors influencing behavior development. Personal determinants of PAL participants might include learner characteristics, such as self-efficacy and cognitive perceptions. Bandura (1977) included "endowed personalities, acquired competencies, reflective thought, and a high level of self-initiative" (p. 207) as an example of many personal determinants that *may* lead to human accomplishment. I emphasized the qualifier "*may"* to reflect Bandura's view of how much or little personal determinants can affect a learner's behaviors. The social cognitive theory also acknowledges that a learner's environment affects behavior and that all three categories interact reciprocally.

In addition to influencing tutees, PAL might enhance tutors' intrinsic motivation, a personal determinant, as they learn the material, knowing they will later need to teach it (Bulte et al., 2007; Ten Cate & Durning, 2007). As PAL tutors interact with tutees and engage in other tutor behaviors, some characteristics of their determinants, such as their confidence and leadership skills, may increase (Burgstahler & Crawford, 2007).

Burke et al. (2007) documented PAL applied to a medical school environment and found that using PAL boosted trainees' confidence in their performance. Following PAL training, participating students showed a significant increase in their confidence. In addition, trainers and trainees gained knowledge from the PAL activities, with higher pass rates on exams for PAL participants than non-PAL participants.

Le Doux and Waller's (2016) article illustrated interactions between personal and behavioral determinants. Le Doux and Waller wrote about a problem-solving studio environment where the instructor paired entry-level college engineering students with peers to solve engineering problems. Pairs of learners sat at a table next to another table of two learners, each with four learners per table. The studio instructor gave the entire studio a problem to work on. Roaming PAL tutors then adjusted the problem to being within the ZPD for each pair of learners. PAL tutors supporting tutees in the studio were selected based on their past performance in the same course. Student pairs would then solve each problem using a sheet of 17 by 22-inch blotter paper and a single marker. While writing out and attempting to solve each problem, the studio instructor encouraged students to explain their thoughts as their partner listened and provided feedback. We can attribute following a unique set of prescribed behaviors, including showing one's work and problem-solving process on a shared space of the blotter paper while explaining their reasoning to their paired student and roaming PAL tutor, to personal and behavioral determinants.

Le Doux and Waller (2016) believe the problem-solving studio environment promotes learning. It requires students to verbalize and defend their problem-solving approach, which may help them draw conclusions and inferences from a problem

statement when information is missing. Working with a peer may help students argue a point and communicate effectively. The student pairs' illustrations on the blotter paper are visible to peers, PAL tutors, and the course instructor. This visibility may motivate students to perform well, altering their behavior as part of the learning activity (Le Doux & Waller, 2016).

Reciprocity Between Personal and Environmental Determinants

According to Bandura (1977), "because personal and environmental sources of influence function as interdependent rather than separate determinants … one must analyze how each is conditional on that of the other" (p. 197). The interchange between a learner's environmental and personal determinants is unique in PAL settings. Applying the lens of Bandura's determinants in viewing the interaction between a tutee's personal and environmental determinants—including how they shape and are shaped by a tutor—illustrates this unique learning interaction. Topping (1996) wrote that not just the tutee's knowledge stands to benefit from PAL interactions but that tutors "learn themselves by teaching" (p. 322). Researchers have suggested that a linkage may exist between peer tutors' success and the cognitive congruence they share with tutees (Lockspeiser et al., 2008). Lockspeiser et al. also documented the benefits of social congruence on learning outcomes in PAL settings. Tutors who share cognitive congruence with tutees can more readily teach at an appropriate cognitive level than an experienced faculty member or teacher.

Cognitive Congruence. Defined as "the ability to express oneself in the language of the students, using the concepts they use and explaining things in ways easily grasped by students" (Schmidt & Moust, 1995, p. 3), cognitive congruence determines how a tutee's personal determinants interact with her environment, specifically with a tutor. Students learn from peers near them differently than from faculty. Students may feel more comfortable asking questions of a near-peer than of a senior faculty member (Kumar, 2013). Individuals who share a similar knowledge base have more cognitive congruence or less cognitive distance than students whose knowledge base is mainly different from their teacher or professor (Ten Cate & Durning, 2007).

How the environmental determinant of cognitive congruence affects the experience of medical students who participated as PAL tutees is a theme that emerged in this literature review. Lockspeiser et al. (2008) invited those medical students who participated as tutees in a medical scholars' PAL program at the University of California, San Francisco School of Medicine, to a follow-up focus group during the 2004–2005 academic school year. The researchers randomly invited twenty-three tutees to participate, and eight participants opted to join the focus group. These tutees discussed the value of cognitive congruence, noting they understood their tutors had recently struggled to learn the material reviewed in PAL sessions. This struggle helped build empathy and understanding of what the tutees were experiencing. The tutors' experience with recently learning the material also helped them explain how they had learned the concepts. For example, one tutee wrote, "They have the perspective of having just learned it as opposed to innately knowing it and … they remember recently having gone through the learning process" (Lockspeiser et al., 2008, p. 365). Tenenbaum et al. (2017)

documented feedback from tutees tutored by slightly older tutors. One student said the tutors' "closeness in age made them relatable and able to teach concepts in a way that was fun and understandable" (p. 7).

Bulte et al. (2007) assessed student PAL participants' perceptions of teaching among sixth-year medical students who taught first- and second-year medical students in PAL near-peer teaching programs at two medical schools. The PAL instruction occurred for six weeks. The researchers asked tutors who participated in the program to complete a survey, and the researchers sent a second survey to tutee participants. In response to a free-text question where the authors asked students to summarize near-peer teaching strengths and weaknesses, Bulte et al. noted that since PAL tutors are closer to tutees' training level than professors' training, they documented tutors as better explaining challenging concepts in accessible, understandable ways.

The cognitive congruence between tutees and tutors significantly affected tutees' perceptions, as shown in Kassab et al.'s (2005) study. For example, the researchers rated tutors' ability to provide feedback significantly higher than the faculty's ability to do the same at a medical school following a randomized study of a PAL intervention ($p < 0.05$). Kassab et al. randomly assigned medical students to either a student-led or faculty-led hematology tutorial as part of the study. Following the tutorial, researchers asked tutees to evaluate their instructor's performance or several measures using a Likert scale questionnaire. Tutees said the student tutors performed better than faculty tutors, including establishing a better tutorial atmosphere ($p = 0.013$), making decisions ($p = 0.001$), and reacting to the tutor group leader ($p = 0.012$). Thus, Kassab et al. hypothesized that a relationship exists between this significant performance among tutors

and the tutors' displayed cognitive congruence during tutorial groups. However, tutees'

perceived performance advantage in their student tutors' instructional abilities did not

seem to impact any measures of tutees' performance. Furthermore, Kassab et al. could

not show significant differences in students' exam scores from the faculty-led

hematology tutorial compared to students instructed in the student-led hematology

tutorial.

Tutors' personal and educational development affects their understanding of the

curriculum, the words they might use to communicate concepts within the curriculum,

and how relatable they might be as they work to support tutees. Within the cognitive and

social congruence theory, tutors whose knowledge and skills are slightly more developed

than tutees have less cognitive distance than much more advanced tutors (Hall et al.,

2014). Jackson and Evans (2012) argued that although some distance between tutors and

tutees could be valuable, no research had documented optimal distance.

Hall et al. (2014) evaluated how different cognitive distances affect learning

experiences and outcomes in a PAL experiment conducted at a medical school in the

United Kingdom. In the study, a senior medical student taught course material to junior

medical students, and then a junior doctor taught additional material to junior medical

students. Another set of students first learned from a junior doctor, then a medical

student. Hall et al. asked students to complete a questionnaire following their session.

The junior medical students perceived significantly greater enjoyment from senior

medical student interactions than junior doctor interactions ($p < .01$). Students also

preferred the delivery approach of senior medical students. Students felt it was a better

time to use at significant levels ($p < .05$, $p < .01$, respectively). These findings document

that closer distance between tutor and tutee can positively impact the student learning experience.

Some distance, however, may be helpful (Jackson & Evans, 2012). Shapiro et al. (2013) compared learning outcomes from genomic annotation instruction provided by near-peer tutors (students who had previously taken an undergraduate bioinformatics course) with co-peer students (students currently taking the course, assigned by facilitators to become experts on individual modules) in an undergraduate bioinformatics course. Near-peer tutors were more effective than co-peer students at communicating conceptual knowledge with students in the course. The researchers also found that near-peer tutors were more effective at helping students understand how genomic annotation fits within bioinformatics, something the researchers believe would motivate students (Shapiro et al., 2013).

Wilson et al. (2014) gathered similar feedback from tutees in their study of a PAL intervention between first-year pharmacy students whom either second-, third-, or fourth-year students tutored. Tutees negatively commented on the need for more knowledge of tutors in their second year of the program. Pharmacy students appeared to prefer receiving tutorial support from students with more cognitive distance and, thus, more established curriculum knowledge than the second-year students' single year of development.

Lack of enough knowledge to support tutees who have questions is not the only documented challenge of tutees whose tutors have too little cognitive distance. Singh (2010) wrote that students compete with their peers since their performance is evaluated compared to their peers. The evaluation element of many learning outcomes is an

environmental determinant that shapes personal determinants, like a student's reflective thoughts. According to Singh, this sense of competition hinders learning. Some distance between tutors and tutees can reduce the competition tutees might feel while promoting learning in a friendly, less competitive environment.

Social Congruence. As valuable as cognitive congruence appears within a PAL environment, social congruence may bring even more value to tutees and tutors. Social congruence—that is, both the teacher and learner's ability to communicate comfortably and informally—is more important than cognitive congruence, according to Schmidt and Moust (1995). Schmidt and Moust also found that social congruence and subject-matter expertise affect cognitive congruence while promoting self-directed learning among tutees. The authors emphasized that an empathetic attitude, perhaps more naturally held by PAL tutors, may help create an atmosphere where tutors and tutees more openly exchange ideas. Bulte et al. (2007) found that tutors better understand their tutees' challenges and problems because tutees and tutors are closer to each other than teachers are to the tutees. Tutees responding to the survey mentioned that their PAL tutors could explain challenging concepts at an appropriate level.

Bandura (1977) wrote that corrective learning shapes individuals' self-efficacy, as the learner observes what behaviors lead to desired outcomes and reflects on whether they can effectively execute them to attain desired outcomes. Much observational learning occurs as learners observe a model performing a behavior while reflecting on the consequences of the model's behavior. Medical student tutees participating in Lockspeiser et al.'s (2008) PAL study noted that having access to second-year student tutors helped them gain confidence that they could make it to their second year of

medical school. One tutee remarked how observing a tutor use various tools put her at ease:

> I felt like watching the second-years and the way they handled just the tools and how they handled the bodies in general really gave me an idea of how to handle the body myself … the ease of which they were using things and not afraid of everything—that was kind of comforting. (Lockspeiser et al., 2008, p. 366)

This tutee's comment gives us insight into their reflections on observing someone completing a task they would later need to learn. In PAL settings, opportunities for learners to observe peers completing work or working through problems are often available.

The social congruence in PAL settings helps create a psychologically safe learning environment where students feel more at ease as they strive to learn challenging concepts (Lockspeiser et al., 2008; Ten Cate & Durning, 2007). Tenenbaum et al. (2014) found that 18-to-25-year-old tutors and 475 middle and high school tutees experienced growth and maturation from participating in a summer-long STEM internship. Tutees commented on connecting with their tutors in ways that were not possible with teachers during the program. One student said, "They were able to explain [things] to me better than a normal teacher would since they were closer to my age," while another student wrote, "They were young enough to relate to, and they knew how to teach kids our age" (Tenenbaum et al., 2014, p. 382). Tutees in a train-the-trainer program expressed similar appreciation for being taught by their peers in Carruth et al.'s (2010) study. Tutees remarked they "could relate" to their tutors and felt more comfortable asking them questions than older, traditional instructors.

Tandon et al. (2011) evaluated a peer-led depression prevention intervention for African American adolescents and young adults in employment training programs. Young adults in the study, supported by peers, displayed significant reductions in depressive symptoms and growth in active coping strategies. In addition, Tandon et al. highlighted the advantages of a peer-led format, including better social congruence between participants and less stigma associated with asking a peer rather than a mental health professional for support.

Murphey and Arao (2001) also documented positive outcomes from social congruence. They found that 115 first-year native Japanese-speaking students at a university enrolled in an introductory English course benefited from observing slightly older university student peers talk about English learning in an eight-minute video. The researchers measured students' beliefs about their ability to speak English before and after viewing the video. Murphey and Arao recorded measurable improvements in university students' beliefs because of their exposure to peers in the video.

Tolsgaard et al. (2007) attempted to answer whether there is a correlation between an educator's or tutor's natural ability to relate to students and positive learning outcomes from the tutor's instruction. Tolsgaard et al. conducted an experimental, randomized controlled trial in which they compared the quality of teaching provided by student teachers with the quality of teaching provided by professors. Students were pre- and post-tested on IV-access and bladder catheterization knowledge and skills; Tosgaard et al. then analyzed one-way ANOVA test results. Tosgaard et al. found that student teachers performed significantly better than professors on evaluation responses from tutees on questions including, "The teacher paid attention to participants' different levels of prior

knowledge" ($p = .045$), "I feel I got a good understanding of the complications/problems related to the procedures" ($p = .033$), and "The written test reflected the theory taught in the class" ($p = .011$) (p. 556).

Tosgaard et al. (2007) argued that student teachers are naturally skilled at teaching because of reduced psychological distance from their peers. Tolsgaard et al. additionally contrasted traditional classroom teaching with the significant outcomes PAL tutors' students achieved even though tutors received no formal pedagogical training. Although there is a need for further research, Tolsgaard et al. stated that their findings might show that students possess a tacit knowledge of teaching principles. This tacit knowledge may be one advantage PAL tutors have over traditional teachers or experts in teaching a subject.

Social congruence may foster learning beyond the formalized curriculum in PAL settings. For example, researchers refer to discussions between tutees and tutors that are not part of the formal curriculum on topics such as future career plans and tactics for navigating the school and social settings as hidden curriculum (McKenna & Williams, 2017; Trombulak, 1995; Williams & Nguyen, 2017).

Cianciolo et al. (2016) stated that although researchers frame social congruence within demographic characteristics of a tutor-tutee relationship, the instructor's professional background may also affect social congruence. Cianciolo et al. suggested that social and cognitive congruence fit within the umbrella of professional congruence; any instructor can achieve professional congruence with her students by supporting all dimensions of her students' professional development.

Loda et al. (2019) noted that many PAL studies reporting on cognitive and social congruence primarily investigated the effectiveness of PAL as an instructional method, while few focused on expanding the understanding of cognitive and social congruence in PAL settings and that researchers should investigate this area further.

Self-Efficacy. Whereas social and cognitive congruence are environmental determinants, self-efficacy is a personal determinant. Bandura (1977) defines self-efficacy as "the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 79). Bandura stated that learners' expectation of outcomes and corrective experiences mold their self-efficacy. Outcome expectations are "a person's estimate that a behavior will lead to certain outcomes" (Bandura, 1977, p. 79). However, even trusting the connection between behavior and outcome, an individual may still wonder whether she can perform behaviors necessary to achieve outcomes. For example, someone with low self-efficacy who would like to learn to speak Spanish may choose not to engage in behavior that they believe will lead to the desired outcome (attending an introductory Spanish course and practicing what they learn in natural settings) because they might fear they cannot perform a behavior (consistently attending the course and practicing what they learn with their Spanish-speaking friend). Their past corrective experiences may also shape their self-efficacy. Perhaps they tried to learn Spanish earlier in life, felt embarrassed by making mistakes, and believed they would experience embarrassment again if they tried again to learn the language. Alternatively, they might not have an observable role model who had successfully learned Spanish. Conversely, someone with solid self-efficacy and the same goal may be more persistent at learning Spanish, spurred on by the belief that they can succeed. If their persistence leads to

successful language acquisition, they may reflect on this corrective experience and recognize that they could follow the behaviors to learn Spanish, and this knowledge will strengthen their self-efficacy.

Participating in PAL training has increased pharmacy students' self-efficacy in required clinical skills (Cole et al., 2018), math teaching skills (Tucker-Raymond et al., 2016), computer programming (Clarke-Midura et al., 2018; Sun & Clarke-Midura, 2022), computer programming and peer code reviews (Pon-Barry et al., 2017), and the pursuit of STEM careers (Tenenbaum et al., 2017).

As mentioned in this literature review, the impact of near-peer role modeling on self-efficacy is clear in Murphey and Arao's (2001) study. Murphey and Arao showed the impact of near-peer role modeling on self-efficacy. They found that small groups of native Japanese speakers felt more confident speaking English after viewing videos of Japanese speakers speaking English. First, the researchers separated study participants (n = 1,125) into groups based on each participant's assessment of how successfully they had learned English. Next, the researchers asked participants four questions on a five-point Likert scale to gauge their perception of English learning. Then, they watched an eight-minute video featuring four individuals who spoke about English learning. After the video, the students were asked the same questions, and Murphey and Arao evaluated the pre- and post-survey responses with a T-test. Presented statements included:

1. I am confident to improve English [sic].

2. Making mistakes in English is OK.

3. It's good to have goals in learning English.

4. Speaking English is fun.

5. Japanese can become good speakers of English. (Murphey & Arao, 2001, p. 5)

Murphey and Arao (2001) found significant gains in response agreement ($p < .05$, with some improvements at $p < .01$) to statements from all groups except those who self-identified as already viewing themselves as having been previously successful in English. The authors postulated that the Japanese students' vicarious learning with the observed students' language performance accomplishments were meaningful corrective experiences that built self-efficacy.

Feedback is vital in developing a learner's self-efficacy because it acts as corrective learning (Bandura, 1977). Pon-Barry et al. (2017) emphasized the importance of feedback on building self-efficacy. The researchers wrote about an introductory computer science PAL program in which tutees participating in the program periodically met with mentors to review their programming code, where they received feedback in a low-stakes setting. Pon-Barry et al. (2017) asserted that interactions between the tutee and the tutor during these code reviews could build community, self-efficacy, and greater understanding. These code review meetings were like what a professional coder may experience at work (Pon-Barry et al., 2017).

We can classify feedback from a tutor to a tutee as an environmental determinant that affects self-efficacy. Clarke-Midura et al. (2018) revealed how relatable a tutee finds the tutor can affect the tutee's self-efficacy. The researchers found that mentor relatability significantly predicted self-efficacy and interest in computer science among young middle school-aged computer science students participating in a computer science camp. The PAL tutors, referred to as mentors in the study, modeled problem-solving behavior. At the same time, campers observed that "asking questions was okay, not knowing

everything was okay, and collaboration was welcome" (Clarke-Midura et al., 2018, p. 668). According to Bandura (1977), these productive, learned observations can act as corrective experiences to strengthen self-efficacy.

Sun and Clarke-Midura (2022) extended Clarke-Midura et al.'s (2018) research on the effects of near-peer mentoring in which they measured how their near-peer mentoring model affected mentees' self-efficacy in computer programming. Sun and Clarke-Midura posited that higher levels of perceived similarity in age, gender, and experience would positively affect learners' self-efficacy. For example, participating in summer camp sessions significantly increased camp mentees' perceived competence self-efficacy ($p < .001$). Additionally, the researchers measured how various experiences affected mentees' self-efficacy. They found that perceived similarity and mentor modeling significantly impacted mentees' self-efficacy ($p < .001$, $p = .027$, respectively).

Learning Outcomes. The environmental determinants may also shape tutees' interests in future extracurricular activities. For example, Bonner et al. (2017) evaluated a classroom-based secondary school intervention in mathematics and science called the Peer-Enabled Restructured Classroom (PERC). The PERC was administered for an entire school year, and each 50-minute class session began with 10 minutes of instruction by the teacher, followed by 40 minutes with the PAL tutor supporting five students. As part of training throughout the school year, faculty taught PAL tutors about the class curriculum and how to use metacognition through self-monitoring and self-regulation, as well as building positive perceptions about tutors' roles as facilitators. In assessing the effects of this training and experience on PAL tutees, Bonner et al. (2017) conducted pre-test and post-test assessments of the PAL tutees. They found significant improvements ($p < .01$)

in academic performance and mastery rates in the subject where they provided

instruction. However, the researchers found no significant change in responding tutors'

metacognitive strategy use or perceptions about their roles as learning facilitators.

Moreover, participation in PAL may lead to outcomes beyond learning the

curriculum. For example, Italian high school students were taught a sex education course

by 19- to 22-year-old medical students. Ninety-nine percent of the 547 students taught by

slightly older medical students responded to a survey following the two-day course, in

which 32.38% stated they desired to become peer educators (Benni et al., 2016, p. 21).

This was a logical but unexpected outgrowth of their perceived self-efficacy.

Reciprocity Between Behavioral and Environmental Determinants

According to Burgess and Nestel (2014), medical students participating in a PAL

program they studied behaved in a school of practice, engaging in legitimate peripheral

participation. Their behavior changed as students participated in the PAL program and

the environment that defined it. For example, tutees' involvement in a voluntary teacher

training course and a formative objective structured clinical examination doubled, which

the researchers attributed to PAL's alignment with an assessment (Burgess & Nestel,

2014). Students' behavior within the PAL environment also shaped personal

determinants, including identity. Teaching is an imperative skill for physicians to hone.

Medical students participating in PAL recognized how teaching skills are essential in

medicine, shaping their identity as medical students and prospective doctors (Burgess &

Nestel, 2014).

The reciprocity between behavior and environment is evident in Evans and

Cuffe's (2009) findings, where near-peer medical student teachers ($n = 12$) responded to

a questionnaire after engaging in a PAL environment. Seven respondents stated that their teaching skills improved from acting as near-peer teachers. An additional nine responded with comments that indicated they deepened their learning from participation in the environment. Some near-peer teaching respondents noted they would like to alter their environment with additional session numbers ($n = 5$), more feedback from students and others on teaching style ($n = 3$), and additional training on the subject matter ($n = 2$).

Brown et al.'s (2014) evaluation of a peer-assisted study sessions (PASS) program within a New Zealand university illustrates the interaction between behavioral and environmental determinants. The PAL program paired second-year students with new college students taking a required and challenging education course. The stated goal of the PASS intervention for tutors was to create co-construction of learning activities, not by teaching tutees the materials but by facilitating learning. However, tutors, referred to as "facilitators" in the research, felt challenged acting as teachers and providing instruction when some students wanted instruction. The challenge presented prominently as tutees with low self-efficacy levels were more likely to demand instruction—a behavioral determinant—from their tutors to shape their learning environment. Brown et al. discussed that the positive outcomes of learning from social congruence are more easily retained when tutors approach interactions with tutees as co-constructors of learning. As some tutees demand instruction from their tutors, the relationships can become more hierarchical as social congruence is disrupted (Brown et al., 2014).

Learners' behaviors can change in additional ways based on learning environments. For example, Polansky et al. (2010) wrote about several university students' service-learning interactions at two urban public high schools. A teacher in the

research found that one of her students had a disengaged presence in a classroom but performed well and engaged more in a one-on-one setting with the tutor, illustrating that behavior can change based on the learning environment.

In alignment with Clarke-Midura et al.'s (2018) findings that a tutor's relatability could strengthen self-efficacy, Polansky et al. (2010) found that relatability can also help ease conversations between tutors and tutees. For example, one tutor in Polansky et al.'s (2010) study said:

> Coming into a high school as a tutor, not far removed from my own high school experience, made my role within the classroom in relation to my students sometimes difficult to define. I was certainly in a position of some higher influence, but I definitely did not have the status or authority of a teacher or even a student teacher. I quickly realized that these ambiguities aided me in my ability to work with and relate to my students by allowing me to converse with them at a more casual, peer-to-peer level that cannot happen between a student and his or her actual teacher. (p. 315)

In this example, we could view the tutor's relatability with the students given the tutor's age and role as an environmental determinant, influencing the behavioral determinants of conversing with participants more casually than possible or naturally between a student and a traditional teacher.

Lundmark et al. (2017) discussed the PAL program they oversaw at Sacramento State University. They reviewed PAL in high-risk STEM classes, including general chemistry, precalculus, calculus I and II, human anatomy, molecular cell physiology, and systemic physiology. Student learners attended sessions and used whiteboards to solve problems related to the course collaboratively. Because the researchers and program leaders saw more applications than they had positions, they required a letter of recommendation and invited finalists for interviews. Lundmark et al. (2017) initially

hired PAL tutors under the designation of "leaders" who were outgoing and independent but re-designated the title of their roles to "facilitators" after observing that their former appointment attracted students who liked to be the center of attention and less amenable to PAL tutees' needs (p. 50).

In filling facilitator positions, Lundmark et al. (2017) designed interview questions to select PAL tutor candidates who embodied skills the researchers valued, including empathy, optimism, approachability, and problem-solving skills. Additionally, tutees came from diverse backgrounds, and Lundmark et al. ensured that hired PAL tutors reflected the tutees' diversity. Finally, Lundmark et al.'s efforts to select tutors who practiced behaviors the researchers valued showed how program leaders can influence environmental determinants by intentionally recruiting for desired behaviors. As a result, Lundmark et al. documented an increase of 20% in course pass rates and course grades earned among students trained by PAL facilitators in their study.

Although nearly all reviewed articles reported PAL face-to-face interactions between tutors and tutees, Burgstahler and Crawford (2007) detailed an online mentoring, near-peer, peer support program named "DO-IT" for college-bound youth with disabilities. Burgstahler and Crawford documented those online learners benefited from more flexible schedules over in-person models requiring specific attendance and participation. Online environments also helped learners overcome some of their challenges with the distance between their places of residence and traditional learning environments, as well as disabilities that might prevent tutors and tutees from meeting otherwise. Additionally, the broader access tutees have to potential tutors increases the likelihood that a good learning match occurs between tutees and tutors. The online

tutoring environment is also different in that it can be supervised in ways that in-person

PAL sessions cannot be supervised (Burgstahler & Crawford, 2007).

Online tutoring presents additional opportunities that might otherwise be

unavailable for training and educating participants who share rare characteristics with

other learners. Young and Heinzerling (2017) wrote about a peer-led intervention called

"Harnessing Online Peer Education," which they applied to a set of online opioid use

disorder groups. Young and Heinzerling could tailor the interactions more appropriately

than in-person groups, given the specific and often rare forms of chronic pain people

suffer. Participants felt online groups were important in their efforts to reduce chronic

pain.

Although most instructional subjects are broad enough and are administered in

education settings with enough interested PAL tutors and tutees, administrators might

have to look beyond school walls to source participation in more specific subjects, like

addressing rare forms of chronic pain. PAL program administrators generally consider

potential tutors within their school or program with whom tutees could relate. However,

administrative teams may need to look outward and online for closer pairings.

Administrators can promote relatability and self-efficacy, improving learning outcomes

by mindfully establishing PAL environments and recruiting instructors with positive

online or offline behaviors.

In addition to the outlined reciprocal and concurrent interactions between

Bandura's (1977) determinants in PAL settings, the following sections aim to investigate

PAL's reported benefits and weaknesses from the perspective of those involved, namely

tutees, tutors, and administrators. They will also shed additional light on what the literature reveals about PAL's effectiveness in supporting learning.

Benefits of PAL

Both tutees and tutors benefit from gains in knowledge from PAL interactions (Hall et al., 2013; Lundmark et al., 2017; Silberberg et al., 2013; Topping, 1996). Topping (2005) documented gains in social and communication skills that PAL participants can use in many parts of their lives. Teaching is a valuable skill for individuals in many fields beyond education to develop. For example, researchers found that PAL helps individuals develop their ability to teach and is an essential skill in medicine (Antonelou et al., 2014; Bulte et al., 2007; Burgess & Nestel, 2014; Evans & Cuffe, 2009; Silberberg et al., 2013), in paramedic student training (Williams et al., 2014; Williams et al., 2015), in farming safety (Carruth et al., 2010), and other fields. Learning is also an essential and transferable skill that emerges from PAL activities (Roberts et al., 2018). Bone et al. (2019) found that PAL activities helped develop friendships and social support structures among tutees and tutors.

Tutees' Benefits

Several studies documented improvements in tutee knowledge. Williams et al. (2014) noted that tutees who participated in their PAL intervention earned higher scores on their clinical scores than their classmates who did not participate in the PAL intervention. Oliveira et al. (2015) documented similar results, sharing significantly higher final test scores among students who participated in at least one 90-minute peer teaching session for anatomy and at least one 90-minute session for histophysiology

compared to students who did not participate in any mentoring session. Silberberg et al. (2013) wrote about PAL in nine general practice medical clinics in Australia. The authors found that tutors' practice clinics effectively filled tutees' knowledge gaps of the supervising instructor while providing more current perspectives on various topics.

Tutees may also value learning from tutors rather than traditional teachers, at least in some settings. For example, Kassab et al. (2005) found that out of 36 PAL tutee respondents from a medical school, 67% perceived peer tutors were better at assessing tutees' knowledge than faculty, and 64% perceived peer tutors as better at understanding the difficulties tutees face during tutorials.

PAL learning outcomes may be transferrable to other subjects and have long-term effects. For example, tutees have noted an improved ability to work in groups and apply what they have learned in new settings (Burke et al., 2007). In addition, researchers have pointed out that PAL can help prepare tutees for a career in their field while engaging tutees as tutors to support younger learners (Tenenbaum et al., 2017). This career preparation happens through skill development and conversations beyond the curriculum related to future career interests and plans (McKenna & Williams, 2017; Tenenbaum et al., 2017; Williams & Nguyen, 2017). For example, in Burgstahler and Crawford's (2007) article, one tutor-tutee pair developed a long-term friendship rooted in career conversations. Following the formal PAL interactions, one tutor now has a career in architecture and encouraged the tutee to consider going into the same field. With that encouragement, the tutee applied and was accepted into an architecture school. Likewise, Trombulak (1995) captured the response of one student participant in a near-peer teaching experience who wrote, "I finally had an experience in the lab which was closer

to that of someone with a career in science. I have decided to further pursue the sciences

with an eye towards a future career in the field" (p. 415).

Tutors' Benefits

Students who teach material must review and relearn it from earlier parts of their

education (Lockspeiser et al., 2008). This review of past curricula motivates and

encourages tutors to learn the material better themselves (Ten Cate & Durning, 2007).

Nevertheless, researchers have noted many positive tutor-oriented learning outcomes

from PAL beyond formal curriculum learning, sometimes called hidden curriculum

(McKenna & Williams, 2017; Tenenbaum et al., 2014; Tenenbaum et al., 2017).

Documented learning outcomes for tutors include skills and knowledge development in

communication (Kassab et al., 2005; Lundmark et al., 2017; Tandon et al., 2011;

Williams & Nguyen, 2017; Wilson et al., 2014), critical thinking (Williams et al., 2014),

evaluation (Kassab et al., 2005), feedback (Kassab et al., 2005; Lawrence et al., 2016;

Ten Cate & Durning, 2007), intrinsic motivation (Ten Cate & Durning, 2007), leadership

(Kassab et al., 2005; Ten Cate & Durning, 2007; Williams et al., 2014), mentoring

(McKenna & Williams, 2017), multitasking (Lundmark et al., 2017), public speaking

(Williams & Nguyen, 2017), reflective listening (Tandon et al., 2011), and teamwork

(Kassab et al., 2005).

Tolsgaard et al. (2007) wrote that tutors might see benefits to their future careers

from tutoring. Tenenbaum et al. (2014) stated that tutors believed their tutoring gave

them access to a professional environment to develop their professional skills and

interests. These activities can also provide evidence of engagement in the portfolios and

CVs of students seeking employment (Wilson et al., 2014). Both tutors and tutees

practiced professional behaviors in Turner, White, Poth, and Rogers' (2012) study of a PAL program centered on a medical competency framework for learning among first-year medical students and first-year residents. Tutees in Tenenbaum et al.'s (2017) study shared that their tutors discussed topics outside the STEM program they participated in, sharing advice on education planning, careers, and general life lessons.

Evans and Cuffe (2009) surveyed 12 tutors who had supported tutees in a medical school anatomy course. Respondents noted several perceived personal benefits from teaching younger students, including deeper learning of the subject, career and teaching skill development, and enjoyment. In addition, Evans and Cuffe concluded that near-peer teachers better established their understanding of anatomy while building teaching experience, which these teachers can use in their professional careers.

Tutors have reflected on some of the gains they have experienced from teaching peers. Silberberg et al. (2013) noted that many PAL tutors appreciated the variety that tutoring added to the workplace. In addition, training peers helped them build their patient education skills and establish relationships with tutees. One could interpret these social interactions and the experience of teaching someone something new as a meaningful activity for tutors. Tucker-Raymond et al. (2016) captured feedback from one PAL tutor who taught others in a program designed to build mathematics and computer science skills among underserved youth. In reflecting on his experience as a tutor, he writes:

> Kids keep coming back to me, "I went home and showed my mom," and I was like, "Do you know what you just did there? You just taught someone." And I keep telling them the ring of teaching, so it's like if I teach you, maybe you'll go teach someone else, and the chain will keep going around and around in circles … I feel like I pretty much did my part to change the world because the reason why I teach at [Organization] is

just for that. It was to "Go home and teach someone else," so it's like if I'm just teaching one person, hopefully, it gets to the hands of a million people, a billion people, maybe the whole world. (p. 1037)

From the added variety to tutors' work weeks in professional settings to the skills gained, relationships developed with others, and positively impacting others through teaching, tutors seem to benefit from PAL.

Administrators' Benefits

Administrators must consider financial and time expenses associated with any educational program. PAL is inexpensive from an economical and time perspective (Burke et al., 2007; Topping, 2005; Turner, White, Poth, & Rogers, 2012). Financial resources for education are limited worldwide, and PAL's inexpensive nature can be a valuable method to include in learning activities without the fear that educational quality will be compromised (Ten Cate & Durning, 2007). Tolsgaard et al. (2007) documented that tutors can train tutees as well as or better than associate professors and note that this support can be a practical addition to teachers' efforts and make small-group learning viable. According to Turner, White, Poth, and Rogers (2012), integrating a PAL program like the near-peer shadowing program into the existing curriculum can be done with little administrative effort. Gallan et al. (2016) extended Turner, White, Poth, and Rogers' (2012) findings in outlining how senior medical students are perhaps better positioned than faculty to teach incoming medical students a curriculum integrating biochemistry and clinical medicine. The researchers noted that although science faculty in medical schools are knowledgeable and able to teach biochemistry, they might not have the clinical experience or knowledge to share how it applies in a clinical setting, while clinicians teaching at medical schools are often busy in practice and less knowledgeable

than biochemistry professors in the subject of biochemistry. Gallan et al. proposed a near-peer learning model to remedy this challenge, leading administrators to cost-effectiveness and positive learning outcomes.

Peer support has improved the D.A.R.E. Plus program's outcomes, an additional benefit for administrators. Stigler et al. (2011) noted that the Drug Abuse Resistance Education program (D.A.R.E.) has little documented impact on reducing youth alcohol and drug use. Still, the updated D.A.R.E. Plus program successfully reduces tobacco and alcohol use among boys. The researchers attributed the program's success to its "Plus" elements, which include peer leadership.

PAL can help develop employees within organizations. For example, in Silberberg et al.'s (2013) study of the nine general practice clinics in Australia, the researchers found that tutees and tutors expressed appreciation for teaching and learning from others. In the studied clinics, supervisors were traditionally responsible for all training. Responding supervisors felt that PAL reduced time pressure on their schedules, helping supervisors stay current with their responsibilities. Additionally, implementing PAL opened opportunities for practice clinicians recently out of school to share existing knowledge with supervisors and others in the clinic. Supervisors also shared that PAL was financially beneficial to their clinics and was a helpful development tool for succession planning.

Weaknesses of PAL

PAL tutors and tutees have remarked that tutors have less knowledge than teachers (Bulte et al., 2007). PAL tutors and tutees have also commented that tutors may face challenges with being taken as seriously as a traditional teacher; tutees felt PAL

tutors might not provide the correct answers to their questions (Bulte et al., 2007). Given many tutors' shortcomings in knowledge, educators must deliver instructional practice training to PAL tutors (Evans & Cuffe, 2009). Educators could attempt to address this weakness by providing additional training to tutors; however, more training expands the commitment required to support PAL. Vardy et al. (2022) shared four case studies of PAL used to implement peer-assisted learning strategies (PALS), which requires extensive tutor training, and educators in all case studies indicated that implementation of PALS "with competing demands on time" was a concern (p. 527).

As Kassab et al. (2005) shared, the possible shortcomings in tutors' subject matter knowledge may affect some discussions with tutees. In their post-PAL intervention survey, 64% of tutee respondents felt they experienced difficulty with problem discussion and analysis in an early tutorial of their material. Further, PAL may create an unwanted disconnection between tutees and their formal teachers. Kassab et al. (2005) found that 22% of respondents perceived they experienced less contact with faculty due to participating in the peer-led tutorial.

Benni et al.'s (2016) study, where medical student tutors instructed high school students in a two-day sex education course, documented significant gains in knowledge on sex, sexually transmitted infections, and safe sex. Parents of some high school students participating in the class shared feedback with researchers that they did not like the PAL education strategy. However, Benni et al. did not specify if the responding parents referred to PAL broadly or in its use in sex education. Thus, PAL in educating learners on sensitive subjects may come with challenges that are not documented in

reviewed literature when educators apply PAL to other curricula, such as reading or science.

Not all researchers studying PAL have documented significant improvements in learning outcomes. Martinez et al. (2009) compared evaluation data submitted by medical students taught by faculty paired with student tutors or faculty without tutors in three control groups. The researchers could not identify a significant difference in instructor time-management ratings and effectiveness. Iwata et al. (2014) attempted to answer whether PAL tutoring increases performance in fourth-year examination results among medical school students. Although PAL tutors performed better in final-year examinations, the performance improvements were insignificant. The researchers attributed it to the tutors' background academic abilities and not their participation as PAL tutors.

What Research-Informed Instructional Considerations Should Guide Using PAL for Gatekeeper Training in the Hope Squad Program?

Topping (2001) outlined the planning and implementation of dimensions to support PAL settings, termed his "Structured Planning Format" (pp. 105–126). This format can guide how educators consider each dimension in implementing PAL in gatekeeper training, including in the Hope Squad program. For example, Topping outlined the following dimensions in which he recommends educators make plans to organize successful PAL interactions:

- Context

- Objectives

- Curriculum area

- Participants

- Helping technique

- Contact

- Materials

- Training

- Process monitoring

- Assessment of students

- Evaluation

- Feedback

The selected literature ($n = 95$) was reviewed to align with Topping's Structured Planning Format dimensions, and examples of PAL planning and implementation have been included in each dimension below (see Table II.2).

Context

Topping (2005) encouraged those planning PAL to consider potential problems and opportunities related to the local context where PAL tutors deliver instruction. PAL educators should customize PAL to fit the unique needs of the school. For example, deploying PAL at a time designed to meet students' needs allowed students to connect with new peers in one learning environment. Lockspeiser et al. (2008) wrote that the PAL intervention they studied was valuable during the first few months of medical school when students might experience anxiety and stress living and learning within a new setting. An additional contextual element that might influence a student's experience in a unique educational setting might be who is observing whom. For example, Williams and Nguyen (2017) found that PAL tutees participating in a paramedic training program

expressed less anxiety when performing a paramedic skill with a tutor watching than with an instructor watching. However, Williams and Nguyen's findings were not statistically significant. Understanding the context of students' ebbing and flowing needs during a program may help shape the timing of PAL deployment.

In evaluating the context of a setting to deploy PAL, Topping encouraged educators to consider the learning needs of students. For example, peer tutors in one study provided an outline of information they wanted to learn in their roles, including:

- "how to guide a group and take control of the teaching session;

- to what extent the content of the lessons should be prepared versus interactive discussion;

- how to deal with questions and problems, especially if the near-peer cannot answer them during the lesson;

- how to handle 'difficult' students (e.g., unmotivated, dominant, impolite);

- how to optimize the group learning process" (Bulte et al., 2007, p. 589).

Student needs and desires should be valuable data points for administrators when deciding whether, when, and how to implement PAL.

Evans and Cuffe (2009) documented a need to guide tutors on the curriculum. Among the study's PAL tutors, two of 12 responded that they felt less confident than they would have liked in guiding students through a dissection. In considering the specific context of a gatekeeper program in high schools, Walker et al. (2009) stated that youth who participated in their Signs of Suicide program voiced the primary complaint that they feared reporting concerns about others' suicide risks to adults. Educators understanding this contextual concern might address this documented problem as a PAL

instructional consideration in high school gatekeeper training programs. It should be noted that the concerns and needs of PAL participants vary in the context in which the program is delivered.

Indeed, educators have applied PAL in various in-person settings. Hargreaves et al. (2022) investigated PAL's use in a remote environment during the COVID-19 pandemic. In alignment with Topping's (2005) encouragement, the authors reported problems and opportunities related to PAL's application. Remote PAL tutors experienced problems that in-person tutors might be less likely to encounter during tutoring sessions. Whereas PAL tutors would be able to see tutees entering a room for a drop-in tutor session and acknowledge them, remote tutors may not notice when tutees join a Zoom call with several people on it. As one tutee stated, "I think some people generally have more anxiety when joining Zoom rooms and speaking; it always seemed like the routine was to join and sit in silence until spoken to" (Hargreaves et al., 2022, p. 713). Still, all participants ($n = 15$) in the Zoom tutor sessions shared that they believed their involvement with PAL "improved their subject knowledge" (p. 713). Tutees commented on the low barrier to entry in joining a Zoom PAL session, especially if they had just a question or two for the tutor. Finally, tutees noted appreciating the ability to attend sessions as anonymous students, which they believed lowered their anxiety in asking for and seeking help. "[Online] can be a little less nerve-wracking because you are on the other side of the screen; you can be anonymous," confided one student (p. 713).

Objectives

Clear objectives outline what educators hope to achieve and the domain (Topping, 2005). Considering a program's objectives will shape how educators can use PAL. For

example, Lockspeiser et al. (2008) wrote that the medical school PAL program they researched was migrating from lecture-based instruction to self-directed instruction in small-group settings. PAL fits well within the school's objectives. Establishing clear learning objectives is essential for learning outcomes. In addition, objectives shape the technology and materials needed to support learning (Burgstahler & Crawford, 2007). In their article, Tenenbaum et al. (2014) documented a study whose learning objectives for tutees were to "gain new skills, collect data, mathematically organize the data, analyze results, and form conclusions" (p. 378). A hands-on laboratory PAL learning environment supported tutees in meeting the outlined objectives. Because tutors, tutees, and programs can all gain knowledge from PAL interventions, administrators should write objectives for tutees and tutors.

In contrast to Topping's recommendations on the need for educators to set objectives, Jayathilake and Huxham's (2022) study shares details of the autonomous and widespread PAL practice among Sri Lankans called Kuppi, in which objectives are not formally set. These sessions are student-led and student-organized, during which students "translate academic ideas into accessible language" (p. 209). They occur outside of scheduled instruction "under trees, in cafeterias and other informal places" (p. 209), sometimes at midnight in student hostels. Educators do not organize these group study sessions or set objectives for them. Instead, the formal university and course curriculum shapes these sessions, and students focus their Kuppi sessions on building knowledge to pass examinations. In the case of Kuppis, educators neither set objectives nor are involved in organizing these learning interactions.

Curriculum Area

Topping (2001) estimated that reading is PAL's most common curriculum area, specifically oral reading (p. 43). In addition, Topping noted that writing, spelling, math, and native language learning are all common curriculum areas. High school educators additionally use it in physical science, social science, and foreign language instruction. This review found PAL used in teaching English as a second language (Murphey & Arao, 2001), math (Tucker-Raymond et al., 2016), and computer programming (Clarke-Midura et al., 2018; Pon-Barry et al., 2017). With imagination and organization (Topping, 2001), educators can use PAL in many curriculum areas, including gatekeeper training (Walker et al., 2009). Educators have used PAL to aid instruction beyond traditional limitations.

Indeed, PAL's use is documented broadly in various professional training settings for future dentists (Roberts et al., 2018), pharmacists (Cole et al., 2018; Wilson et al., 2014), paramedics (McKenna & Williams, 2017; Williams & Nguyen, 2017), doctors (Hall et al., 2014; Qureshi et al., 2013), and lawyers (Crowley-Cyr & Hevers, 2021). Within the medical education field, Brierley et al. (2022) concluded that PAL has shown the most significant value in the more advanced stages of medical training when future clinicians are learning clinical and practical skills, in which setting PAL has helped to improve academic performance and teaching skills.

Those implementing PAL for gatekeeper training and beyond might follow Hargreaves et al. (2022) recommendation. The authors encouraged educators to link the curriculum to formal assessment, stating that doing so improved PAL session attendance.

Participants

Reviewed literature in this paper includes recommendations to ensure tutees and tutors share cognitive and social congruence with minor—but some—cognitive distance (Hall et al., 2014; Jackson & Evans, 2012; Kassab et al., 2005; Lockspeiser et al., 2008). Researchers have also recommended that tutees relate to tutors (Clarke-Midura et al., 2018).

Administrators might also consider how many tutees a tutor should support. Although reviewed articles document various PAL pairings between tutees and tutors, researchers must reflect on and recommend the ideal group size. This ambiguity might stem from the nature of the relatively novel and changing language used to describe PAL. For example, Olaussen et al. (2016) reviewed and evaluated PAL medical programs based on the relationship between student and teacher and student-to-teacher ratios. According to Olaussen et al., the most commonly used term is PAL. However, PAL is an umbrella term that needs to add more description to designate the participant participation makeup being studied.

Olaussen et al. (2016) encouraged future researchers to classify PAL interactions descriptively. Specifically, Olaussen et al. suggested that all PAL types comprise two participants at least one academic year apart or peers of the same age, of which one has different abilities. Peers, then, are those with no difference in age or skill. The second dimension Olaussen et al. provided in their classification structure is how many students the peer supports. For example, mentors are one-to-one or one-to-two structured; tutors work with three to ten students, while didactic peers work with 11 or more students. Combining the two provided classification types gives us six terms to differentiate better

and describe PAL learning interactions. These compound classifications include peer mentoring, peer tutoring, peer didactic, near-peer mentoring, and near-peer interactions (Olaussen et al., 2016). According to Protty et al. (2013), most near-peer research involves small groups, and opportunities exist for researchers to better document outcomes from near-peer didactic and peer didactic models.

Olaussen et al.'s (2016) classifications provide the framework administrators can use to develop a participant structure in their PAL interventions. Although Olaussen et al.'s classification structure might not play a critical role in informing educators on a recommended peer tutor type or group size, it may help them better understand potential PAL structures in use while identifying future research that may better inform them of best practices within the PAL structure of the application.

Whether participation in a PAL program is optional or required as part of a broader education effort may influence who participates. For example, students who value teaching ability may be interested in becoming a PAL tutor in optional programs. Hughes et al. (2017) discussed the value of physicians developing clinical teaching skills but noted that, as of 2015, no Canadian medical school program offered instruction on teaching skills for students. Hughes et al. sent a survey to all Canadian medical schools targeted toward medical students, asking students if they were interested in learning to teach. Slightly more than 49 percent of respondents selected "Agree" to the prompt, "I would participate in a clinical teaching elective during my last year of medical school" (Hughes et al., 2017, p. 4). Most interested medical students noted they would opt for a two-week course when given a choice.

Ensuring tutees can meet and become acquainted with tutors may aid future communication and learning between tutors and tutees. For example, Walker and Haddon (2011) noted that a student participating in an online distance language learning program felt nervous communicating with other students they had never met, which may lead to non-participation.

Some reviewed journal articles provided helpful guidance on tutee and tutor characteristics when building participation in a program.

Tutee Characteristics. Topping (2001) suggests that tutees should ideally be the same age or slightly younger than tutors; they should be neither best friends nor enemies with their tutor to avoid distractions during lessons. Further, tutees should be reflective or encouraged to reflect on their performance. They can build self-efficacy from vicarious experience and through individual accomplishment and reflection, and Murphey and Arao (2001) stated that considering the growing outcomes tied to performance accomplishments, educators could encourage self-assessment by ensuring activities are structured to allow students to experience success in regular intervals (Bandura, 1977). In addition, tutees should be engaged with their instruction and understand how their instructors will grade them and other tutees to avoid competitiveness (Singh, 2010). Finally, tutees should have some cognitive distance from tutors (Hall et al., 2014; Jackson & Evans, 2012).

Tutor Characteristics. Tutors might be unprepared to provide educational support (Bulte et al., 2007; Lockspeiser et al., 2008). Bulte et al. (2007) recommend that administrators train PAL tutors for teaching styles, speaking to an audience, maintaining tutees' attention, assessing tutees' understanding, and addressing incompatibilities between tutees and tutors. Kassab et al. (2005) noted that former participation as a tutee is not enough preparation for taking on a role as a tutor in a PAL program and that further training is needed. Bulte et al.'s (2007) tutor and tutee respondents provided additional advice on preparing near-peer teachers for their roles. Administrator-facing advice included:

- "give an introduction about how to teach, how to introduce yourself and the subject, how to prepare yourself for teaching fellow students, how to cope with group dynamics;

- give near-peer teachers an opportunity to ask questions to an expert on the subject matter prior to the session;

- let near-peers be observed by and given feedback from an experienced teacher;

- schedule time for feedback, so near-peers can evaluate their own teaching methods;

- let near-peers observe experienced teachers;

- consider videotaping near-peer teachers for purpose of giving feedback;

- organize regular sessions for the near-peers to discuss experiences and difficulties" (Bulte et al., 2007, p. 589).

Such activities appeared consistently in the literature on the training of tutors for their role in PAL.

Similarly, Edgcomb et al. (2010) asked participants of two PAL STEM programs what qualities tutees "have learned from and enjoyed" (p. 5). The responses included being approachable, enthusiastic, informative, knowledgeable, laid back, patient, and willing to help (Edgcomb et al., 2010). Therefore, one might assume tutors should be high achievers in the field they tutor. However, Bonner et al. (2017) selected middle achievers to lead tutoring for their intervention, stating that the tutors would be in close cognitive proximity to their tutees in the subject area. Various cognitive and social qualities can prove valuable assets in PAL programs.

Day-Vines et al. (1996) encouraged PAL leaders to consider diversity in recruiting, selecting, and training PAL tutors. Lundmark et al. (2017) tried to ensure that the diversity found among their tutees participating in their PAL program was represented among the PAL tutors they hired. Troubled youth, those with disabilities, and other minority students can succeed if they work well with other students, follow the rules and regulations, and take on leadership responsibilities. Including diverse PAL tutors may better reflect the entire student population, potentially promoting intercultural sensitivity among participants and helping mediation programs be more responsive to the student body. Other studies use high-achieving students as PAL tutors (Brown et al., 2014; Lundmark et al., 2017).

Although many graduates from a dental school that paired each third-year student with a fourth-year student for the entirety of the school year shared positive feedback on their experience learning alongside their PAL partner, not all agreed. Some respondents noted that they struggled with conflicting personalities with their PAL partner. One student suggested implementing "speed dating to figure out compatibility." Employing a

similar metaphor, another graduate suggested, "If we don't get to choose who we 'marry,' then we shouldn't be punished if we need to separate" (Roberts et al., 2018, p. 1190). On the other hand, some respondents did not indicate discomfort with being unable to share their preference in a PAL partner. As one graduate responded, "I think random is best. It gives an opportunity for people to step outside the box to pair with someone they may not have picked" (Roberts et al., 2018, p. 1190). Topping (2001) suggests considering preexisting social relationships among students, avoiding pairing students with poor associations in the same learning setting, and avoiding pairing with best friends. He additionally proposes that there is value in gathering partner preferences from participants, which aligns with some of the noted respondents from Roberts' (2018) study.

Tutors could also benefit from being reflective on their teaching experiences and ready to support other tutors who prepare for lessons. According to Burke et al. (2007), PAL tutors were trained on education theory, performed curriculum to be taught under peer review, and then provided a review for other tutors before providing PAL training sessions. In addition, following the delivery of PAL training sessions, tutors were asked to discuss the sessions in a reflective dissertation.

Helping Techniques

Helping techniques refer to how tutors support tutees through the learning process; these naturally should vary depending on the PAL program. Topping (2005) encouraged those planning peer learning to consider whether they will use a packaged (e.g., the PALS program) or newly designed method. In PAL programs, where tutees can later become tutors as part of succession planning, participants learn helping techniques

through apprenticeship, thereby promoting the sustainability of the PAL program. Educators should consider the approach to supporting tutees and its impact on tutees' perceptions of support. Brown et al. (2014) introduced PASS into a challenging first-year education course at New Zealand University, a program with packaged helping techniques. In this context, PAL tutors were encouraged to act as facilitators rather than instructors to aid tutees in learning. Tutors were urged to focus on co-constructing learning in their interactions with tutees. However, Brown et al. noted that tension arose from tutees wanting more instruction from their tutors than the tutors would provide. As a result, tutors expressed a need for more guidance in addressing this tension.

Tutors can help tutees learn by applying tutoring, modeling, monitoring, and assessment skills. Administrators considering PAL implementation in gatekeeper training programs should plan how tutors will support tutees.

Contact

Topping (2005) referred to the instructional frequency, length, and location of this aspect of a PAL intervention organization. The literature includes examples of individual tutor-to-tutee sessions that last as long as three hours (Burke et al., 2007) and are as short as regular 50-minute meetings during the entire school year, where the teacher provides instruction for the first 10 minutes, at which point the tutor is available to provide support for the remaining 40 minutes (Bonner et al., 2017). Lundmark et al. (2017) trained their tutors in nine-hour training sessions with scheduled two-hour weekly follow-up sessions designed to help the tutors practice and prepare to teach the following week's lesson while focusing on teaching STEM. In Burgess and Nestel's (2014) study, tutors were trained in a six-module, 18-hour program. Bulte et al. (2007) trained tutors in one two-

hour session where near-peer teachers practiced teaching a one-hour tutorial to an observing student and then switched the roles of near-peer teacher and student. Following the two-hour session, there was a feedback session where experiences were shared. Sun and Clark-Midura (2022) found that longer time spent in their near-peer mentoring model significantly predicted participants' increased computer programming self-efficacy.

Although most PAL interactions documented in the reviewed literature occurred face-to-face, Niday and Campbell (2000) detailed their study of PAL interactions between eighth-grade middle school literature students and pre-service literature teachers over email for four weeks. In addition, several articles studied similarly reviewed PAL programs that did not occur in person but within online mentoring communities (Burgstahler & Crawford, 2007; Jaganath et al., 2012; Young & Heinzerling, 2017).

Materials

Topping (2005) encouraged PAL administrators to consider what resources are required for instruction. Once materials are established, PAL tutees must be aware of the materials available. Burgess and Nestel (2015) wrote that tutors attended training sessions where materials were reviewed to prepare for tutoring activities as part of PAL tutee training. If educators use technology in assisting learning, Burgstahler and Crawford (2007) recommended considering learning goals, how accessible the technology would be for participants, and how communication might occur, ideally reaching students on the platforms they regularly use, such as their email accounts.

Materials might come from many sources, such as "in-house existing materials," a "library loan," and "material from participants' homes" (Topping, 2005, p. 116). PAL support materials can guide facilitation, providing tutors with the materials they will later

use to apply newly gained skills that may be appropriate for some learning contexts. As an example of "materials from participants' homes" (Topping, 2005, p. 116), some educators have used social media platforms to facilitate PAL. For example, Jaganath et al. (2012) discussed the early stages of a longitudinal study of an online intervention to recruit opinion leaders to help HIV prevention among African American and Latino men seeking sex from other men online. Recruited opinion leaders who met inclusion criteria and consented to participate in the program were trained on HIV information, cultural sensitivities, and communication strategies for Facebook groups. Once these tutors passed their training, they were assigned to a group where they provided support, shared links to resources, and helped guide conversations. For example, tutors taught Facebook communication strategies on the Facebook platform in closed groups where they could engage in role-playing and become more comfortable starting conversations before applying those skills in open Facebook groups.

Educators should adjust materials based on the development level of PAL tutees and the subject. For example, Hughes et al. (2000) found that self-prompted communication book training for special needs students helped develop and improve their conversation abilities. General education students who volunteered as trainers met one-on-one with special needs students in conversation sessions and engaged in conversation-driven prompts in the provided conversation book.

Murphey and Arao (2001) and Schickedanz et al. (2009) documented using video as material for instruction. In addition, students responded positively to videos as instruction in both studies (Murphey & Arao, 2001; Schickedanz et al., 2009).

Bulte et al. (2007) encouraged other near-peer program facilitators to expose near-peer teachers to the curriculum and instruct them on teaching styles and roles, speaking to an audience, maintaining attention, and assessing understanding. In addition, Day-Vines et al. (1996) encouraged PAL leaders to include materials to support intercultural sensitivity training as part of the PAL tutor curriculum.

Providing materials to facilitate PAL can act as a barrier to some schools. For example, in attempting to understand the challenges of PAL in a large university in Ethiopia, Birhan and Chekol (2019) found that sports science students and the department head noted a need for more supporting materials to assist PAL tutors.

Training

Topping (2005) recommended that educators train staff and tutors before tutors train tutees. The reviewed literature did not include studies on staff training, but insights were published on training tutors and tutees. Training PAL tutors who provide instructional support to programs and tutees is time well spent. Training PAL tutors can ensure programs and services maintain programmatic quality while developing tutors to participate more maturely within the community (Lave & Wenger, 1991; Topping, 2005; Tucker-Raymond et al., 2016). Williams et al. (2014) captured responses to open-ended statements that indicated tutors felt uneasiness with teaching because of inadequate teacher training before their tutoring sessions and the need to establish tutor training.

Williams et al. (2015) described training tutors during a workshop on facilitation and instructional skills they could later use as PAL tutors. The researchers documented significant improvements in PAL tutor outcomes following two one-hour workshops before tutors led PAL teaching sessions. The stated goal of the workshops was to grow

understanding and skills of small-group tutorial sessions. Williams et al. implemented the Peer Assisted Study Sessions program framework in their workshops, including small group activities, individual reflections, and role-plays. In particular, the researchers noted significant improvements in the tutors' likelihood of setting high standards for students in the classroom, giving students constructive feedback when student performance was not satisfactory, and in their attitudes supporting the statement, "I want students to leave this course well prepared for further work in this area" (Williams et al., 2015, p. 295).

The skills a PAL tutor needs training are unique to the instructional setting administrators establish for PAL. For PAL activities that encourage tutors to act as facilitators rather than instructors, tutor facilitators may benefit from training to develop their understanding of facilitating co-educational interactions. Tutor facilitators would also benefit from being trained to negotiate requests from tutees for more explicit instruction (Brown et al., 2014).

Administrators should ensure that PAL tutors are trained on the curriculum and instructional techniques. Tandon et al. (2011) shared that participants in the peer-led depression prevention program for African American adolescents they studied were trained in both those areas. Peer leaders were trained in the program curriculum, facilitating groups, and research ethics. Peer leaders were also trained in communication techniques and reflexive listening (Tandon et al., 2011).

According to Qureshi et al. (2013), many undergraduate and junior doctor curricula still need teacher training, yet opportunities to provide that exist with PAL. Bulte et al. (2007) surveyed medical students who had participated as PAL tutors about

what training they would want before teaching additional tutoring sessions. The topics included:

- How to guide a group and take control of the teaching session,

- To what extent the content of the lessons should be prepared versus interactive discussion,

- How to deal with questions and problems, especially if the near peer cannot answer them during the lesson,

- How to handle "difficult students" (e.g., unmotivated, dominant, impolite), and

- How to optimize the group learning process (Bulte et al., 2007, p. 589).

The students in Bulte et al.'s (2007) study also encouraged trainers to train tutors to introduce themselves and the topic. Survey respondents wrote that they would like to observe experienced teachers teaching and have opportunities to meet with other tutors to discuss their teaching experiences and difficulties. Responding tutors also requested that a video session be recorded to be evaluated for feedback on their teaching. Carruth et al. (2010) documented video feedback from tutor training. In this study, tutors would be video-recorded during a tutoring session. Graduated students would then observe the recording and provide instructional feedback to the tutors. Participants noted they disliked being watched and evaluated but enjoyed watching other videos of PAL tutors providing tutoring.

PAL tutors in the undergraduate program, as documented by Lundmark et al. (2017), were trained in teaching STEM. PAL tutors, referred to as "facilitators" in Lundmark et al.'s study, were trained in an eight-hour training session on basic rules of

operation and human resources, "aspects of group facilitation (icebreakers, creating an inclusive environment, group dynamics, etc.), and a 'run through' of problems for the first week of PALs" (p. 51). As part of training on teaching STEM, tutors were presented with academic articles about student success in STEM. Article topics include scaffolding, problem-solving, developing a growth mindset, and encouraging higher-order thinking skills.

The guidance found in Ilakkuvan et al.'s (2015) article is relevant to this literature review's second question. The authors prescribed content that educators should include in college campus-based suicide prevention programs. Recommended training included:

1. Clear definition of program aims and objectives

2. Modeling of skills and opportunities for practice

3. Best practices

4. Clear definition of peer helper roles, responsibilities, and boundaries

5. When/how to seek adult help and resources available

6. Non-judgmental thinking skills

7. Active listening, presentation, and facilitation skills

8. Self-care skills

9. Clear, safe, and effective messaging

10. Ongoing training support. (Ilakkuvan et al., 2015, p. 12)

The focus on these skills is especially appropriate given the sensitive nature and high stakes of suicide prevention.

Pon-Barry et al. (2017) prepared PAL tutors through a complete training course that reviewed the course curriculum and practice exercises for providing feedback on

code, both in writing and in person. Tutors were encouraged to provide weekly feedback and focus their observations on the coding process and progress. In addition, tutors were trained on emotional intelligence, providing constructive feedback, the concept of self-efficacy, and reflective practice (Pon-Barry et al., 2017).

Process Monitoring

Monitoring a PAL program may be challenging. Topping (2005) defined process monitoring as "the quality assurance of the process" (p. 634). Ilakkuvan et al. (2015) noted that program evaluation, which includes ongoing process monitoring, should be implemented with college campus-based suicide prevention programs involving peers. Lundmark et al. (2017) wrote that new PAL tutors were observed and debriefed twice per month. Returning PAL tutors were observed and given feedback at least once per semester. Tutors were evaluated based on an observation protocol that included classroom management, demeanor, and program-specific behaviors that PAL tutors were taught in training (Lundmark et al., 2017). Monitoring the PAL instruction process in gatekeeper training settings may give administrators the information they need to adjust their programs to ensure success.

Assessment of Students

Educators should assess the product and process of a PAL program; Topping (2005) wrote that his assessment could be self-assessment, peer assessment, or both. For example, in Burgess and Nestel's (2014) study, medical students acting as PAL tutors were allowed to assess the tutees they tutored on clinical skills. Burgess and Nestel stated

that this tutor-led assessment helped develop the tutors' competency while assisting them in crafting their professional identity.

Assessing whether students met learning objectives is essential. Iwata et al. (2014) evaluated medical students who acted as PAL tutors for their final fourth-year exam performance. Although PAL tutors in the study performed at higher levels than their non-tutor peers, Iwata et al. attributed the slightly higher performance of PAL tutors to their high academic aptitude and not to the learning that occurred during their participation in PAL tutors. In response to Iwata et al.'s assessment, Umapathi and Tsang (2015) emphasized that many of the skills gained from participating in PAL are "difficult to test in summative examinations" (p. 234). Ensuring that assessment measures skills a PAL program develops is imperative; understanding that some skills gained from PAL participation are challenging to assess may also shape how a program administrator develops meaningful assessments.

Those acting as tutors may value the assessment of their work. After participating fourth-year medical students taught first- and second-year medical students the subject of anatomy in one PAL setting, all 12 PAL tutors responded to a survey. Three respondents commented that they would like more feedback on their teaching performance. In addition, five of the 12 respondents commented that they would have wanted to increase the number of sessions each PAL tutee had with tutors (Evans & Cuff, 2009).

Evaluation

Topping (2005) stated that the purpose of the evaluation is to determine if a PAL program worked. Besides assessing students' learning within a program, researchers recommend that educators broadly evaluate their PAL-supported program. For example,

Ilakkuvan et al. (2015) encouraged program organizers to include program evaluation in

implementing a college-based suicide prevention program. Benni et al. (2016), Carruth et

al. (2010), and Stuart et al. (2003) are all examples of such program evaluations. In

addition, Wyman et al. (2010) specifically conducted an outcome evaluation on the

Sources of Strength suicide prevention program. Wyman et al. found that "Sources of

Strength training was highly effective in increasing diverse peer leaders' adaptive norms

about suicide and positive coping, connectedness to adults, and supportive behaviors with

their friends" (p. 1658).

Feedback to Tutees

In addition to assessing learning outcomes from PAL participants and evaluating

the PAL program, Topping suggests that tutees and tutors benefit from feedback. Those

using PAL should provide feedback to all PAL program participants to improve future

learning outcomes (Topping, 2005). Williams et al. (2015) found that PAL tutors felt

more comfortable providing feedback when students' performance was unsatisfactory

after training on tutoring skills. Feedback techniques were also reviewed in PAL training

sessions with medical students as part of their tutor training (Burgess & Nestel, 2014).

Campbell (2003) noted that feedback is a prosocial skill, and educators can teach students

to provide specific feedback using the sandwich approach. In this approach, the first slice

of bread might include positive feedback. The sandwich filling is the corrective feedback

that educators should give PAL tutees, and it needs to be delivered with the right tone of

voice. The tutor then completed the sandwich with the second slice, which might be an

encouraging remark. Paramedic student tutees value tutors' honest, realistic, and helpful

feedback (Williams & Nguyen, 2017). Burke et al. (2007) wrote that their PAL tutors

were trained in modules for five weeks. Instructional content included outlining education theory and engaging in tutoring role-playing of tutors teaching tutees, which were then shared for feedback on their performance from peer tutors under a physiotherapist's supervision.

Discussion

This literature review aimed to broadly appraise PAL's effectiveness in supporting learning and identify research-informed instructional considerations that should guide the use of PAL for gatekeeper training in the Hope Squad program. In answering the first research question to understand PAL's effectiveness in supporting learning, this literature review evaluated selected research using Bandura's (1977) social cognitive theory and the triadic reciprocal causation model. Many themes were identified that play a part in learners' journeys. First, PAL learning environments affect participants' personal, behavioral, and environmental determinants. Participating in PAL requires tutees and tutors to behave in specific ways, and their behavior can influence personal determinants, including their confidence and leadership skills (Burgstahler & Crawford, 2007). Evidence shows that PAL prompts reciprocal interactions between PAL participants' personal and environmental determinants, prompting favorable learning outcomes. For example, researchers show that tutees and tutors share cognitive congruence not standard between traditional instructors and students, which helps tutors explain concepts in easy-to-understand ways (Bulte et al., 2007; Schmidt & Moust, 1995) with empathy (Lockspeiser et al., 2008), and create a positive learning atmosphere (Kassab et al., 2005). Students who share social congruence with their PAL tutors may

feel more comfortable asking questions (Carruth et al., 2010) and learn valuable lessons

beyond the formal content (McKenna & Williams, 2017; Trombulak, 1995; Williams &

Nguyen, 2017). PAL instruction also can build participants' self-efficacy in many areas,

from computer programming (Sun & Clarke-Midura, 2022) to math teaching skills

(Tucker-Raymond et al., 2016).

PAL can benefit tutees in many ways, including boosting performance on skills

(Williams et al., 2014) and subject-matter knowledge (Silberberg et al., 2013). Tutors

also benefit from participating in PAL, as preparing to tutor can motivate them to learn

curricula better (Ten Cate & Durning, 2007) while developing various skills required for

and used for teaching (Kassab et al., 2005; Lundmark et al., 2017; Tandon et al., 2011).

Moreover, PAL comes with affordances for administrators as a potentially low-

cost instructional methodology (Burke et al., 2007; Turner, White, Poth, & Rogers, 2012)

that educators can deploy with little effort (Turner, White, Poth, & Rogers, 2012).

However, not all researchers agree that PAL always saves time compared to alternative

instructional approaches, given the level of tutor training needed in some cases (Vardy et

al., 2022).

This literature review identified research-informed instructional considerations

that should guide the use of PAL for gatekeeper training in the Hope Squad program

using Topping's (2001) Structured Planning Format to answer the second research

question. The Hope Squad program is a school-based gatekeeper intervention

incorporating PAL instruction elements in its training. It involves a group of students

nominated by their peers who comprise the Hope Squad. The program's advisors are

typically school counselors, psychologists, social workers, teachers, staff members, or

parents (Hope Squad, 2023a). These advisors are trained on the Hope Squad curriculum by program leaders and then train the Hope Squad members. Advisors train members to identify warning signs of suicide in their peers, engage with at-risk students, and refer them to support. In addition to these efforts, Hope Squad members also lead an annual hope-themed week at their school. During the week, they share materials on suicide prevention and messages of hope. Most schools have six to ten students from each grade level participating in the program, and nominated peers often remain Hope Squad members for more than a year.

Training Hope Squad members in gatekeeper strategies is crucial to the program's effectiveness. The Hope Squad curriculum consists of ten modules, referred to as PHASEs. Hope Squad first trains advisors on the curriculum; then, advisors meet with Hope Squad members monthly to lead or oversee PHASE-based training. Advisors typically deliver Hope Squad student training didactically in a classroom setting. However, second and third-year Hope Squad members may assist in training the first-year members (Hope Squad, 2023a).

Topping's (2001) Structured Planning Format can offer research-informed instructional considerations to guide using PAL for Hope Squad's gatekeeper training. Much of the published literature supported the validity of Topping's dimensions, though conflicting recommendations emerged on establishing clear objectives (Topping, 2001) versus the power of not establishing objectives (Jayathilake & Huxham, 2022). Of particular emphasis was the need to train tutors before engaging them in PAL sessions (Brown et al., 2014; Lundmark et al., 2017; Tandon et al., 2011). For example, in one

study, untrained tutors expressed uneasiness, and training might have helped alleviate their discomfort (Williams et al., 2014).

Limitations

Findings shared in this review are unique to PAL programs and the curriculum they supported; thus, their findings may not apply or be replicable in other settings. Further, Topping (1996) and Olaussen et al. (2016) highlighted that PAL is a broad umbrella term for many peer-led instructional interventions with some shared and dissimilar characteristics. Therefore, findings for a near-peer didactic PAL intervention may not be entirely relevant to an educator considering developing or deploying a PAL using an alternative tutor-tutee PAL structure, as distinguished by Olaussen et al.'s (2016) classification. For example, most articles reviewed involved peer and near-peer tutoring and near-peer mentoring studies. Therefore, findings from research on near-peer mentoring or near-peer tutoring interventions may not apply as well, for example, in near-peer didactic or peer didactic tutoring interventions (Olaussen et al., 2016; Protty et al., 2013).

This study had additional limitations tied to various factors. Given the wide variety of interventions, outcomes from some studies may only be transferable to some. Not all researchers saw full participation from subjects in research activities (Kassab et al., 2005; Lockspeiser et al., 2008). Additionally, some articles that included quantitative analysis had relatively small sample sizes of ($n = 12$) (Evans & Cuffe, 2009) and ($n = 8$) (Lockspeiser et al., 2008).

Limitations by duration, discipline, and student audience highlight the need for further study. PAL's long-term effects are unknown, as many research articles reviewed in this study had short study follow-up durations (Yu et al., 2011). Furthermore, PAL has been applied to learning environments in medicine and STEM. Thus, there is a larger body of literature covering PAL in medical settings than in non-medical, non-STEM environments (Erdoğan & Stuessy, 2015; Honey et al., 2014; Tenenbaum et al., 2014). Because PAL is more thoroughly documented in medical field education than in high school programs, research findings might not be entirely relevant in high school settings where the academic environment is less demanding.

Nonetheless, the relative absence of PAL studies in the context of secondary education accentuates the requirement for an increased volume of scholarly investigation in the domain. Furthermore, participation in Hope Squad is voluntary, and successfully learning the curriculum is not graded. More research is needed on PAL in non-compulsory settings where learning outcomes are not assessed and recorded as grades.

Further, gatekeeper programs also have their own set of challenges. According to Walker et al. (2009), gatekeeper programs' effectiveness should be measured by decreasing deaths by suicide; however, such measurements are unattainable given the small sample sizes of those participating in gatekeeper programs. Thus, combining PAL with a high school gatekeeper program may not clarify the effectiveness measurements of these suicide prevention programs.

Conclusion

Among myriad accountabilities, educators are tasked with ensuring students are learning in safe environments (Modzeleski et al., 2012). Youth suicide is the second leading cause of death among youth, negatively affecting learning environments. High schools may seek to apply evidence-based approaches rooted in gatekeeper training and peer support in school settings to help secondary education teachers and administrators effectively meet needs. However, running a gatekeeper training solely by faculty might be challenging because educators are time and resource-constrained. Including PAL as an element of gatekeeper training might be an effective way to ease the administrative burden of running a program while benefiting from PAL's positive outcomes.

To better understand how PAL can lead to positive learning outcomes and experiences for tutees, tutors, and administrators in settings including gatekeeper training, I reviewed selected PAL literature within the theoretical framework of Bandura's (1986) social cognitive theory. Personal, behavioral, and environmental determinants affect a learner's outcomes, and PAL activity elements affect many of these determinants. On top of the benefits tutees can experience from learning in PAL settings, tutors and administrators can also benefit from PAL. Tutees and researchers highlighted that the close cognitive and social congruence tutor and tutee share are typically not shared between a learner and her traditional instructor. PAL interactions can help promote self-efficacy among tutors and tutees as they work and learn together. Administrators considering implementing PAL in gatekeeper training, including in Hope Squad, should review and consider Topping's (2005) dimensions of PAL interventions as they build the critical elements of a successful program.

Although many researchers share positive outcomes of PAL interventions, some tutors feel uncomfortable when they need to be trained on instructional approaches and the curriculum. At the same time, some tutees want more direction from their tutors than tutors are instructed to provide. Educators may help ease some shortcomings of PAL by ensuring they train tutors on curriculum, helping techniques, and other elements of Topping's (2005) dimensions. Further, PAL research is broad, and no scholars have standardized the language describing PAL tutee and tutor structure. Consulting with Olaussen et al.'s (2016) classifications to match potential research findings with the PAL structure may help administrators identify and consider the most relevant evidence base.

CHAPTER III: PEER-ASSISTED LEARNING IN A HIGH SCHOOL SUICIDE

PREVENTION INTERVENTION: AN EXPLORATORY QUALITATIVE STUDY

by

Sterling R. Morris

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Instructional Technology and Learning Sciences

UTAH STATE UNIVERSITY
Logan, Utah

2024

ABSTRACT

Peer-assisted Learning in a High School Suicide Prevention Intervention:

An Exploratory Qualitative Study

by

Sterling R. Morris, Doctor of Philosophy

Utah State University, 2024

Major Professor: Dr. Andrew E. Walker
Department: Instructional Technology & Learning Sciences

This exploratory qualitative study examined the experiences of high school students in a suicide prevention program (the Hope Squad program) for whom peers taught a suicide prevention curriculum as part of an instructional model of peer-assisted learning. This study examined how student tutees experienced peer-assisted learning instruction and to what extent they experienced social congruence and cognitive congruence with their tutors in their respective Hope Squad chapters. This study also investigates how tutees perceived the level of expertise of tutors teaching suicide prevention material. Peer-assisted learning tutees shared that some tutors showed signs of nervousness when tutoring. Still, participants felt comfortable in the peer-assisted learning environment and appreciated the tutors' conversational instruction. Some tutors shared experiences applying the suicide prevention curriculum to their lives and noted they valued this instructional approach. Study participants also experienced social congruence and cognitive congruence. Finally, a hidden curriculum was identified in the Hope Squad

program as tutees learned valuable lessons beyond the formal program curriculum,

including leadership skills. Some participants noted that the Hope Squad program shaped

their career aspirations.

Introduction

In recent years, death by suicide has been the third leading cause of death among youth aged between 15 and 19 in the United States (see Figure III.1), growing from 7.9 deaths per 100,000 in 2001 to 10.6 deaths per 100,000 in 2020 (Centers for Disease Control and Prevention [CDC], 2022). In addition, the COVID-19 pandemic introduced additional daily stressors for youth, and researchers identified an increase in suicidal ideation among youth in psychiatric settings during the COVID-19 pandemic (Bersia et al., 2022; Kudinova et al., 2022). Moreover, youth suicide rates in rural communities within the United States are nearly double that of urban areas (Fontanella et al., 2015).

This study was conducted in Utah due to the state's distinct youth suicide prevention needs. First, Utah is in the center of the "suicide belt," an eight-state region spanning the Intermountain West in which suicide rates are at least 50 percent higher than the United States national average for the other 42 states (Harper et al., 2008, p. 37). Further, Utah is a geographically rural state where 12 of 29 counties are designated rural, with between six and 100 persons per square mile. An additional 12 are designated frontier counties, comprising six or fewer persons per square mile (U.S. Department of Health and Human Services [HHS], 2021). In 2020, when 10.6 youth per 100,000 died by suicide across the United States, Utah's death-by-suicide rate was 19.4 for the same age span (CDC, 2022).

Figure III.1

Underlying Cause of Death, 2001–2020 for 15- to 19-Year-Old Youth
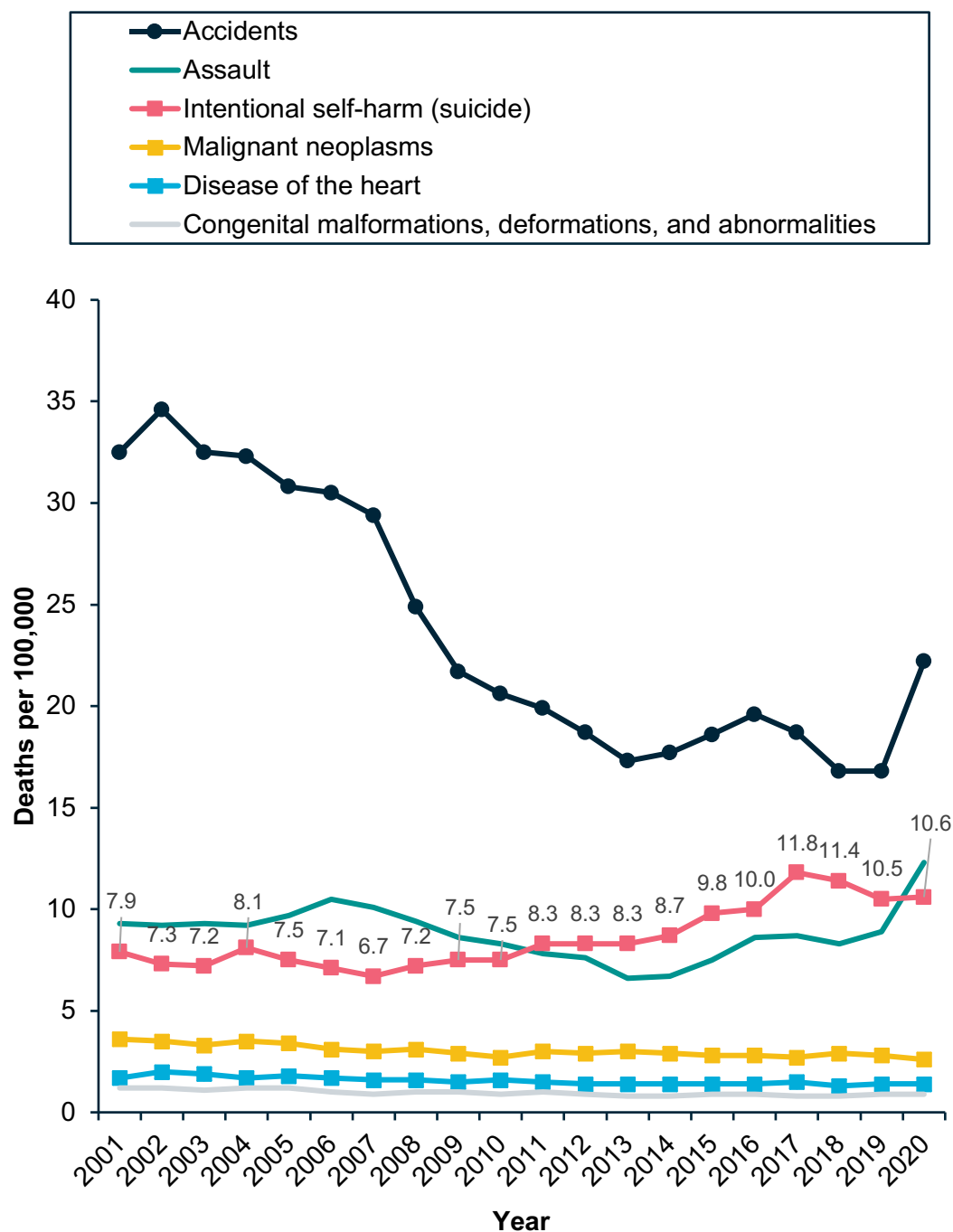
Note. Adapted from *National Vital Statistics System, Mortality 1999–2020 on CDC WONDER Online Database*, by Centers for Disease Control and Prevention, 2022 (https://wonder.cdc.gov/ucd-icd10.html).

Youth ages 15–19 spend substantial time in school settings, and school-based programs to prevent suicide exist. The Suicide Prevention Resource Center (SPRC) listed 38 programs for high school implementation geared toward training adolescents, though program availability differs from state to state (Suicide Prevention Resource Center [SPRC], 2023). In Utah, administrators have several suicide prevention program options to select and implement in their schools to address youth suicide. Of all programs listed in the Utah State Board of Education's Program and Resources Guide for suicide prevention, 16 programs cover at least a portion of the high school grade range. In addition, five of the 16 high-school-specific programs incorporate peer-to-peer training, including the Hope Squad program (Hope Squad operating with the name Hope 4 Utah within Utah schools) along with the safeTALK, Signs of Suicide, and Sources of Strength programs (C. Davis, personal communication, September 16, 2020).

Utah's three most used prevention programs include Hope for Tomorrow, Hope Squad, and QPR (question, persuade, refer; Annor et al., 2017). Utah schools have implemented Hope Squad more than the Sources of Strength program (Annor et al., 2017).

Hope Squad and Sources of Strength are programs designed to support students throughout the school year, while the State Board of Education designated Hope Squad as the only "emerging best practice program" of the two. Although SPRC's programs and practices list does not include Hope Squad among programs with the "evidence of effectiveness" designation (SPRC, 2023, para. 1), Hope Squad includes QPR training as part of its curriculum. The QPR Institute's gatekeeper training for suicide prevention, as incorporated into Hope Squad, trains people to recognize signs of suicide, question,

persuade, and refer individuals at risk of suicide to available resources and support
(SPRC, 2012).

Background

Hope Squad is a peer-to-peer suicide prevention program (Hope Squad, 2023b).
More than 1,600 schools in 43 U.S. states and Canada, Ghana, and South Korea have
Hope Squad chapters involving more than 45,000 Hope Squad members (Hope Squad,
2023b). A Hope Squad chapter consists of advisors and school-aged Hope Squad
members. Hope Squad advisors—tasked with providing administrative leadership for
Hope Squads—are typically school counselors, psychologists, social workers, teachers,
staff members, or parents (Hope Squad, 2023b). Advisors conduct a schoolwide
nomination process to gather student nominations for potential Hope Squad members.
Then, advisors review nominations and invite selected nominees to participate in the
Hope Squad.

Hope Squad's approach to suicide prevention is primarily guided by Joiner's
(2005) "Interpersonal Theory of Suicide" (IPTS; Hope Squad, 2023a, para. 1). The theory
hypothesizes that suicidal desire emerges when individuals experience obstinate feelings
of perceived burdensomeness and thwarted belongingness. Furthermore, an individual's
emergent desire, when combined with their acquired capability for suicide, has been
shown to lead to suicide attempts or death by suicide (Joiner, 2005; Van Orden et al.,
2010). Secondly, the evidence that peers are likelier to disclose thoughts of suicide to
peers than adults (Bell et al., 2018; Rowe et al., 2014) has guided Hope Squad's program

in that it seeks to equip peers with the knowledge of what to do when confronted with such information (Hope Squad, 2023a).

Hope Squad's suicide prevention, intervention, and postvention efforts have sought to counteract the factors outlined in IPTS (Hope Squad, 2023a). For example, from a prevention perspective, Hope Squad strives to encourage mental well-being, connectedness, and resilience among its members to counteract thwarted belongingness and perceived burdensomeness. Along with prevention, the QPR gatekeeper training curriculum is the centerpiece of Hope Squad's intervention initiative. The inclusion of QPR gatekeeper training is informed by Kalafat's (1992) work documenting the propensity of youth to share thoughts of suicide with friends.

In Hope Squads, students who accept their nominations meet as a Hope Squad regularly throughout the school year. Members are not trained to be counselors to peers but learn to identify warning signs of suicide in their peers, talk to at-risk students, and refer them to approved support resources (Hope Squad, 2023b). Hope Squad members also spearhead the organization of an annual hope-themed week at their school to share materials on suicide prevention and promote hope. These members often participate in the program for more than one year, and most schools have 20 to 30 students participating (See Table III.1).

Table III.1

Hope Squad Operational Factors

Factors	Criteria
Nominations	Peers select Hope Squad members through a nomination process, selecting peers they would feel comfortable talking to if they were struggling. Hope Squad advisors and school administrators review nominations and invite potential Squad members to participate. Parents must sign a permission form for students to participate in the program. For an average size high school, 20 to 30 students may serve on the Hope Squad. However, the number of members may vary according to the school's needs.
Student training	Students meet at least once a month with advisors for training. Some schools have found that pre-training before the school year begins is helpful. The program allows flexibility for training according to the needs of the school.
Curriculum	Hope Squads must follow the developed curriculum manual containing monthly lesson plans (PHASEs) and activities. The curriculum focuses on training squad members in suicide prevention, resilience, and anti-bullying.
Mental health partnerships	Hope Squad advisors are encouraged to partner with a local mental health agency. In addition, mental health specialists are encouraged to visit with Hope Squad members about mental illness and resources in the community.
Staff involvement	Hope Squad members identify teachers and staff members from whom they would feel comfortable seeking assistance either for themselves or struggling peers. Once identified (usually 10–12 teachers or staff), individuals are trained on how to assist students by the Hope Squad members.

Factors	Criteria
Student referrals	Hope Squad members are trained to notice, reach out, and assist fellow students who may struggle with depression or other suicide concerns. Hope Squad members are trained to be a friend, not a therapist. Once a Hope Squad member identifies a fellow student as "at risk," the member encourages their peer to visit with a trusted adult and receive additional help. Hope Squad members are trained to involve an adult anytime they are concerned about a peer.

Note. Adapted from Hope Squad FAQ page, by Hope Squad, 2023b,

(https://hopesquad.com/faq/). Copyright 2023 by Hope Squad.

Hope Squad formally and informally uses peer-assisted learning (PAL) in some segments of its participants' training. Its mission is to "reduce youth suicide through education, training, and peer intervention" (Hope Squad, 2023b, para. 1). Effective education and training play a vital role in achieving this mission. To succeed in that important work, Hope Squad relies on students' ability to learn its curriculum and apply what they learn in settings where they interact with peers.

Various learning theories by Vygotsky (1978) and Bandura (1977) may illuminate how PAL profoundly supports learning (Lundmark et al., 2017; Topping, 1996, 2005) in Hope Squad settings. Researchers have investigated PAL in many instructional settings, and others have investigated various Hope Squad outcomes, but researchers have yet to conduct research on PAL in Hope Squad.

Theoretical Framework

Topping (1996) defined PAL as "people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by

teaching" (p. 322). PAL involves at least two participants: a tutor (sometimes referred to as a mentor), a tutee (sometimes referred to as a mentee), a curriculum, and a learning objective. The tutor and tutee might be the same age or close in age and ability.

One can view the social nature of the PAL method through the lens of many learning theories considered for this study. The "Zone of Proximal Development" (ZPD) in Vygotsky's (1978) social development theory provides insight into those evaluating the near-peer instructional space. Specifically, it references the gap between a learner's current skill or knowledge level and their potential to improve their skills or knowledge. Vygotsky stated that this gap is best identified "through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). Further, Vygotsky argued that learning occurs in this space "only when the child is interacting with people in his environment and in cooperation with his peers" (p. 90). Researchers have described how peer tutors and tutees learn to use Vygotsky's ZPD (Murphey & Arao, 2001; Niday & Campbell, 2000; Williams & Nguyen, 2017; Williams et al., 2015).

Because PAL involves a tutor who is slightly more knowledgeable about a subject and who guides the tutee in learning—often in situated learning environments— researchers have also applied Lave's (1988) situated learning theory to understand PAL learning outcomes (Tucker-Raymond et al., 2016; Turner, White, Poth, & Rogers, 2012). Turner, White, Poth, and Rogers (2012) and Turner, White, and Poth (2012) have referenced Lave and Wenger's (1991) legitimate peripheral participation work as it applies to PAL. Tutors and tutees learn from PAL opportunities; their knowledge changes because of their interactions. According to Lave and Wenger (1991), learners evolve through membership in a learning community. A core tenet of learning in communities of

practice is that learning occurs beyond formal learning goals. Learning may happen independently of traditional goals, and learning outcomes not tied to formal goals—often referred to as hidden curriculum—for both PAL tutees and tutors have been documented (McKenna & Williams, 2017; Williams & Nguyen, 2017).

Many PAL studies reference Bandura's (1977) social cognitive theory, including factors associated with the theory's determinants (Akinla et al., 2018; Campbell, 2003; Clarke-Midura et al., 2018; Pon-Barry et al., 2017). Bandura held that people learn by observing others and that factors beyond an individual's behavior shape their learning outcomes. His triadic reciprocal causation model's personal, behavioral, and environmental determinants attribute learning to the dynamic environment and unique interactions that learners encounter (see Figure III.2). Because the PAL environment differs from traditional instructional settings, PAL tutees' and tutors' learning behavior is unique, with interactions occurring between Bandura's determinants. Further, researchers have commented on personal determinants like self-efficacy and attitude outcomes from PAL engagements (Clarke-Midura et al., 2018; Pon-Barry et al., 2017).

Figure III.2

Triadic Reciprocal Causation Model
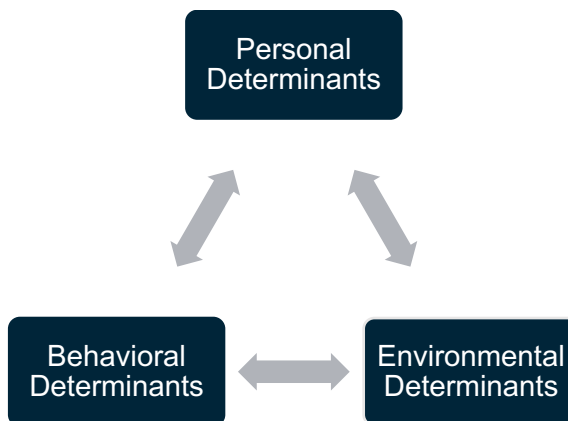
Note. The arrows between each set of determinants represent the concurrent and ongoing interactions, i.e., the reciprocal interactions that prompt learning. Adapted from *Social Learning* Theory (p. 10) by A. Bandura, 1977, Prentice-Hall. Copyright 1977 by Prentice-Hall, Inc.

Peer-Assisted Learning

PAL occurs when individuals unite to help each other learn. Participants learn from teaching and learning from their peers (Topping, 1996). Topping (1996) documented several forms of PAL, including supplemental instruction, group tutoring, and peer-assisted writing. Olaussen et al. (2016) wrote that PAL is an umbrella term for many PAL interventions. Specifically, PAL is a broad term that encompasses three categories of PAL led by a peer in the same grade as the students who teach one to two students at the same time (peer mentoring), three to ten students (peer mentoring), and ten or more students (peer didactic). In addition, three additional categories of PAL exist that are led by a near-peer (one or more grades older than the students) who teaches one to

two students at the same time (near-peer mentoring), three to ten students (near-peer mentoring), and ten or more students (near-peer didactic; Olaussen et al., 2016). Because a large portion of the reviewed literature predates Olaussen et al.'s recommended nomenclature, this study will reference all studies using the umbrella term "PAL" and follow the authors' recommendations for the descriptive classification of the PAL intervention type in findings from this study.

Researchers have documented many positive learning outcomes from facilitating PAL for individuals who take on a tutoring role (Akinla et al., 2018; Clarke-Midura et al., 2018). PAL tutees also benefit from participation (Bester et al., 2017; Turner, White, Poth, & Rogers, 2012). Researchers have studied PAL in multiple learning venues, including high schools (Benni et al., 2016; Polansky et al., 2010). PAL can support the learning of a vast array of curriculum foci, including medicine (Antonelou et al., 2014; Bulte et al., 2007; Yu et al., 2011), paramedics (Williams et al., 2014; Williams et al., 2015), farming safety (Carruth et al., 2010), and gatekeeper training in a college setting (Samuolis et al., 2020).

Both tutees and tutors have benefited from gains in knowledge from PAL exchanges (Hall et al., 2013; Lundmark et al., 2017; Silberberg et al., 2013). In alignment with Bandura's (1977; 1986) social cognitive theory, Burgstahler and Crawford (2007) described how PAL tutors' confidence and leadership determinants might increase from teaching tutees behavioral determinants. PAL's efficacy and the instructional construct's relation to social and cognitive congruence concepts are themes with manifold recurrences in the literature (Kassab et al., 2005; Lockspeiser et al., 2008; Schmidt & Moust, 1995).

Social congruence refers to how well two individuals can communicate with each other, both comfortably and informally. Those who feel at ease speaking with each other have high social congruence, while those who experience communication challenges lack social congruence. The concept of social congruence might help illuminate why learners may thrive in near-peer tutor relationships and how that relationship differs from a relationship between a student and a formal teacher. The often psychologically safe learning environment between tutors and tutees may also help students feel more at ease with tutors than with formal teachers as they strive to learn challenging concepts (Lockspeiser et al., 2008; Ten Cate & Durning, 2007). Because PAL tutees share more proximity with tutors than with traditional instructors in terms of their social standing and educational abilities, tutors explain concepts in more straightforward language and can create more comfortable environments where tutees feel more open to asking questions (Bulte et al., 2007; Kassab et al., 2005).

The documented effects of social congruence in PAL extend beyond a learner feeling comfortable and safe to raise questions. For example, Schmidt and Moust (1995) found that students in a PAL setting who expressed high social congruence levels with their tutor experienced increased intrinsic interest in and time studying the subject. Educators could harness the motivational forces associated with social congruence by deploying PAL.

Cognitive congruence occurs when the teacher and student share a similar knowledge base and similar language (Lockspeiser et al., 2008). Cognitively congruent instructors instruct learners with accessible language while using concepts that learners easily comprehend (Schmidt & Moust, 1995). PAL tutees share more cognitive

congruence with PAL tutors than traditional instructors. This congruence exists because PAL tutors have often learned the material they teach more recently than conventional instructors. PAL tutors' nascent content learning allows them to teach material using language and examples that tutees might identify with more (Lockspeiser et al., 2008). Hall et al. (2014) investigated the optimal cognitive distance between instructors and learners. The researchers found that more proximal cognitive distance led to higher levels of enjoyment among learners. Nevertheless, there are limits to the added benefits of the reduced cognitive distance between learners. According to Jackson and Evans (2012), some cognitive distance is more effective than no distance.

In association with Bandura's (1977) work on self-efficacy, Murphey and Arao (2001) documented gains in Japanese students' confidence after viewing videos of peers speaking English. In addition, Clarke-Midura et al. (2018) found that mentor relatability was a significant predictor of self-efficacy and interest in computer science among young middle school–aged computer science students participating in a computer science camp.

The Hope Squad organization trains all advisors on the Hope Squad curriculum and program delivery. Advisors then educate Hope Squad members in the curriculum during monthly reoccurring meetings during the school year. Although many advisors instruct Hope Squad members on the program's curriculum didactically, some ask the second-, third-, and fourth-year students to teach select lessons of the curriculum the Hope Squad terms as PHASEs. Depending on the squad size, these instructional sessions can be delivered in the PAL form of peer tutoring, peer didactic, near-peer tutoring, or near-peer didactic (Olaussen et al., 2016). Besides curriculum instruction, Hope Squad meetings also include role-playing, during which Hope Squad members practice

responding to various scenarios they may encounter in their interactions with peers and near-peers.

The literature included details of challenges educators may encounter in implementing PAL. Although PAL tutors can naturally connect with tutees because of their close cognitive and social congruence, training tutors is essential. Among many guidelines, Topping (1996, 2005) encouraged PAL facilitators to ensure they train tutors before beginning their tutoring efforts. Some would-be tutor students may feel apprehensive about tutoring peers without proper training (Williams et al., 2014). Ilakkuvan et al. (2015) outlined a prescriptive training guide that may help if a theme emerges from investigations that Hope Squad tutors believe they need to be more adequately prepared to teach their peers.

Within the domain of curriculum expertise, PAL tutors and tutees have remarked that tutors have less content knowledge than teachers (Bulte et al., 2007). PAL participants have also noted that tutees may not take tutors as seriously as traditional teachers; tutees felt their tutors might not correctly respond to their questions (Bulte et al., 2007). Given many tutors' potential deficiencies in pedagogical knowledge, teachers need to provide PAL tutors with training on the subject matter and instructional practices (Evans & Cuffe, 2009).

Existing Research on Hope Squad

Existing research on the Hope Squad program is limited but growing. For example, CDC researchers evaluated Hope Squad as part of an Epidemiologic Assistance (Epi-Aid) report (Annor et al., 2017). Further, researchers have conducted and published

four peer-reviewed studies (Wood et al., 2022; Wright-Berryman et al., 2018, 2019, 2022) and two theses (Osterhues, 2021; Rainock, 2018).

Wright-Berryman et al. (2018) reported on initial pilot data gathered during the 2014–2015 year that Hope Squad members saw an increase in their knowledge of how to help a suicidal peer and the resources available to support at-risk peers. In addition, the researchers identified improvements in members' self-efficacy in crisis response in that same study. Annor et al. (2017) conducted a content analysis on Hope Squad, QPR, and Hope for Tomorrow. The team concluded that Hope Squad's school training materials and objectives align with Stone et al.'s (2017) CDC-published technical package for techniques to promote connectedness with Hope Squad curriculum's efforts to normalize protective factors such as resiliency, belonging, help-seeking, and positive and behavioral change. Annor et al. (2017) additionally noted that QPR gatekeeper training aligns with the evidence-based practice to "identify and support people at risk" (Stone et al., 2017, p. 35) in the suicide technical package. Annor et al. (2017) acknowledged Wright-Berryman et al.'s (2019) pilot study. Still, they emphasized that more research on Hope Squad outcomes was needed "to determine whether the program has beneficial effects on risk for suicide behavior" (p. 56).

Wright-Berryman et al.'s (2019) study reviewed 2013–2017 suicide concern contact data in schools with Hope Squad programs. Wright-Berryman and team found that 24% of all contacts ($n = 287$) in their data set came from Hope Squad members and documented that 14% of the individuals referred by Hope Squad members later received care in a hospital. This indicates that Hope Squad offered at least some benefit by

identifying and intervening for individuals at risk of suicide within the schools in which it operates.

Rainock's (2018) study examined the experiences and perspectives of past Hope Squad members. Rainock focused on traits and skills Hope Squad members gained from participating in the program and identified that they developed and used listening and peer support skills during and after their time in Hope Squad.

Osterhues (2021) investigated the perspectives of the school personnel regarding Hope Squad and identified the perceived benefit of the trust that Hope Squad members have with their peers. Although PAL was not discussed, three of the study's respondents identified time constraints as a challenge within Hope Squad. One respondent noted that "finding time to train the students can be difficult and a challenge" (p. 50), a refrain familiar to much literature on PAL.

Whereas gatekeeper training is typically administered in education settings, Wood et al. (2022) investigated Hope Squad QPR gatekeeper training outcomes when the curriculum was taught in religious settings compared to education settings. Following training, trainees in both educational and religious settings showed significant gains in their suicide prevention knowledge and likelihood to take specific actions to get a suicidal person help.

Wright-Berryman et al. (2022) tracked suicide-related stigma over a school year. They found that respondents from Hope Squad schools indicated lessened stigmatizing attitudes toward suicide than schools without Hope Squad, supporting peer-to-peer suicide prevention programs.

Research on PAL in Hope Squad has yet to be conducted. However, Samuolis et al. (2020) evaluated peer-led QPR training directed at college-aged students. They found that students whom their peers trained showed increases in knowledge of suicide, self-efficacy to intervene, and the likelihood of intervening, and all of these increased at significant levels.

Despite the broad implementation of Hope Squad in Utah classrooms, the many chapters' everyday use of PAL, and existing research on PAL as an effective learning method, no study has investigated PAL within the Hope Squad program. This research investigates how Hope Squad tutees experience PAL through the lens of Bandura's triadic causation model. Findings from this research can help the Hope Squad program find opportunities to improve curriculum delivery as it aims to fulfill its mission.

Research Questions

To address the gap in research on PAL as it intersects with informal contexts like high school Hope Squads, this study addressed the following research questions:

- RQ1: How do PAL tutees experience tutor-led instruction in Hope Squad training?

- RQ2: In what ways do PAL tutees experience cognitive congruence with PAL tutors who have led Hope Squad training?

- RQ3: In what ways do PAL tutees experience social congruence with PAL tutors who have led Hope Squad training?

- RQ4: How do PAL tutees perceive the expertise of PAL tutors who have led Hope Squad training?

Methodology

This study applied an exploratory qualitative research design to answer its
research questions, modeling its methodology after the methodological design and the
focus group and interview questions published in McKenna and Williams's (2017) article
to fit this study's context (see Table III.2). This method was used because no literature
was published on PAL in Hope Squads or, more broadly, suicide gatekeeper training
programs in high school settings. In addition, because of the theoretically lifesaving
outcomes associated with effectual gatekeeper training and other suicide prevention
interventions in high school settings, and because PAL is inconsistently used in Hope
Squad, it was imperative to understand PAL tutees' experiences in settings where PAL is
used.

Table III.2

Exploratory Qualitative Approach to Answering Research Questions

Research question	Data	Analysis technique
RQ1: How do PAL tutees experience tutor-led instruction in Hope Squad training?	Transcripts of responses to semi-structured focus group and interview questions on broad experiential perspectives.	Thematic analysis of transcripts guided by Braun and Clarke (2006).

Research question	Data	Analysis technique
RQ2: In what ways do PAL tutees experience cognitive congruence with PAL tutors who have led Hope Squad training?	Transcripts of responses to semi-structured focus group and interview questions adapted from Schmidt and Moust's (1995) assessment of cognitive congruence.	Thematic analysis of transcripts guided by Braun and Clarke (2006) while comparing responses to Lockspeiser et al.'s (2008) and Moust's (1995) descriptions of cognitive congruence.
RQ3: In what ways do PAL tutees experience social congruence with PAL tutors who have led Hope Squad training?	Transcripts of responses to semi-structured focus group and interview questions adapted from Schmidt and Moust's (1995) assessment of social congruence.	Thematic analysis of transcripts guided by Braun and Clarke (2006) while comparing responses to Lockspeiser et al.'s (2008), Moust's (1995), and Ten Cate & Durning's (2007) descriptions of social congruence.
RQ4: How do PAL tutees perceive the expertise of PAL tutors who have led Hope Squad training?	Transcripts of responses to semi-structured focus group and interview questions on broad experiential perspectives.	Thematic analysis of transcripts guided by Braun and Clarke (2006) while comparing responses to Schmidt and Moust's (1995) measures on subject-matter expertise.

Participants and Data Collection

Not all Hope Squads use PAL to support instruction. Therefore, participants were purposely selected based on experiential inclusion criteria, including that they were (a) Hope Squad members, (b) in a Utah high school, and (c) received instruction from a PAL tutor as a part of the Hope Squad curriculum for this study. The recruitment process was conducted in collaboration with the Hope Squad organization, and participants were selected from a segmented list of PAL-participating Hope Squads. Once approval was obtained from the Utah State University Institutional Review Board, potential

participants were then notified of the focus group through an email advertisement sent by Hope Squad that included details of the study, the scheduled dates and times, semi-structured focus group questions, and a financial incentive for participating in the one-hour focus group (see Figure B4).

Seven students responded to the study flyer, followed consenting procedures (see Figures B1–B5), and completed participation in a whole focus group or interview (a scheduled focus group in which only one of the several registrants attended) (see Table III.3). In addition, this study identified that all participants' PAL experiences were near-peer didactic, in which one PAL tutor taught more than ten peers (Olaussen et al., 2016).

The participants who met the qualifications of being active Hope Squad members and having participated in Hope Squad instruction by a PAL tutor took part in one of the two focus groups. A final participant participated in a focus group turned interview. The focus groups (and an interview with Allison) were conducted remotely following Utah State University Institutional Review Board (n.d.) research recommendations for COVID-19. These focus groups and interviews took place over secured Zoom meetings in the evening, outside of scheduled school hours, to avoid disrupting the school day or the need to remove students from participation in core-subject learning. Participants were reminded that their session would be recorded as outlined in the consent form and reminded of the study's purpose. During the discussion, study participants were encouraged to share their experiences freely (see Figure C1 for an outline of the focus group agenda).

Table III.3

Participants' Demographics

Pseudonym	Gender	Pronouns	Years of experience	PAL tutor experience	Study engagement
Allison	Female	She/Her/Hers	5	No	Interview
Bailey	Female	She/Her/Hers	Unidentified	Yes	Focus Group 1
Chloe	Female	She/Her/Hers	5	Yes	Focus Group 2
Daniel	Male	He/Him/His	Unidentified	No	Focus Group 2
Emily	Female	She/Her/Hers	3	Yes	Focus Group 1
Mason	Male	He/Him/His	3	No	Focus Group 2
Savannah	Female	She/Her/Hers	3	Yes	Focus Group 1

Note. Participants' names were replaced with pseudonyms to protect their identities. Although some of these individuals could take on or may have already acted as a PAL tutor in their Hope Squad chapter, this study focused on their role and experiences as tutees during the training sessions.

A semi-structured interview approach was taken to conduct the focus group conversations. A semi-structured interview guide was developed and applied to address four key topic areas to answer four research questions, modified from McKenna and Williams' (2017) focus group questions. Those constructs include (a) tutees' experiences in PAL sessions, (b) tutees' perceived social congruence with PAL instructors, (c) participants' perceived cognitive congruence with PAL tutors, and (d) tutees' perceptions of tutors' expertise (see Table III.4). In addition, additional follow-up questions were asked in response to comments made by participants.

Table III.4

Semi-Structured Interview Guide: Hope Squad Focus Groups

Construct	Questions
Experiential	• How has your experience of being taught by a high school student impacted your understanding of what it means to be a Hope Squad member? • What parts of learning from a PAL tutor have you liked the most? • What lessons have been the most helpful for you as a Hope Squad member? • How has the atmosphere during learning felt? • What challenges have you had with learning Hope Squad lessons from a high school student? • What are some things student teachers can do to improve how they teach you? • How can the Hope Squad program develop the Hope Squad member experience for future members?
Social congruence	• Did your tutors seem interested in the lessons they taught? • Did your tutors seem interested in your well-being? • Did your tutors seem interested in and open to your point of view? • How would your tutors listen for feedback?
Cognitive congruence	• Did your tutors seem like they understood the information they taught you, and if so, how did you believe they understood? • Did your tutors explain the lesson in ways that were easy to understand?
Perception of expertise	• How knowledgeable were your tutors on the information they taught you? • How did your tutors use their subject-matter knowledge to guide the group?

Note. Questions for the cognitive congruence, social congruence, and perceptions of tutors' expertise constructs were adapted from the assessment offered in the presentation "What Makes a Tutor Effective?" by H. G. Schmidt and J. H. C. Moust, 1995, at the Annual Meeting of the American Education Research Association in San Francisco, CA (https://doi.org/bgcp8g).

After each focus group and interview, each audio recording was immediately transcribed verbatim. Audio and video files were destroyed, and participants were de-identified with pseudonyms. Transcripts were stored on an encrypted, cloud-based storage system approved by Utah State University's Institutional Review Board.

Data Analysis

This study implemented Braun and Clarke's (2006) thematic analysis guide, following their recommended six-phase procedure (see Table III.5). Then, the study's findings were compared to Braun and Clarke's 15-point checklist of criteria for good thematic analysis (see Table III.6). Finally, phases one through five of the thematic analysis were conducted using NVivo 1.6 (see Table III.5).

Table III.5

Phases of Thematic Analysis

Phase	Description of the process	Output
1. Familiarizing yourself with your data	Transcribing data (if necessary), reading and re-reading the data, and noting down initial ideas.	• Two focus group transcriptions and one interview transcription
2. Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.	• 38 initial codes • 679 coding references
3. Generating and constructing themes	Collating codes into potential themes, gathering all data relevant to each potential theme.	• Identified and gathered 14 themes and associated codes in NVivo 1.6
4. Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis (see Figure F1).	• Thematic map hierarchy created in NVivo 1.6
5. Defining and naming themes	Ongoing analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names for each theme.	• Created a definition matrix and narrowed themes
6. Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, the final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a	• Core themes published in this report

Phase	Description of the process	Output
	scholarly report of the analysis.	

Note. Adapted from "Using thematical analysis in psychology," by V. Braun and V.

Clarke, 2006, *Research in Psychology, 3*(2), pp. 87–93 (https://doi.org/fswdcx).

Table III.6

The 15-Point Checklist of Criteria for Good Thematic Analysis

Process	No.	Criteria
Transcription	1	The data have been transcribed to an appropriate level of detail, and the transcripts have been checked against the tapes for "accuracy."
Coding	2	Each data item has been given equal attention in the coding process.
	3	Themes have not been generated from a few vivid examples (an anecdotal approach), but instead, the coding process has been thorough, inclusive, and comprehensive.
	4	All relevant extracts for each theme have been collated.
	5	Themes have been checked against each other and back to the original data set.
	6	Themes are internally coherent, consistent, and distinctive.
Analysis	7	Data have been analyzed—interpreted, made sense of—rather than just paraphrased or described.
	8	Analysis and data match each other—the extracts illustrate the analytic claims.
	9	Analysis tells a convincing and well-organized story about the data and topic.
	10	A good balance between analytic narrative and illustrative extracts is provided.
Overall	11	Enough time has been allocated to complete all phases of the analysis adequately without rushing a phase or giving it a once-over-lightly.
Written report	12	The assumptions about and specific approach to thematic analysis are clearly explicated.
	13	There is a good fit between what you claim you do and what you show you have done—i.e., described method and reported analysis are consistent.
	14	The language and concepts used in the report are consistent with the epistemological position of the analysis.

Process	No.	Criteria
	15	The researcher is positioned as active in the research process; themes do not just "emerge."

Note. Adapted from "Using thematical analysis in psychology," by V. Braun and V. Clarke, 2006, *Research in Psychology, 3*(2), p. 96 (https://doi.org/fswdcx).

Findings

Focus group and interview participants shared insights into their experiences of PAL tutors teaching them in Hope Squad settings. For example, the PAL tutees shared feelings that indicate they shared cognitive and social congruence with tutors. In addition, participants noted they trusted tutors' expertise, showing how they developed their trust while emphasizing the need for Hope Squad Advisors or knowledgeable students to train them on the curriculum before teaching.

RQ1: How do PAL tutees experience tutor-led instruction in Hope Squad training?

Three key themes were identified among the discussion responses to questions on PAL tutee experiences: *learning environment comfort*, *opportunities for PAL improvement*, and *hidden curriculum*. As coded to these themes, focus group and interview question responses shed light on how focus group and interview respondents perceived tutor-led instruction while indicating improvement opportunities for PAL in Hope Squads.

Learning Environment Comfort

Focus group and interview participants described the comfort they experienced in Hope Squad PAL settings. They also commented on the comfort they perceived PAL tutors had or did not have while teaching material. For example, PAL tutees commented on sensing tutor nervousness when PAL tutors were teaching them. Participants referenced the word "nervous" or one of its stems 12 times during the focus groups and interview. Excerpts of participants' comments were visualized as a word tree to illustrate this reoccurrence (see Figure III.3).

Figure III.3

Word Tree
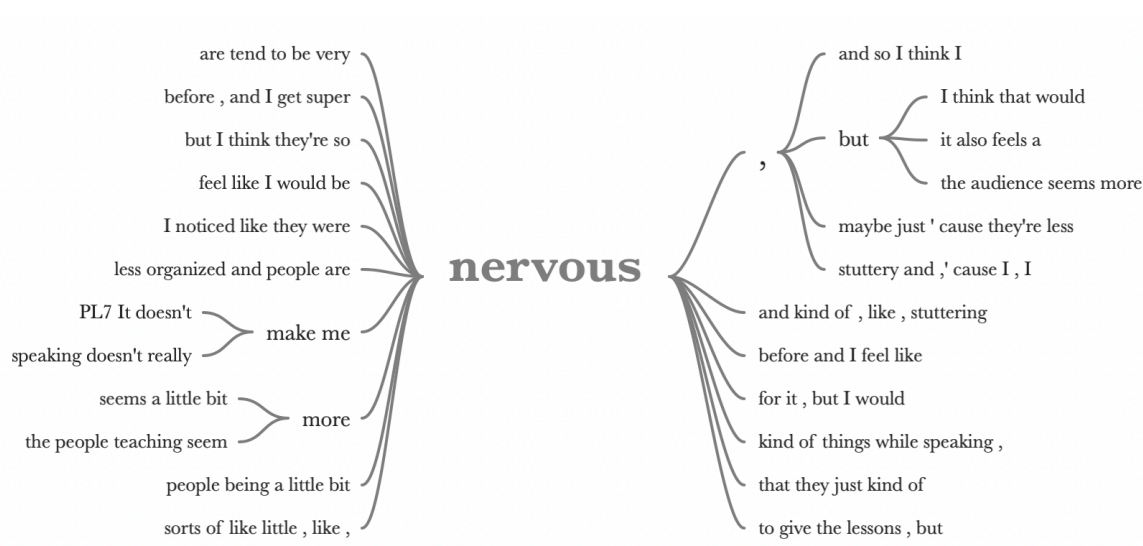
Mason said the following about observing signs that PAL tutors are nervous:

> When, like, a student would, like, kind of, like, come up and, like, speak for a little bit about like an issue or something, it was very, like, brief in a little bit, I, I noticed like they were nervous and kind of, like, stuttering when they were talking and stuff … I do observe is they are tend [sic] to

be very nervous, stuttery, and … I like notice, like, them shifting their feet and stuff like that. (Mason)

Chloe posited that tutors feeling nervous might experience challenges listening to tutees' responses to instructional prompts, which could lower the quality of instructional dialogue compared to tutors who are not feeling nervous:

I think a lot of the times, the [PAL tutors] listen, but I think they're so nervous that they just kind of smile and be [sic] like, "that was good," and then just move on instead of really taking into consideration what that person said and maybe trying to, like, add onto it or something, they just kind of, "good comment," and then keep going. (Chloe)

According to Chloe, while PAL tutors can appear nervous to tutees, their nervousness might not necessarily cause tutees to feel uncomfortable:

I feel like when I'm listening to other students teach as well, everyone just seems a little bit more nervous, maybe just 'cause they're less familiar with the material than … the leaders are, or because they're younger. But oftentimes, it seems a little bit less organized, and people are nervous, but it also feels a lot more—I don't know how to describe it—like, the people teaching seem more nervous, but the audience seems more comfortable. (Chloe)

Chloe said she empathizes with nervous PAL tutors because she has taught lessons and gets nervous before teaching. However, understanding the nervousness other PAL tutors might feel from her own experience influences her efforts as a learner:

It makes me a lot more sympathetic because, like, when they're there and they, like, jumble over their words or something, I know what that feels like, and so I feel like I can maybe have more of an open mind towards what they're saying. And it's just a little bit easier to listen to them because I know what they're going through, and I put more effort into trying to take something away from what they're saying or to try and get something out of it because I know how much time and effort goes into planning those lessons and how tough they can be. (Chloe)

Beyond attempting to learn from tutors, Chloe further shared that her understanding of what PAL tutoring entails affects how she engages in tutor-led sessions

as a tutee. Namely, she noted she is more inclined to respond to other tutors' teaching and questions when participating in a lesson as a tutee. She said, "Especially when it's someone teaching that I know, like, I want to help them out; I want to make them feel more comfortable in their presentation, and so I will be more willing to add my own thoughts to it as well."

Opportunities for PAL Improvement

PAL tutees' comments on their experience with PAL in Hope Squad settings show potential opportunities for the Hope Squad and its advisors to make adjustments that could improve learning outcomes. For example, some PAL tutors share their personal experiences applying the Hope Squad curriculum in their lives and other Hope Squad-related experiences as part of their teaching. PAL tutees repeatedly expressed the value they gained from this experience sharing. For example, Bailey said that experience sharing helped her contextualize the PHASE curriculum: "I think something that [PAL tutors] could do to improve is, like, provide, like, experiences of their own. I think for me, at least, that helps me to better understand, like, what they're talking about."

Tutors' use of experience sharing as an instructional tactic aided PAL tutees in understanding how to apply the Hope Squad curriculum in their daily lives. Bailey pointed out that while not all PAL tutors share their experiences using the curriculum, doing so can help them become better PAL instructors.

Tutees can perceive the tutor's use of the material as a sign of engagement with the material and commitment to the cause of suicide prevention:

> You can kind of tell by what [PAL tutors] say and how they say it if it's really, deep-down important to them. I think that if they're just kind of standing and they're just kind of reading off their points, we'll kind of see

like they're involved in it, but maybe not as strongly tied to it, but I think that if, like, they have … personal stories or they have instances where they can be like, "I know that this helped me," … it can really show in their presenting and how they present it. (Emily)

Using experience sharing as an instructional tactic seems to be effective for PAL tutors. Experience sharing aided PAL tutees in understanding how to apply the Hope Squad curriculum in their interactions with others. Bailey noted that not all PAL tutors share their experiences with applying the curriculum to their lives, but doing so can help them become better PAL instructors.

Experience sharing can also signal that the tutors trust the curriculum enough to apply it to their lives outside of Hope Squad training meetings. For example, Savannah stated that experience sharing showed that tutors were interested in the curriculum:

Yeah, there's [sic] been times where you can really tell that the person teaching is very passionate about it. Usually, they'll throw in some personal experiences or just life experiences or experiences they've had on Hope Squad, and that will kind of, that kind of shows you how passionate they are about it. Like, they'll bring up times where [sic] they've used the advice they're giving us in their lives. (Savannah)

Bailey recommended that tutors learn the PHASE they will teach before teaching it to others. As tutors understand the Hope Squad PHASEs, they can avoid reading the curriculum word-for-word and can add personalized commentary to their instruction:

I would tell [PAL tutors] to look over the information before presenting because that way, they can, I guess, come up with better ways of presenting the information. You know, it's not just like you just reading the information, but you actually, like, have things in mind that you're going to say, and in that way, it's more personal. (Bailey)

Advisors play a central role when a PAL tutor is teaching. Allison said her advisors would moderate tutors' instruction to ensure accuracy. "From my perspective, it's always been, you know, moderated by the advisors so that the presentations are all

looked after, and they're making sure that what's taught is accurate and be taught in a well [sic] way" (Allison).

Besides advisors moderating PAL instruction, Daniel shared that he prefers to learn some Hope Squad curricula he terms "heavy" from advisors and other types of curricula from tutors:

> It kind of depends on what the subject was. But on most of, on some of the subjects, though, I feel it would be better to hear from … the peers in the Hope Squad the like the officers and Hope Squad or something, 'cause they would know more what to say … some of the students can relate more with them. But on a heavier subject, I feel that it's better to hear from the advisor. (Daniel)

Hidden Curriculum

Evidence was emergent that PAL tutees learn valuable lessons in vicarious, unintended ways on subjects outside of formal Hope Squad material. The subject matter students learn that is not part of a program or course's formal curriculum is known as a hidden curriculum (McKenna & Williams, 2017). PAL tutees shared examples of knowledge and skills they gained from participating in Hope Squads beyond the curriculum found in the phases of Hope Squad. For instance, several tutees mentioned their squads' efforts to plan Hope Weeks and the skills they learned. Tutees discussed Hope Squad week planning and how they reviewed past Hope Week successes, then evaluated and implemented ideas. Savannah stated:

> In past years, I've taken a lot of, kind of, inspiration from past presidents, and so this year, I've taken, like, a lot of ideas from my freshman, sophomore, junior years, a lot of ideas and a lot of ideas I probably, maybe wouldn't be as helpful. I just learned a lot from them, and I, I kind of, it's definitely influenced how I've planned activities as a president, just using a past presidency as a kind of a guide or example. (Savannah)

Beyond the Hope Squad curriculum, Emily suggested she developed knowledge that she can apply in other settings while inspiring her to be a good PAL tutor:

> I think that I've definitely learned a lot from my peers. I think that they show you that you can be really passionate about something and teach it well, and I think that people who have taught me, particularly, they kind of give you, they leave you with something to think about and something that maybe you've never thought of it that way before, or, and it gives it kind of makes you want to do good when you're teaching and want to make you leave someone with this same feeling. And I think that as a student, just in general, it helps you on different projects as well … you never know when you're going to be put in a, like, leadership position outside our Hope Squad. And I think that the things that they teach you can be used anytime, anywhere. And I think that all of the lessons are not even just pointed at, like, Hope Squad members—like we're the ones who get the lessons, and we're the ones to learn all of it—but I think that anybody could thrive off of the lessons and the leadership traits that they're teaching you and just the life lessons in general. (Emily)

Several tutees mentioned that their overall participation in Hope Squads had influenced their interpersonal and professional skills. For example, Savannah stated that she had applied skills she learned while serving in a school leadership position:

> I'm also Vice president at the FBLA [(Future Business Leaders of America)] at my school, and so I plan a lot of the activities. I definitely do use some of the skills I've developed from my past years at Hope Squad and both Hope Squad and FBLA and other activities I'm involved in. (Savannah)

Mason stated that participating in the Hope Squad program "definitely has helped me, I think, wanting to be more open-minded and like listening to peers, like always questioning, like seeing how everyone is doing."

In response to whether participation in the Hope Squad changed what PAL tutees want to do with their careers, Daniel stated that his experience has helped him develop conversational skills. In addition, he expressed an interest in community service to be a part of his potential future profession:

I have been in the Hope Squad for a little while now … it's helped me be able to talk to people, and I want to go into the criminal justice field and become like a law enforcement officer or something like that just to be able to, like, help others, you know, by stopping other, like, things out bad [sic] to happen that can hurt other people, you know, and just preventing those type of things. I think Hope Squad is influenced [sic] that is just helping or like helping the community and helping people. (Daniel)

Chloe identified that her participation in Hope Squads helped her develop sympathy and a desire to support people during moments of vulnerability:

I've learned a lot from [participating in my Hope Squad], and I've had a lot of experiences with it, and I think it has taught me how to be a more, like, sympathetic person, and I think that kind of maybe changed the way that my life is headed. I want to go into the medical field, specifically emergency medicine, and I think maybe the Hope Squad [program] played an impact on wanting to be there for people when they're having a hard time and when they're going through the hardest part of their life. You know, I can be there and kind of know better about how I can help them, not just on the physical side, but on the mental side of things as well. (Chloe)

RQ2: In what ways do PAL tutees experience social congruence with PAL tutors who have led Hope Squad training?

Study participants shared anecdotes that indicate they communicate with PAL tutors in comfortable, informal, and empathetic ways, creating a learning environment that encourages an "open exchange of ideas" (Schmidt & Moust, 1995, p. 13). In addition, evidence that study participants experienced social congruence with PAL tutors was unearthed. Tutors described the social congruence they felt using the term "relatability," while some commented on the conversational nature of their PAL sessions, the first theme that stood out. The theme of *conversational instruction* was also discovered in examples the focus group and interview participants shared.

Relatability

Relatability was a prominent theme in all focus group and interview conversations. All study participants made at least two comments, subsequently coded with the relatability identifier in NVivo version 1.6, as displayed below (see Figure III.4).

Figure III.4

Social-Congruence-Related Factors' Codes with Number of Statements Made by Study Participants
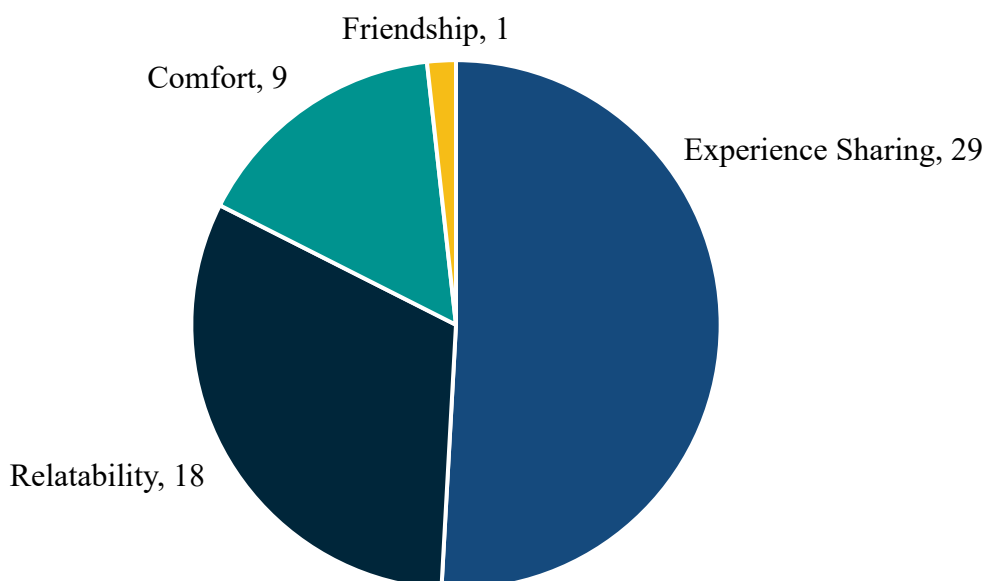
Tutees stated that experiences were helpful if they could relate to the instructor's experience. Chloe shared one such insight:

> I feel like when the high schoolers are teaching us, sometimes it feels
> more applicable to your own life because they tend to understand a little
> bit better about what you're going through—'cause they're typically going

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through the exact same things—and so I've had a pretty positive
experience having high schoolers talk about the Hope Squad material,
just 'cause it seems they understand a little bit more how the rest of the
group feels rather than being like many years older and kind of not
relating to us the same way. (Chloe)

Bailey noted that her shared experiences with her peers helped her connect and

relate to them better:

Yeah, I think for me it's definitely helpful to learn from my peers, well,
both my advisors and my peers, but I think especially my peers just
because they are kind of going through the same things as me, and so they
can, I think I just kind of connect better with them. (Bailey)

Besides the study participants remarking that they find it easier to relate to their

peers within the program than their advisors, tutees mentioned relatability between

themselves and their high school student body. For example, Bailey shared the following

about her experience as a Hope Squad student who collaborates with her squad members

and advisors to plan Hope Squad activities:

Our advisors, sometimes their ideas, you know, they have great intentions,
but you know when they present their ideas to the members of Hope
Squad, it's just they, we, we just know how our peers are going to
respond, and so sometimes we, yeah, don't think that their ideas are the
best. (Bailey)

Savannah participated in the same focus group as Bailey and shared the following

insight into event planning for her school, noting that she has seen student-led Hope

Squad efforts translate into better event support and attendance:

It also seems like the activities that were thought of and kind of planned
by the students, like a student—an entire student body activity—typically
schoolwide activities planned by students tend to have a bigger outcome;
more students show up than if a teacher planned it, just because the
students or the members of Hope Squad usually have a little more updated
ideas that appeal to our peers. (Savannah)

Conversational Instruction

Informal and comfortable conversations are characteristics of social congruence (Schmidt & Moust, 1995). Allison referenced the conversational style PAL tutors used as they taught the material. In speaking about the learning atmosphere that she experienced when peers were teaching, Allison noted:

> I think it feels very different. Like a lot more fun and free, a lot more relatable, and I don't know. I remember I just, I really loved the people that might, the people that [sic] taught, and I don't know, it definitely did not feel like a classroom setting like a normal teacher. It was more of just like having a conversation, you know? We're involved, and we get to answer questions, too. Yeah, I think it was just that they're my age themselves. And, I don't know, it just felt more like a conversation, which I feel, like, is easier to relate to. (Allison)

RQ3: In what ways do PAL tutees experience cognitive congruence with PAL tutors who have led Hope Squad training?

Although we can classify teachers and learners who share a joint knowledge base and language as cognitively congruent, cognitive congruence extends beyond what tutors and tutees know and say to how they say it.

The Hope Squad developed its curriculum for use in school settings, and Hope Squad members gain knowledge from it. Some experiences shared by PAL tutees illustrated the cognitive congruence of a similar knowledge base, which was particularly pronounced when describing experience sharing.

Experience Sharing

Many tutees expressed value for occurrences when tutors shared personal experiences applying the Hope Squad curriculum in their lives as part of their instruction. Besides the perceived benefits of experience sharing captured in this manuscript's

"Opportunities for PAL Improvement" section, the experiences high school students shared represent knowledge that an adult advisor cannot replicate, and they indicate social congruence between tutee and tutor.

Allison mentioned that the learning atmosphere from a PAL tutor differs from that of an advisor-taught lesson. For example, tutors sometimes share their experiences as Hope Squad members while teaching lessons. These experiences might occur in the high school, described as seen through the eyes of a high school student, using the language of a high school student—experiences that can differ from the perceptions and language of an advisor:

> It's definitely a different experience to have someone that [sic] you relate to more teaching the lessons, like somebody that [sic] has personal experiences as a Hope Squad member, like, they know how to come across to people as, like, being inviting. Or you know they know how people respond to certain things that they say. (Allison)

RQ4: How do PAL tutees perceive the expertise of PAL tutors who have led Hope Squad training?

When asked if their tutors seemed to understand the information they taught, some tutees mentioned using the measure of tutors' ages and experience in the Hope Squad program to gauge tutors' level of expertise. Tutees used the measure of experience, precisely the number of years tutors had participated in the Hope Squad program, to assess tutors' knowledge. For example, when asked if she trusted information shared by tutors, Savannah responded, "For the most part, yes, it really depends on how many years, like, it kind of depends on my [tutor]. Like how many years they [have] been on Hope Squad, what question you ask [them], and … the … experience that they've had."

Specifically, participants referenced the experience Hope Squad members built through iterations of responding to concerns raised by classmates, using Hope Squad guidance. Students get practice deploying the QPR model and can then share those experiences with other Hope Squad members. Chloe noted:

> I think it depends on what they're sharing, but, generally, yeah,
> yeah, 'cause I think they, I mean peers come to them all the time with stuff
> that they're going through, and so I think by that time that they know,
> they've seen like, they have first-hand experience of what that's like, and
> so I think they know. (Chloe)

Emily revealed that a tutor's confidence influences her assessment of the tutor's expertise, and she emphasized the need for tutors to learn the lesson before teaching it:

> Everybody is different, and you're gonna probably trust one person a little
> bit different. I know that if someone seems really confident about it, you'll
> probably be … like, "Oh yeah, that sounds good." Or if they, like, mumble
> it, "I think that's what I said," and I think that that's why it's so important
> to go to the lesson with background knowledge so that you can answer
> questions if they arise. (Emily)

Discussion

This study is the first to investigate PAL in Hope Squad training spaces. Since little was known and documented about PAL instruction in Hope Squads, this study aimed to explore how PAL tutees experience tutor-led instruction. The study also sought to determine whether PAL tutees experience social and cognitive congruence when taught by tutors while investigating how they perceived their tutors' expertise.

No reviewed PAL literature referenced the potential for tutors to feel or show signs of nervousness; therefore, the level of comfort tutees perceived tutors to have while teaching was an unexpected finding. However, when gathering data to support how tutees experience tutor-led instruction, tutor nerves were a prominent theme potentially related

to a lack of formal PAL tutor training. Alternatively, the apparent tutor nervousness could be attributed to the apprehension many individuals experience when speaking in public settings.

The structure of their PAL tutoring sessions aligned with the near-peer and peer didactic structure that all study participants noted (Olaussen et al., 2016). Hughes et al. (2000) investigated using one such near-peer struct self-prompted communication book training. The training involved two peers who would engage in a guided conversation about the learning material, and Hughes et al. reported favorable learning outcomes from the intervention.

Bandura's (1977) social cognitive framework provided insight into tutees' experiences with PAL. For example, the signs of tutor nervousness can affect students, though not always negatively. Chloe, for example, empathetically shared that having experienced acting as a tutor and knowing its challenges, she tried hard to listen. She said she "put more effort into trying to take something away from what they're saying." Chloe's engagement as a peer learner illustrates the interplay between the triadic reciprocal model of causation determinants, including the display of nervousness (environmental); the recognition of nervousness, all while learning the material (cognitive); and the conscious decision to learn and benefit from the lesson (behavioral).

Participants stated they valued hearing about PAL tutors' experiences and that applying the material displayed that the tutors were committed to preventing suicide. They encouraged tutors to share their experiences if they had not already done so. Tutees advised PAL tutors to invest time in learning the PHASE they would teach before

teaching it. Advisors played an essential role in moderating PHASEs to ensure that the information tutors shared while teaching was accurate.

Researchers have documented hidden curricula in alignment with other PAL settings (McKenna & Williams, 2017; Williams & Nguyen, 2017). Thus, its emergent presence in the Hope Squad program as PAL tutees gained valuable knowledge beyond its formal curriculum was not unexpected. For example, one tutee shared that she built her Hope Squad event planning and operational knowledge, while others reported developing leadership traits and conversational skills. In addition, Clarke-Midura et al. (2018) wrote that a peer mentor could act as a role model from which tutees can "envision their future selves" (p. 664). As previously mentioned, Chloe noted that her participation in the Hope Squad program influenced her decision to enter the emergency medicine field. Though Chloe did not specifically attribute her career goals to interactions with PAL tutors but to her experience in the program, which taught her to be a "more … sympathetic person," tutees can look to tutors as role models for their future.

Peer tutees experienced social and cognitive congruence with their tutors. Various study participants shared that they could relate with their tutors and that instruction felt like a conversation rather than didactic instruction. The ability to relate with PAL tutors is a theme in the literature. For example, Tenenbaum et al. (2014) captured responses to open prompts from PAL tutees in which one tutee noted that "you feel comfortable around them, you can relate, and you can ask them for guidance" (p. 382), while another respondent shared that "they were young enough to relate to, and they knew how to teach kids our age" (p. 382). In addition, all study participants shared that they could relate more naturally to their peer tutors than their advisors. Perhaps tutees felt they could easily

relate to peer tutors because these tutors had often recently been peer tutees and may have had lived experiences as Hope Squad members to include in their lessons, while advisors naturally could not share the same experiences.

Tutees assessed tutors' expertise by age and experience with the Hope Squad. Some tutees trusted advisors over tutors to teach so-called "heavier course material." Tutees also tied the tutors' age to the ease tutees felt in relating to tutors. One participant remarked that the tutor's confidence supported her perception that the tutor had some expertise in her teaching domain.

Limitations and Future Research

This study design has limitations, including restricting potential study participants to just those from the State of Utah while also limiting the age of students to high school ages, limiting the study's transferability in other states and to other ages for Hope Squad participants. The study had limited participants and was conducted in a single data-collection phase. More participants and a second and third follow-up session with participants could have presented an opportunity to collect richer data. Program administrators and researchers may experience challenges determining how similar their populations are to those represented by research participants and then aligning the study's results because of the limited demographic data gathered about participants. Participants were asked to reflect on their experiences. Respondents' recency biases and other recall challenges may have affected their responses.

Although the study's seven participants represented their experiences at various Utah high schools, their experiences are unique. They may not be what other high school Hope Squad members experience in Utah or elsewhere. This limitation could be

counteracted by broadening the inclusion criteria to more schools in more states to gather feedback from a more geographically diverse respondent base in a future study. More than half the participants also had experience acting as tutors (see Table III.3). Although research questions were framed from Hope Squad members' experiences as tutees, some focus groups and interview conversations centered on overall Hope Squad experience. A follow-up study exploring tutors' perspectives and experiences could help expand understanding of PAL in Hope Squad. Finally, there are limits to the exploratory, descriptive qualitative study approach because it focuses on observing rather than manipulating study setting variables. Although descriptive qualitative studies can help researchers like McKenna and Williams (2017) observe and describe PAL environments where gaps in knowledge exist, the methodology lacks quantitative tools that are part of other methodologies.

Conclusion

As the third leading cause of death in the United States among youth aged between 15 and 19, suicide is a pressing problem in school communities. Evidence-based suicide prevention interventions can help people recognize signs of suicide and know how to intervene, getting people needed help, including using the QPR model. For example, the Hope Squad program teaches its members the QPR model. Furthermore, there is evidence that PAL is an effective instructional method, and some Hope Squad chapters use PAL in their instruction. Ensuring suicide prevention instruction is effective can have lifesaving consequences.

This study investigated the experiences of Hope Squad members learning its curricula from PAL tutors. Evidence shows that PAL tutees in the Hope Squads program can experience social and cognitive congruence with their peer tutors. Some Hope Squad members feel they can relate better to peer tutors than advisors, which helps them feel at ease. They value learning about experiences their peer Hope Squad members have had in applying the skills and knowledge they learned in Hope Squad in their everyday lives at school and in the community. On the other hand, some peer tutors can show nervousness when teaching, which program coordinators could address by training the trainer on instructional techniques and content while breaking up instructional activities into smaller learning groups, possibly through peer mentoring or near-peer mentoring structures. Indeed, Shapiro et al. (2013) recommend that "not only must faculty be content experts but also be supportive and closely involved in peer learning activities, including peer leader training" (p. 25).

Hope Squad tutees learn about steps they can take to prevent suicide, and they benefit from the hidden curriculum. In addition, some tutees noted that their experiences in the program had shaped their future professional outlook.

Although the findings of this study contribute to a better understanding of what some Hope Squad participants are experiencing in PAL settings, we know little about how these experiences differ by gender. This study investigated tutees' experiences in Hope Squads. Future research could explore tutors' experiences in Hope Squads and what hidden curriculum they learn from and apply to their lives after their time in Hope Squads ends. Researchers could study the impact of providing instructional training to tutors before asking them to tutor other students, evaluate learning outcomes from

advisor-led instruction compared to tutor-led tutorials, and document tutors' experiences

in Hope Squad settings.

CHAPTER IV

EXPLORING PEER-ASSISTED LEARNING TUTOR

EXPERIENCES IN HOPE SQUAD

by

Sterling R. Morris

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Instructional Technology & Learning Sciences

UTAH STATE UNIVERSITY
Logan, Utah

2024

ABSTRACT

Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad

by

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Utah State University, 2024

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Department: Instructional Technology & Learning Sciences

This study extends the research on peer tutees in Hope Squad to peer tutors in the same organization. Scholars have investigated peer-assisted learning in many settings and published findings that reveal many of the instructional approach's affordances and challenges. However, we know less about peer-assisted learning in some environments, including in noncompulsory high school settings, including suicide prevention training settings, where I conducted this research. This chapter outlines background research on peer-assisted learning and identifies unknown elements, including the emotional states of tutors who play a core role in instructing tutees. Then, to add to the literature on peer-assisted learning and bring insight to Hope Squad, I deployed qualitative methodology using multi-stage focus groups, the gathering of journey maps, and qualitative analysis techniques to answer research questions related to understanding the experiences of peer-assisted learning tutors in the Hope Squad suicide prevention program.

Introduction

Background

Peer-assisted learning (PAL) involves at least two participants who are "helping each other to learn and learning themselves by doing so" (Topping, 2001, p. 2). PAL includes peer assessment, counseling, education, modeling, monitoring, and tutoring (Topping & Ehly, 1998). This peer-led form of instruction can supplement professional teaching, promoting learning and gains in students' self-efficacy (Tenenbaum et al., 2017), subject-matter knowledge (Cohen et al., 2015; Silberberg et al., 2013), and interpersonal skills for participants (Williams & Nguyen, 2017). Scholars have investigated PAL in various settings, with many investigations occurring in higher education settings (see Bester et al., 2017; Tibingana-Ahimbisibwe et al., 2022, as two examples).

While researchers, including Topping (2001), have referenced using PAL in voluntary settings, most literature investigates it in settings where educators grade participants on learning outcomes and require participation in PAL. The learning environment of traditional classroom settings is unique, and incentives are likely disparate from a voluntary learning environment where learning outcomes are essential but not tested and graded. Scholars need to conduct more research on PAL in the latter-described settings. One setting where investigations have begun is suicide prevention training among high school students (Morris, 2024b).

The Research Problem

In recent years, death by suicide has become the third leading cause of death among youth aged between 15 and 19 in the United States (Figure II.1), growing from 7.9 deaths per 100,000 in 2001 to 10.6 deaths per 100,000 in 2020 (Centers for Disease Control and Prevention, 2022). Family and friends of those who die by suicide can be left coping with grief (Sajan et al., 2022; Testoni et al., 2019) and feeling the fear of loss and abandonment (Azorina et al., 2019; Hunt et al., 2019) while potentially attempting to conceal the cause of death, given the cultural stigma associated with suicide (Oexle et al., 2020; Ross et al., 2021). Additionally, youth suicides disrupt safe school environments for students, teachers, and other school personnel (Metha & Webb, 1996; Rishel, 2007). With rates of suicide increasing by 41.3 percent in a decade (Centers for Disease Control and Prevention, 2022), there is a vital need for schools to join students, students' families, guardians, and other community organizations in taking steps to prevent suicide.

Individuals at potential risk of suicide may struggle with perceived burdensomeness or the feeling that one is a liability to others, in which they may think, "My death is worth more than my life to others" (Van Orden et al., 2010, p. 444). A second compounding interpersonal construct adding to suicide risk is that of thwarted belongingness, in which individuals might feel "disconnected from others" (Van Orden et al., 2010, p. 43). Joiner's (2005) interpersonal theory of suicide suggests that an individual can become an eventual risk for suicide when experiencing feelings of perceived burdensomeness and thwarted belongingness, which, together, can create the desire for suicide when the individual feels hopelessness about these states improving.

Joiner (2005) theorized that the desire for suicide could then lead to the risk of suicide when the individual's emergent desire is combined with their acquired capability for suicide, potentially leading to suicide attempts or death by suicide. Individuals acquire the ability to die by suicide with increased physical pain tolerance and a reduced fear of death (Joiner, 2005; Van Orden et al., 2010).

Researchers have identified additional risk factors that can heighten the risk of suicide and that relate to the core elements of Joiner's theories. For example, family conflict is an identified risk factor (Orlins et al., 2021; Rivers et al., 2022; Van Orden et al., 2010), and it may lead someone to have a sense of perceived burdensomeness. Social isolation is another identified risk factor of suicide (Calati et al., 2019; Olfson et al., 2022; Van Orden et al., 2010) that can leave individuals feeling thwarted belongingness. Researchers have identified multiple protective factors that may help to reduce the risk of suicide. For example, social connectedness is one such factor, which includes the individual's perceptions of their community as caring and supportive (Wasserman et al., 2021; Whitlock et al., 2014). Social connectedness could prevent feelings of thwarted belongingness. Likewise, positive self-esteem is a protective factor (Malak-Akgün et al., 2022; Ozakar Akca et al., 2022), which might help prevent an individual's perceived burdensomeness in alignment with Joiner's interpersonal theory of suicide.

Suicide prevention interventions tend to focus on bolstering suicide protective factors and addressing risk factors in alignment with Hawkins' (1992) risk and protective factors model. One suicide prevention intervention aims to address an individual's acquired capability for suicide, as Joiner (2005) termed it, by limiting access to lethal means for someone in a crisis (Barber & Miller, 2014; Reisch et al., 2013). An additional

form of suicide prevention involves providing at-risk individuals access to appropriate behavioral health care (Brown et al., 2005; Gibbons et al., 2007), helping them work through perceptions of thwarted belongingness and burdensomeness, thus lowering the potential desire for suicide. This form of prevention starts with gatekeeper training, which educates individuals on how to help identify individuals who may be at risk, respectfully questioning them on their risk, persuading them to get help, and referring them to care (Aseltine et al., 2007; Godoy Garraza et al., 2019; Wasserman et al., 2015).

One promising method of providing gatekeeper training is the implementation of PAL, defined by Topping (1996) as "people from similar social groupings who are not professional teachers helping each other to learn and learning themselves by teaching" (p. 322). Researchers have documented many positive learning outcomes from facilitating PAL for individuals who take on a tutoring role (Akinla et al., 2018; Clarke-Midura et al., 2018). In addition, PAL tutees also benefit from PAL participation (Bester et al., 2017; Turner, White, Poth, & Rogers, 2012).

Remarkably, Hope Squad, in some of its chapters, uses PAL to teach its gatekeeper training and other suicide prevention curricula to high school students (G. Hudnall, personal communication, April 11, 2018). However, not all Hope Squads use PAL to support instruction (C. Bledsoe, personal communication, March 11, 2021), and there is a significant gap in the literature regarding PAL tutor and tutee experiences in Hope Squad and similar settings where instructional material is noncompulsory yet essential.

Therefore, Morris's (2024b) exploratory qualitative study investigating how some PAL tutees in Hope Squads experience being taught curriculum by PAL tutors sought to

fill this gap. Among other findings, the investigation identified alignment between PAL literature and the PAL tutees' experiences in feeling social congruence (Lockspeiser et al., 2008; Ten Cate & Durning, 2007) and cognitive congruence (Kassab et al., 2005; Lockspeiser et al., 2008; Schmidt & Moust, 1995) with their peer tutors. In other words, study participants noted that tutees could relate better to peer tutors (social congruence) than to advisors. In addition, they felt PAL tutors explained concepts in language more like their own (cognitive congruence) than how advisors explained them, which helped tutees feel at ease.

On the other hand, some research participants perceived that PAL tutors appeared nervous when teaching. Unfortunately, researchers do not know much about PAL tutor nervousness or other emotions and psychological attitudes that PAL tutors experience. While some studies referenced nervous tutees (Bone et al., 2019; McLauchlan, 2002) and tutors (Sanchez-Aguilar, 2021; West et al., 2017), none have focused on assessing the emotional states of tutors around instruction. Insight into PAL tutors' experiences may help the Hope Squad organization and other youth gatekeeper training programs better understand how to scaffold their students' involvement as PAL tutors.

Therefore, this study investigated PAL tutors' experience tutoring peers and the potential nervousness, other emotions, and psychological attitudes that PAL tutors experience in association with tutoring peers. This research's findings could help administrators of Hope Squads and similar programs gain insight into the PAL tutor experience, possibly prompting administrators to follow recommendations to train PAL tutors on instructional methods (Shapiro et al., 2013; Williams et al., 2014).

Significance

Researchers have explored PAL's benefits to tutors and tutees (Cohen et al., 2015; Lundmark et al., 2017; Morris, 2024a; Tibingana-Ahimbisibwe et al., 2022), yet its application in sensitive areas like suicide prevention remains nascent. This study presents a unique opportunity to investigate the application of PAL in the context of gatekeeper training, which could represent a transformative approach to suicide prevention training. It uniquely explores it in this context through the lens of Bandura's social cognitive theory. By examining how peers influence one another's understanding of suicide prevention topics, this study could provide new insights into the adaptability of PAL in noncompulsory settings.

The suicide prevention training that the Hope Squad program administers to its students has the potential to save lives. However, the significance of the harm-reducing outcomes of instruction deserves to be research-informed. Previously, the application of PAL in noncompulsory high school instruction, including suicide prevention training, has been poorly understood. The improved understanding of PAL in the high school gatekeeper program setting achieved through this study might improve instruction and learning outcomes and better prepare students to question, persuade, and refer peers in crisis. Moreover, building the body of evidence around the Hope Squad program, its instructional methods, and outcomes may help the organization secure additional resources to bring its programming to more schools.

Even if this study did not involve gatekeeper training, its potential contributions to the PAL literature remain significant. Findings from studies exploring how PAL is implemented and experienced by tutors and tutees to augment traditional education

methods in any subject area may be helpful to educators who are thinking about implementing it in their classrooms.

Purpose and Objectives

This study sought to explore PAL, including in Hope Squad settings. I previously investigated PAL literature broadly, documenting practices that high-school suicide prevention programs like Hope Squad could consider using in their instruction (Morris, 2024a). I also explored Hope Squad members' experiences of being tutored by other members (Morris, 2024b). This study combined an exploratory qualitative research design with evaluating PAL tutors' emotions and psychological attitudes within Bandura's social cognitive theory framework. The study examined how Hope Squad members broadly experience the program and their experience tutoring peers in Hope Squad training sessions. Additionally, it aimed to explore if members experience social and cognitive congruence with the Hope Squad members they teach. This study also aimed to measure to what extent Hope Squad members feel positive and negative emotional affects, including nervousness, while teaching other Hope Squad members.

Research Questions

This study expanded on the tutee study, which evaluated aspects of Hope Squad members' experiences being taught Hope Squad material by their peers (Morris, 2024b). Namely, the new work in this study sought to explore the PAL environment from a new perspective. Specifically, it sought to examine those of tutors—Hope Squad members who taught material to their Hope Squad member peers. Questions for this study focus on Hope Squad members' specific experiences tutoring Hope Squad member peers in the

Hope Squad curriculum. Moreover, tutors can take on the role of tutee when learning from a peer tutor or advisor. Applied to those acting as PAL tutors in Hope Squad instructional settings, my research questions were:

1. How do members describe the strengths and weaknesses of the Hope Squad training and their level of preparation for helping student peers with appropriate referrals?

2. How do members experience tutoring their Hope Squad member peers in training sessions?

3. How do members experience social and cognitive congruence with their Hope Squad member peers?

4. To what extent do Hope Squad members feel positive and negative emotional affects—including nervousness—while tutoring their Hope Squad member peers?

Review of Literature

PAL is a broad term encompassing six categories of PAL: peer mentoring, peer tutoring, peer didactic, near-peer mentoring, near-peer tutoring, and near-peer didactic. Olaussen et al. (2016) distinguished between the first three and the latter three by classifying students in the same academic year as those they teach in PAL settings as peers and classified students one year older or more than those they tutor as near peers. The second part of each categorical term (mentoring, tutoring, and didactic) measures the instructional group size. Peer mentoring occurs when a tutor teaches one to two students at a time, and peer tutoring occurs when a tutor teaches three to ten students. Finally, PAL programs pairing a tutor with more than ten students are peer didactic. The student

thresholds also apply to near-peer mentoring, tutoring, and didactic PAL programs (Olaussen et al., 2016).

Researchers have studied PAL in multiple learning venues, including high schools (Benni et al., 2016; Polansky et al., 2010). PAL can support the learning of a vast array of curriculum foci, including medicine (Antonelou et al., 2014; Bulte et al., 2007), paramedics (Williams et al., 2014; Williams et al., 2015), farming safety (Carruth et al., 2010), and suicide prevention (Morris, 2024b; Wyman et al., 2010).

Both tutees and tutors can benefit from gains in knowledge from PAL interactions (Hall et al., 2013; Lundmark et al., 2017; Silberberg et al., 2013; Topping, 1996). Topping (2005) documented gains in social and communication skills that PAL participants can use in many parts of their lives. Researchers have demonstrated higher performance scores on clinical skills tests (Williams et al., 2014), improvements in PAL participants' ability to work in groups and transfer skills into new settings (Burke et al., 2007), and tutees showing more preparedness to become effective tutors (Tenenbaum et al., 2017). Moreover, participating in PAL can prompt interest in exploring careers (McKenna & Williams, 2017; Tenenbaum et al., 2017; Williams & Nguyen, 2017).

Social and Cognitive Congruence

Social congruence measures how well two individuals can communicate comfortably and informally, and it is rooted in shared roles between two individuals (Lockspeiser et al., 2008; Ten Cate & Durning, 2007). Those who feel at ease communicating with each other have high social congruence, while those who experience communication challenges lack some social congruence. Social congruence might help illuminate why learners may thrive in near-peer tutor relationships and how that

relationship differs from that between a student and a formal teacher. The often psychologically safe learning environment between tutors and tutees may also help students feel more at ease with tutors than with formal teachers as they strive to learn challenging concepts. Because PAL tutees share more proximity with tutors than with traditional instructors in terms of their social standing and educational abilities, tutors explain concepts in more straightforward language and can create more comfortable environments where tutees feel more open to asking questions (Bulte et al., 2007; Kassab et al., 2005).

Cognitive congruence is another aspect of the learning relationship which complements the participants' social congruence. Cognitively congruent teachers or tutors instruct learners with language that learners are more likely to understand while using concepts that learners easily comprehend (Schmidt & Moust, 1995). PAL tutees can share more cognitive congruence with PAL tutors than traditional instructors (Lockspeiser et al., 2008). In addition, PAL tutors have often learned the material they teach more recently than conventional instructors have. PAL tutors' nascent content learning allows them to teach material using language and examples that may better resonate with tutees. PAL's effectiveness and the instructional construct's relation to social and cognitive congruence concepts are themes with manifold recurrences in the literature (Kassab et al., 2005; Lockspeiser et al., 2008; Schmidt & Moust, 1995).

The documented effects of social congruence in PAL extend beyond a learner feeling comfortable and safe to raise questions. For example, Schmidt and Moust (1995) found that students in a PAL setting who expressed high social congruence levels with their tutor experienced increased intrinsic interest in the subject matter and study time. In

association with Bandura's (1977) work on self-efficacy, Murphey and Arao (2001) reported gains in Japanese students' confidence in speaking English after viewing videos of peers speaking English. In addition, Clarke-Midura et al. (2018) found that mentor relatability was a significant predictor of self-efficacy and interest in computer science among young middle school–aged computer science students participating in a computer science camp.

Tutors' Benefits from Participating in PAL

Students who teach material must review and relearn it from earlier parts of their education (Lockspeiser et al., 2008). In addition, preparing to tutor helps tutors learn the material (Ten Cate & Durning, 2007). Nevertheless, researchers have noted many positive tutor-oriented learning outcomes from PAL beyond formal curriculum learning, sometimes called vicarious learning or hidden curriculum (McKenna & Williams, 2017; Tenenbaum et al., 2014, 2017). Documented learning outcomes for tutors include skills and knowledge development in communication (Kassab et al., 2005; Lundmark et al., 2017; Tandon et al., 2011; Williams & Nguyen, 2017; Wilson et al., 2014), critical thinking (Williams et al., 2014), evaluation (Kassab et al., 2005), feedback (Kassab et al., 2005; Lawrence et al., 2016; Ten Cate & Durning, 2007), intrinsic motivation (Ten Cate & Durning, 2007), leadership (Kassab et al., 2005; Ten Cate & Durning, 2007; Williams et al., 2014), mentoring (McKenna & Williams, 2017), multitasking (Lundmark et al., 2017), public speaking (Williams & Nguyen, 2017), reflective listening (Tandon et al., 2011), and teamwork (Kassab et al., 2005).

Tolsgaard et al. (2007) wrote that tutors might see benefits to their future careers from tutoring. Tenenbaum et al. (2014) stated that tutors believed their tutoring gave

them access to a professional environment to develop their professional skills and interests. These activities can also provide evidence of engagement in portfolios and CVs of students seeking employment (Wilson et al., 2014). Both tutors and tutees practiced professional behaviors in Turner, White, Poth, and Rogers' (2012) study of a PAL program centered on learning a medical competency framework among first-year medical students and first-year residents. Tenenbaum et al. (2017) found that tutees in their study perceived that their tutors advised them on lessons outside of the career and educational planning course curriculum.

Evans and Cuffe (2009) surveyed 12 tutors who had supported tutees in a medical school anatomy course. Respondents noted several perceived personal benefits from teaching younger students, including deeper learning of the subject, career and teaching skill development, and enjoyment. In addition, Evans and Cuffe concluded that, compared to those who did not teach, near-peer teachers better understood anatomy while building teaching experience, which these teachers can use in their professional careers.

Nervousness, Other Emotions, and Psychological Attitudes in PAL

Tutees have commented on the perceived nervousness of PAL tutors in various studies (Morris, 2024b; Sanchez-Aguilar, 2021) while noting that PAL tutor confidence appeared to replace nervousness as teaching sessions progressed (Nestel & Kidd, 2005). Moreover, tutors have commented on their nervousness in other studies, with some sharing concerns about how their personalities would mesh with tutees (Zimmerelli, 2015), but found that they became more confident as their tutoring skills increased (West et al., 2017). Other tutors' confidence grew in later tutoring sessions even though they could not say why their nervousness subsided (Sanchez-Aguilar, 2021). Sanchez-Aguilar

(2021) suggested that tutor nervousness decreased after tutors got to know their peer tutees better and grew confident working with them, which increased self-confidence in their tutoring skills. Additionally, tutees have felt nervous about being tutored by PAL tutors (Bone et al., 2019; George et al., 2018).

Self-Efficacy in PAL

Albert Bandura (1977) first defined an efficacy expectation as "the conviction that one can successfully execute the behavior required to produce the outcomes" and distinguished it from an outcome expectation as "a person's estimate that a given behavior will lead to certain outcomes" (p. 79). Bandura later defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (1995, p. 2). Multiple sources of a learner's experience affect perceived self-efficacy (Figure IV.1). Researchers have classified the nervousness some PAL tutors experience as a physiological state affecting a tutor's self-efficacy (Sanchez-Aguilar, 2021; West et al., 2017). Bandura (1995) argued that mastery experience, vicarious experience, social persuasion, and physiological state affect one's perceived self-efficacy, which influences performance. Bandura suggested that teachers' perceived efficacy is determined by their ability to maintain a positive learning environment, connect students with resources, engage students' parents or guardians in the learning process, and counteract social influences that distract from learning, all while teaching the subject matter (p. 243).

Figure IV.1

The Sources of Self-Efficacy and Outcomes

Note. Adapted from *Self-efficacy: The Exercise of Control* (pp. 79–115), by A. Bandura, 1997, W. H. Freeman and Company. Copyright 1997 by W. H. Freeman and Company.

He found that researchers apply multifaceted teacher efficacy scales to tease out drivers of efficacy. Finally, he argued that enactive mastery experiences are the most influential source of self-efficacy because they provide the most authentic evidence that one can do what it takes to succeed (Bandura, 1997, p. 80).

Training PAL Tutors

The literature addresses the importance of tutor training in overcoming key challenges of implementing PAL. Although PAL tutors can naturally connect with tutees because of their close cognitive and social congruence, training tutors is essential. Among many guidelines, Topping (1996, 2005) encouraged PAL facilitators to ensure they train tutors before they begin their tutoring efforts. Without proper training, some students may feel apprehensive about tutoring peers (Williams et al., 2014). Shapiro et al. (2013) recommended that "not only must faculty be content experts but also be supportive and

closely involved in peer learning activities, including peer leader training" (p. 25).
Ilakkuvan et al. (2015) outlined a prescriptive training guide that may help if a theme
emerges from investigations that Hope Squad tutors feel educators need to prepare them
better to teach their peers. For example, researchers could study the impact of providing
instructional training to tutors before asking them to tutor other students, evaluate
learning outcomes from advisor-led instruction compared to tutor-led instruction, and
document tutors' experiences in Hope Squad settings.

As well as the potential challenges associated with not training tutors, some PAL
participants have remarked that they perceive tutors to have less content knowledge than
teachers (Bulte et al., 2007). PAL tutors and tutees have also noted that tutors may need
help earning the trust that tutees give to traditional teachers; tutees believe they might not
receive the correct answers from PAL tutors (Bulte et al., 2007). Given the potential
deficiencies of many tutors in content and pedagogical knowledge, Evans and Cuffe
(2009) suggested that educators must train PAL tutors on the subject matter and
instructional practices.

Hope Squad and Its Engagement with PAL

Hope Squad is a school-based peer-to-peer suicide prevention program that
formally and informally uses PAL in some chapters (C. Bledsoe, personal
communication, March 11, 2021). The program seeks to create safe schools by training
Hope Squad members to recognize the signs of suicide in peers outside of Hope Squad
and refer students at risk to professional help. Youths generally confide in someone they
know and trust for mental health issues (Corry & Leavey, 2017; Van Den Toren et al.,
2019). Studies have documented adolescents' higher propensity to disclose suicide

ideation to a family member or friend than to an adult (Bell et al., 2018; Rowe et al., 2014). Trained Hope Squad members, thus, can play a vital role in getting support for students in crisis.

Hope Squad conducts a school-wide process to gather students' nominations of potential Hope Squad members. Program administrators review nominations and invite selected nominees to participate in the Hope Squad. In Hope Squads, students who accept their nomination learn how to identify warning signs of suicide in their peers, talk to at-risk students, and refer them to appropriate support. Hope Squad members also spearhead the organization of an annual hope-themed week at their school to create and share materials and messages promoting Hope Squad's areas of focus, including safety, connectedness, bullying prevention, mental wellness, reducing stigma, and substance use disorder prevention (Hope Squad, 2024b). Hope Squad members often participate in the program for more than one year, and most schools have between six and ten students from each grade level participating. Hope Squad advisors are typically school counselors, psychologists, social workers, teachers, staff members, or parents (Hope Squad, 2023a).

Hope Squad includes the QPR Gatekeeper Training for Suicide Prevention in its curriculum (QPR, n.d.). The QPR Institute designed this evidence-based curriculum (Cross et al., 2011; Wyman et al., 2008) to teach "gatekeepers" to recognize and refer someone at risk of suicide. QPR aims to help learners identify signs of suicide, question, persuade, and refer individuals at risk of suicide to resources that can support them (SPRC, 2020a). In addition, the U.S. Department of Health and Human Services Suicide Prevention Resource Center (SPRC) has classified eight gatekeeper training programs

with their evidence-based prevention distinction. However, SPRC does not include Hope Squad among the listed programs (SPRC, 2020b).

The Hope Squad organization trains all advisors on the Hope Squad curriculum and program delivery. Then, monthly throughout the school year, advisors educate Hope Squad members in the Hope Squad curriculum, which the Hope Squad refers to as PHASEs. While many advisors dispense instruction on the Hope Squad curriculum didactically, some ask the second-, third-, and fourth-year students to teach select curriculum lessons. Advisors ask only some Hope Squad members to teach a PHASE. Those Hope Squad members acting as PAL tutors are doing so temporarily, for a lesson at a time, and will likely return to their role as a Hope Squad member, being taught by their advisor or peers for future sessions. Depending on the squad size, these instructional sessions might be classified as peer tutoring, peer didactic, near-peer tutoring, or near-peer didactic (Olaussen et al., 2016). Besides curriculum instruction, Hope Squad meetings also include role-playing. Hope Squad members practice responding to scenarios they may encounter in their interactions with peers and near-peers.

Researchers have begun investigating various aspects of Hope Squad (Annor et al., 2017; Osterhues, 2021; Rainock, 2018; Wood et al., 2022; Wright-Berryman et al., 2018, 2019, 2022). For example, Annor and team (2017) conducted a content analysis on three suicide prevention programs, including Hope Squad. They concluded that Hope Squad's school training materials and objectives of normalizing protective factors such as resiliency, belonging, help-seeking, and positive and behavioral change align with Stone et al.'s (2017) CDC-published technical package for techniques to promote connectedness. Annor et al. (2017) additionally noted that QPR gatekeeper training aligns

with the evidence-based practice to "identify and support people at risk" in the suicide technical package (Stone et al., 2017, p. 35).

Wright-Berryman et al. (2018) found that Hope Squad members increased their knowledge of how to help a suicidal peer and of the resources available to support at-risk peers. In addition, I observed improvements in members' self-efficacy in crisis response in that same study. The knowledge gained through Hope Squad participation seems to translate to practical action, as Wright-Berryman et al. (2019) outlined. The scholars documented that, of students who visited their counselors for suicide-related distress in schools participating in their study, nearly one-quarter had been referred by Hope Squad members. In addition, those counselors worked to hospitalize 14 percent of acutely at-risk students for treatment. Wood et al. (2022) inspected Hope Squad QPR gatekeeper training in religious versus educational contexts. The scholars found that trainees in both educational and religious settings showed significant gains in their suicide prevention knowledge and likelihood to take specific actions to get a suicidal person help. Rainock (2018) found that a sample of past Hope Squad members had developed and used listening and peer support skills during and after their time in Hope Squads. Osterhues (2021) investigated the perspectives of the school personnel of Hope Squad and identified the perceived benefit of Hope Squad members' trust in their peers. While Osterhues did not discuss PAL, three of the study's respondents identified time constraints as a challenge within Hope Squad. One respondent noted that "finding time to train the students can be difficult and a challenge" (Osterhues, 2021, p. 50).

Despite the broad implementation of Hope Squad in classrooms, Hope Squads' everyday use of PAL, and existing research on PAL as an effective learning method, no

study investigated PAL within Hope Squad or PAL in gatekeeper training until I conducted an exploratory qualitative study to fill that gap (Morris, 2024b). This study evaluated findings using the theoretical lens of Bandura's (1977) social cognitive theory and its reciprocal determinism framework to investigate PAL research for gatekeeper training.

I illuminated the experience of some students being taught curriculum by their peers in the Hope Squad suicide prevention program (Morris, 2024b). It produced evidence that PAL tutees in the Hope Squad program can experience social and cognitive congruence with their peer tutors, which helped them feel at ease. In addition, PAL tutees valued learning about the experiences of peer Hope Squad members as they applied the skills and knowledge gained in Hope Squads in their everyday lives at school and in the community. Further, I identified a hidden curriculum in the Hope Squad program as PAL tutees learned valuable lessons beyond the formal program curriculum, including leadership skills. Finally, some participants noted that the program shaped their future career aspirations.

In summary, PAL is applied and researched in many settings as an instructional method. In those settings, tutees and tutors gain knowledge and other skills by participating in PAL, including improving their ability to engage in group work (Burke et al., 2007) and becoming effective tutors (Tenenbaum et al., 2017). On top of learning the curriculum by teaching it, tutors can develop their communication, critical thinking, and many other leadership-related skills from tutoring. However, some tutors may feel nervous when teaching peers. Researchers have encouraged educators to train PAL tutors on effective instructional methods, which might help alleviate tutor nervousness. Some

Hope Squad chapters use PAL in their instruction. While researchers have begun to evaluate Hope Squad outcomes, they have yet to investigate the methods of instruction, specifically PAL in Hope Squad, before this research began. Morris's (2024b) results mark the first study on PAL in Hope Squad. Results aligned with PAL research findings in several ways. For example, they supported the literature on PAL nervousness, hidden curriculum, and evidence of social and cognitive congruence between tutors and tutees.

Theoretical Framework

PAL involves at least two participants: a tutor (sometimes referred to in the literature as a mentor or helper) and a tutee (sometimes referred to as a mentee or the helped). It also involves curriculum and learning objectives (Topping, 2001). The tutor and tutee might be the same age or near the same age and near in their abilities (Tenenbaum et al., 2014).

We can view PAL's social nature through the broad perspective of sociocultural learning theories. These theories highlight the significance of the societal context and interaction in learning, emphasizing collaboration and communication. Given the interaction between tutors and tutees, PAL fits well into this schema.

Among these theories, L. S. Vygotsky's (1978) social development theory provides valuable insight into the near-peer instructional space. Vygotsky's zone of proximal development (ZPD) offers insight to those evaluating the near-peer instructional space. The ZPD underscores the gap between an individual's current stage of development and their potential for growth as they strive to acquire new knowledge and competencies.

Vygotsky wrote that this gap is best identified "through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). He argued that learning occurs in this space "only when the child is interacting with people in his environment and cooperation with his peers" (p. 90). Researchers have studied near-peer tutors' and tutees' learning interactions, describing how peer tutors and tutees work to learn in this identified zone (Murphey & Arao, 2001; Niday & Campbell, 2000; Williams et al., 2015; Williams & Nguyen, 2017).

Because PAL involves a tutor who is slightly more knowledgeable about a subject and who guides the tutee along a process of learning—often in situated learning environments—scholars have naturally applied Lave's (1988) situated learning theory to understanding PAL (Tucker-Raymond et al., 2016; Turner, White, & Poth, 2012). Situated learning theory's construct of legitimate peripheral participation references the learners' process as they move from newcomers to old-timers of a community of practice in the social world (Lave & Wenger, 1991). Researchers reference Lave and Wenger's (1991) legitimate peripheral participation work as it applies to PAL (Turner, White, Poth, & Rogers, 2012; Turner, White, & Poth, 2012). The PAL opportunities offer a chance for both tutors and tutees to learn from each other, resulting in a change in their knowledge through their interactions. Lave and Wenger (1991) write that learners evolve from membership in a learning community.

Additionally, a core tenet of learning in communities of practice is that learning is not necessarily exclusive to formal learning goals. Learning may happen independently of formal goals. Learning outcomes not tied to formal goals—often termed hidden

curriculum—have been documented for PAL tutees and tutors (McKenna & Williams, 2017; Williams & Nguyen, 2017).

However, while powerful, many of these sociocultural theories may not adequately emphasize self-efficacy, a key element frequently measured in PAL research and prevalent in social cognitive theory.

Social Cognitive Theory

I selected Bandura's social cognitive theory for primary use. Bandura held that people learn by observing others and that factors beyond an individual's behavior shape their learning outcomes. The personal, behavioral, and environmental determinants in Bandura's triadic reciprocal causation model (see Figure IV.2) attribute learning to the dynamic environment and learners' unique interactions (Bandura, 1977). Because the PAL environment differs from traditional instructional settings, tutees' and tutors' learning behavior is unique. Further, scholars have discussed elements of personal determinants like self-efficacy and attitudes in PAL literature, yet researchers have sparingly applied Bandura's theory to PAL-based models (Clarke-Midura et al., 2018; Pon-Barry et al., 2017; Sun & Clarke-Midura, 2022). Therefore, evaluating PAL using the triadic reciprocal causation model has provided a unique examination of PAL and could be applied in investigating tutor experiences. This researcher evaluated findings using the theoretical lens of Albert Bandura's (1977) social cognitive theory and its reciprocal determinism framework to investigate PAL research for gatekeeper training. Bandura's framework infers that a learner's personal, behavioral, and environmental determinants influence learning (Morris, 2024a, 2024b).

Figure IV.2

Reciprocal Causation Model
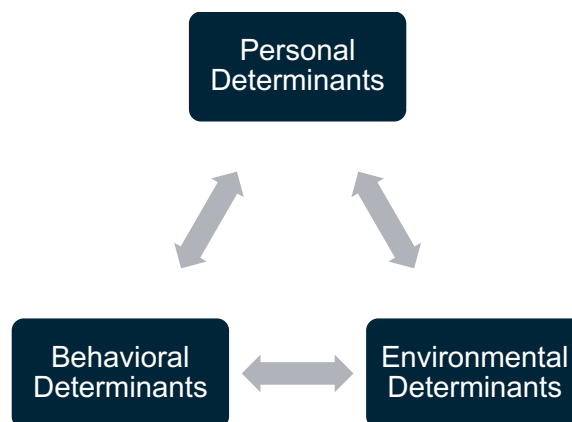
Note. The arrows between each set of determinants represent the concurrent and ongoing interactions, i.e., the reciprocal interactions that prompt learning. Adapted from *Social Learning Theory* (p. 10) by A. Bandura, 1977, Prentice-Hall. Copyright 1977 by Prentice-Hall, Inc.

Methods

Design

To answer the study's research questions, I applied a qualitative design approach to explore Hope Squad members' tutoring experiences, perceptions, and emotional affects related to their PAL experience with Hope Squad (Glesne, 2016). I gathered original data from the primary source of Hope Squad member tutors with semi-structured multistage focus-group interviews over three months (Gardsten et al., 2018; Hummelvoll, 2008) and a demographic survey (Hughes et al., 2022). I additionally gathered data through tutor-curated journey maps (Marx, 2022; Meyer & Marx, 2014). Journey maps helped research participants express themselves beyond spoken and written words,

providing rich, in-depth narratives that offer context and details about their experiences (Annamma, 2017; Marx, 2022). Once these were created, I invited participants to share their journey map and review it in a journey map interview. I inspected gathered journey maps and the journey map interviews using bidirectional artifact analysis (Halverson & Magnifico, 2013; Magnifico & Halverson, 2012) to develop a rich understanding of the experiences and perceptions of Hope Squad members acting as tutors while also allowing for identifying patterns and themes in the data (Palinkas et al., 2015).

The constructivist process of multistage focus groups helped focus group participants build rapport with each other over multiple sessions (Morgan, 1997). As individuals within the focus group shared their broad and PAL tutoring Hope Squad experiences with others, they appeared to become aware of their individual PAL tutoring practices and other related themes the group discussed (Hummelvoll, 2008). I piloted the interview questions and journey map instructions and journey map interview with a graduate student, evaluating its instructions for clarity and how interview questions lend to prompting insightful conversation, and then refined the instructions and journey map interview questions (see Figure G2) and made refinements to materials based on learnings from the pilot.

Participants

I intended to gather an "information rich" sample (Patton, 2000, p. 169) using a purposeful sampling technique to obtain a depth of understanding of answers to the presented research questions. I aimed to select eight to sixteen knowledgeable Hope Squad tutors, which would allow for gathering in-depth insights and efficient data

analysis (Creswell & Clark, 2011; Morse & Niehaus, 2009; Palinkas et al., 2015). I

established the following eligibility parameters, seeking participants who were:

- active Hope Squad members in PAL-practicing chapters

- experienced in acting as a tutor, teaching one or more Hope Squad members
  in at least one Hope Squad lesson

- enrolled in high school from rural, suburban, and urban communities and,
  thus, between the ages of 13 and 18

Participants of PAL-practicing Hope Squads in all 43 states Hope Squad operates

in, except Utah, were eligible (Hope Squad, 2023b). I excluded Hope Squad members in

Utah-based chapters because Utah State University's Institutional Review Board requires

researchers to obtain either school district–level research approval or broad Utah State

Board of Education approval for the state. I obtained permission from the IRB before

recruiting study participants. Through my recruitment efforts, I recruited eight eligible

participants who provided the necessary consent and assent to participate, registered, and

participated in at least a portion of the study (see Table IV.1).

Recruitment

I began recruitment by designing an email advertisement detailing the study,

including focus group dates and links for participants to approve and, where necessary,

their guardians to consent (see Figure F1). The email described the study in simple

language, with a section explaining the study to students and a section describing the

study to the parents and guardians of students who were not yet 18.

Table IV.1

Demographics and Teaching Experiences of PAL Tutors

ID (pseudonyms)	Age (range)	Ethnicity	Number of Hope Squad lessons taught
Aiden	16–17	Asian or Asian American	1–2
Alyssa	16–17	Black or African American	1–2
Ava	16–17	Hispanic or Latino	1–2
Brittany	18+	Asian or Asian American	1–2
Emma	16–17	Asian or Asian American	3 or more
Jack	16–17	Black or African American	3 or more
Julia	16–17	White or European American	3 or more
Sophia	14–15	Asian or Asian American	3 or more

The recruiting email included a zipped folder with PDF copies of the focus group and journey map interview agendas, the study proposal, demographic questions, IRB-approved informed consent and assent documents in English and Spanish (see Figure F2), and the journey map assignment. The recruiting material specified that Hope Squad students who participate in the study will receive up to $100 in compensation for full participation ($30 for completing the first focus group, $30 for completing the second focus group, $30 for participating in a journey map interview, and $10 for completing and turning in a completed journey map). Finally, I used an IRB-approved translation

service provider to translate the recruiting message into Spanish (see Figure F2). The recruitment email also included a youth assent form to provide study participants with comprehensive information on the study (see Figure F3). Those interested in participating in the study were provided a link to the consent materials. Once the guardian consented, the high school student assented to participate in the study, and the 18-year-old Hope Squad members consented; the student selected their level of PAL tutor experience. Qualtrics displayed the session one focus group date and time with the Zoom registration link.

I sent recruiting materials to the Hope Squad's research director, requesting that she disseminate the recruiting message and materials to PAL-participating chapters in all eligible states where Hope Squad operates, except Utah, for the above reasons. The flyer, consent form, and assent form were designed for and emailed from Hope Squad's headquarters to Hope Squad advisors and members two weeks before the first scheduled focus group date. I planned to cap each focus group at eight, totaling 16 study participants. However, fewer participants registered than I aimed for, so I coordinated with Hope Squad to send out additional messaging.

For phase two of recruitment, I created IRB-approved messaging for the social media platforms Hope Squad maintains a presence, including Facebook, Instagram, LinkedIn, and X, formally known as Twitter. I made my own TikTok handle for the study, advertising the research opportunity and pointing them to a research website I developed outlining details on the survey. Interested individuals were sent the study's consent form, assent materials, and a link to register from the website. The first and second recruiting phases helped me acquire eight participants—four beginners and four

intermediates. Six of the eight participants participated in all three stages. I sent out a final IRB-approved message to all Hope Squad Advisors and Hope Squad members and saw no additional registrations (see Figure IV.3).

Ethical Considerations and Approval

Participation in the study was voluntary, and I obtained consent from the parents or guardians of each adolescent participant before the study began. I obtained consent from an adult participant who was 18 or older. I submitted a protocol to Utah State University's Institutional Review Board through Kuali Protocols and did not contact participants until the protocol was approved. Additionally, I only contacted participants in ways outlined in the approved protocol.

I planned to follow all state laws on reporting and responding to child abuse and neglect if I suspected it since this research involved minors. I cc'd parents and guardians on all email communication between me and their respective students from the beginning of the study and plan to do so when delivering its results (see Appendix H). I conducted focus groups and interviews in the evening outside of scheduled school hours to avoid any disruption to the school day or the need to remove students from participation in core-subject learning. I compensated participants for their time. Finally, I reminded participants that their participation was confidential and that they could take a break during the focus groups and journey map interviews, including turning off their cameras.

I took steps to limit the likelihood of harming participants in the reported findings by anonymizing identifiers used in the dissertation so that readers would be unable to identify research participants. I anticipated that suicide may come up in conversations, though it was not the focus of any questions I asked research participants. Still, given its

relatedness to Hope Squads, I followed the National Action Alliance for Suicide Prevention's messaging guidelines at the start of each focus group and interview, encouraging participants that if they or someone they know is in a crisis, please call or text 988 or chat with someone at 988Lifeline.org (Messaging, n.d.).

I reminded participants that they could leave the study without affecting their status in the Hope Squad program. I also shared that I would prorate compensation for any participant who needed to leave or chose to leave at any point during the study earlier than anticipated completion, ensuring their contributions before leaving were recognized (see Figure G2). However, all participants who joined focus groups and interviews stayed for the entirety of the engagements.

Procedures

This study intended to engage with 10 to 16 active Hope Squad members who had acted as PAL tutors in Hope Squad settings. I grouped participants by their teaching experience into two distinct groups, beginning and experienced, with five to eight participants each (Hummelvoll, 2008; Palinkas et al., 2015). Palinkas et al. emphasized multipurpose sampling strategies, which I adopted, encouraging variation in participants' experiences in initial data gathering, all to capture diverse perspectives (Patton, 2000).

The study participants met with me in three stages over several weeks, starting with two focus groups, spread about two weeks apart, and finishing with an interview to review and discuss each participant's journey map (Palinkas et al., 2015). Some participants experienced scheduling difficulties and technical challenges with joining the Zoom meeting focus groups we had planned; with approval from the IRB, I scheduled interviews and followed the same semi-structured focus group questions to interview

each affected participant. All focus groups and interviews were conducted over Zoom using a multifactor authentication–protected Utah State University account, following the university's security guidelines (Utah State University, n.d.-b). Throughout the exchanges, I ensured participants were comfortable sharing their experiences (Krueger & Casey, 2009).

As participants, PAL tutors attended at least one multistage focus group and actively participated in a guided discussion as part of a cooperative inquiry perspective (Hummelvoll, 2008). I led the focus groups and interviews, following an open interview guide and asking semi-structured interview questions (Glesne, 2016), anticipating that participants would be knowledgeable about their experiences and positioned to provide detailed information (Palinkas et al., 2015) in response to focus group questions (see Figure G2). I worked to ensure all participants had opportunities to respond to questions and participate in the summary of each session, all to develop a deeper level of understanding (see Table IV.2). Participants in our focus groups could hear other participants' responses to guided questions and compared their experiences with those of their peers, helping them identify shared challenges and successes.

Following the data collection phase of the study, I anonymized and analyzed the data using the methods outlined in the analysis section.

Table IV.2

Overview of the Study Procedures and Activities of Researchers and Participants

Order of activities	Individuals involved
Planning and designing	Sterling Morris
Pilot testing data collection tools, including interview guides, journey map instructions, and Zoom conferencing platform to reduce the likelihood of technical difficulties (Kite and Phongsavan, 2017)	Sterling Morris and a fellow doctoral candidate
Obtaining ethical permission from Utah State University Institutional Review Board	Dr. Andrew Walker as principal investigator; Sterling Morris as student investigator
Recruiting study group participants	Sterling Morris and Hope Squad director of research
Participation in multistage focus group sessions	Sterling Morris and study participants (Hope Squad members who had acted as a PAL tutor)
Concluding session and summarizing key points	Sterling Morris and study participants (Hope Squad members who had acted as a PAL tutor)
Debriefing after each focus group	Sterling Morris and study participants
Reading the transcript of the previous focus group session to summarize and ask follow-up questions in the upcoming session	Sterling Morris
Creating journey maps	Study participants
Sharing demographic data	Study participants

Order of activities	Individuals involved
Giving feedback and discussing the previous focus group session summary to summarize and ask follow-up questions in the upcoming session	Sterling Morris and study participants
Share and discuss journey maps in a journey map interview	Sterling Morris and study participants
Reading and continuing initial analysis after I completed conducting all multistage focus groups and journey map interviews	Sterling Morris
Final analysis	Sterling Morris (with guidance from Dr. Deborah Fields and Dr. Andrew Walker)

Data Collection

I conducted two parallel multistage focus groups and interviews, one with

beginning PAL tutors who had tutored one to two Hope Squad lessons and one with more

experienced tutors who had taught three or more lessons. The study followed a multistage

sampling strategy for the strategy's ability to aid in gathering qualitative data that has

both breadth and depth (Palinkas et al., 2015). Namely, I collected data in three stages.

The first stage gathered broad data by guiding questions with an expansive view of the

research theme of PAL in Hope Squads. The second stage explored themes that arose in

session one in more depth. The third stage reviewed and discussed participants' journey

maps in interview settings. While I invited all eligible participants to participate in all

three stages of the study, I anticipated potential attrition between consenting for the study

and stage one focus groups and later between each stage, as is expected in multistage

focus groups (Hummelvoll, 2008). We saw attrition from stage two to stage three, in

which two of the study's eight participants did not submit and register for a journey map interview (see Figure IV.3).

In conjunction with conducting stage one focus groups, I procured demographic information (see Table IV.1) through a questionnaire that followed inclusive demographic guidelines recommended by Hughes et al. (2022). Though I did not intend to interpret demographic data for broad generalization, I gathered these data with the intent that they help paint a more detailed picture of the study's participants, shedding light on their personal experiences, motivations, and connections to Hope Squad and the topics the study explores. They also help me ensure that the participants meet the purposeful sampling criteria outlined in the *Participants* section of this chapter.

In addition to administering a demographic survey and conducting the initial focus groups as part of stage one, I shared instructions on creating a journey map. I asked participants to complete theirs before the journey map interviews. Journey maps helped provide insights into students' lives and their feelings (Marx, 2022; Meyer & Marx, 2014; Nyquist et al., 1999; Pantic, 2020), having the potential to help participants reflect on the meaning of their PAL tutoring experience while being "equally useful for participants, researchers, readers, and educators" (Marx, 2022, p. 12; see Table IV.2).

For the second stage of the study, I refined the data collection and analysis processes based on results from the first stage, which aligned with the funnel approach (Morgan, 1997; Palinkas et al., 2015). All stage one participants joined either a focus group or a stage two interview. The second stage aimed to bring depth to the data (Palinkas et al., 2015) as I tried to develop a data-informed sense of the variations and patterns in experiences and emotions based on participant responses (Morgan, 1997).

Figure IV.3

Multistage Focus Group Sessions and Participants
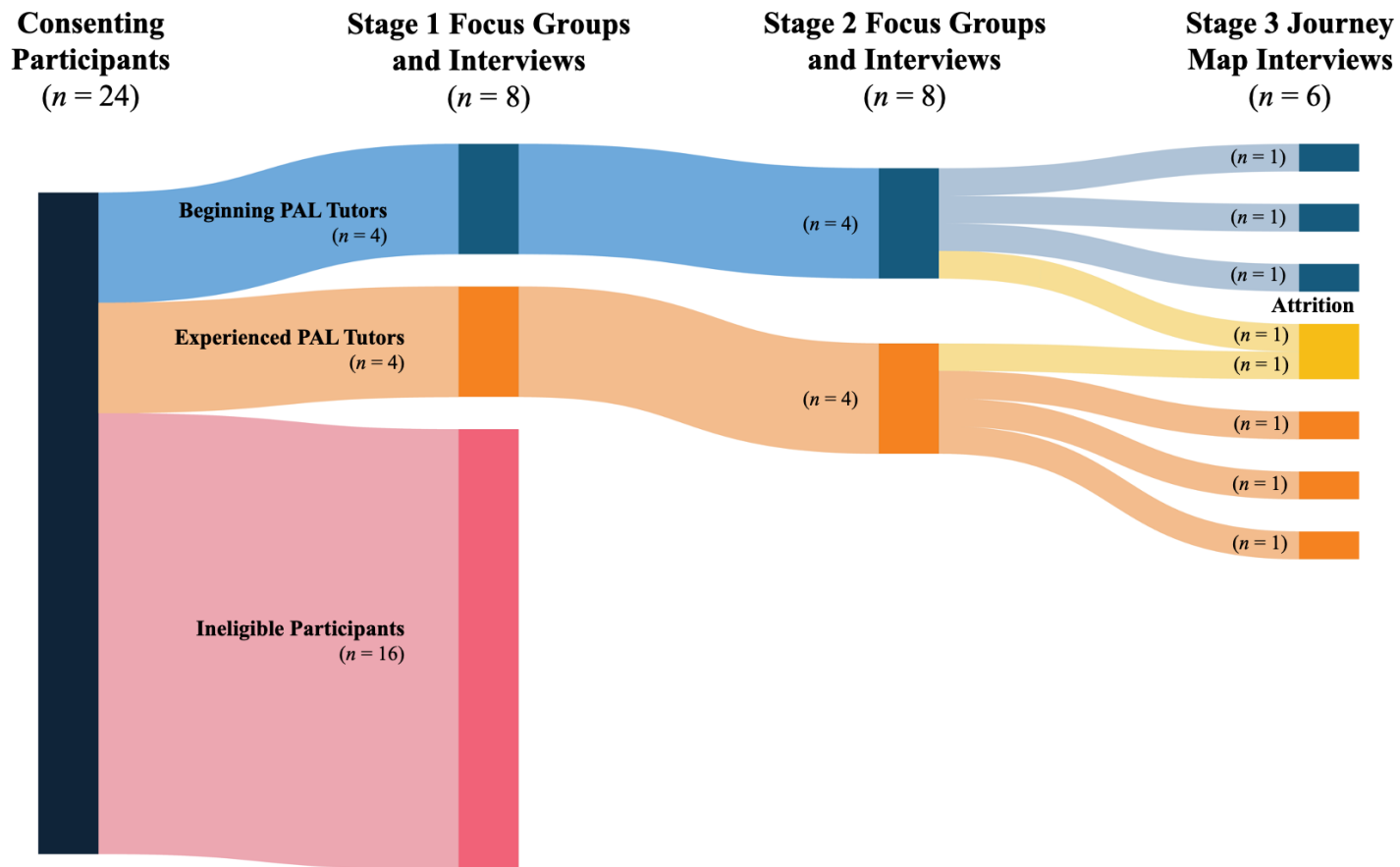
Note. I created this diagram with SankeyMATIC (http://sankeymatic.com/build/).

Table IV.2

Data Collection Timeline

Timing following IRB and committee approval	Event	Activity	Stage
Months 1–2	Recruitment	Sent email	One
		Collected consent materials	
		Supported registration of focus groups	
Week 9	Stage one focus groups	Conducted two parallel focus groups	One
		Gathered demographic survey data	
		Shared journey map instructions	
		Reviewed the next scheduled focus group date and time	
		Paid participants $30 for focus group participation	
Week 11	Stage two focus groups	Conducted two parallel focus groups	Two
		Paid participants $30 for focus group participation	
Week 13	Journey map interviews	Gathered and review journey maps	Three
		Conducted interviews	
		Paid participants $10 for journey map submission and $30 for journey map interview participation	

I organized my observations and ideas by constructing and updating an electronic fieldwork diary using Microsoft OneNote throughout the study's data collection stages, analysis, and writing process. I organized my electronic fieldwork diary following Tam's (2017) recommendations, chronologically organizing entries. The diary consisted of field notes from the study's focus groups and interviews and additional diary entries that captured my reflections during the research process (Glesne, 2016). I captured some jotted notes during each focus group and journey map interview with participants. I organized my field notes from the focus group and journey map interview sessions temporally, documenting the flow of the conversation, participants' responses, nonverbal cues, and other observations in alignment with Wolfinger's (2002) "comprehensive note-taking" strategy (p. 90). I expanded all jotted notes into full field notes and assigned pseudonyms for participants the evening after each participant engagement, as Glesne (2016) recommended.

Stage One Focus Groups. I moderated all focus group stages and encouraged participant interactions during the sessions. I scheduled two focus groups where participants met twice about two weeks apart. I hosted each focus group securely on Zoom. I started the stage one sessions by thanking participants for their involvement. I reminded participants that I would record the session as outlined in the consent form and describe the study's purpose. I emphasized the importance of maintaining the focus group participants' confidentiality during the discussion. Finally, I noted that the topic of suicide may arise in the conversation and that resources are available for those with related struggles (Messaging, n.d.).

I asked participants to introduce themselves and build comfort with the Zoom platform. I took a semi-structured interview approach to the focus groups and interviews, using a semi-structured interview guide to address four key topic areas to answer research questions on Hope Squad members who had acted as tutors: ($n = 1$) experiences with the Hope Squad program and its application into their lives, ($n = 2$) experiences tutoring other Hope Squad member peers, ($n = 3$) tutors' perceived cognitive and social congruence with Hope Squad member peers, and ($n = 4$) emotions they feel while teaching (see Table IV.3). I asked leading and probing questions while monitoring to ensure everyone had opportunities to contribute to the conversation throughout the focus group. I aimed to prioritize approximately a quarter of each stage one focus group interview time for each set of research question–related focus group questions, moving unaddressed semi-structured questions to the set of semi-structured questions for stage two. Some participants who registered for the focus groups could not attend or experienced technical challenges in joining. I followed the same procedures as above, scheduling individual interviews with them to review questions.

Toward the end, I directed the conversation to work with participants on summarizing the discussion, encouraging participants to engage in summation. I then asked the participants to create a journey map of their experiences to be turned in before their journey map interviews, responding to any questions they had on the assignment. Finally, I reminded attendees of the scheduled focus group two weeks away, closed the session, and then paid participants for their contributions. I recorded stage one sessions and stored the audio files on a password-protected, encrypted, FERPA- and HIPAA-compliant, Utah State University-approved cloud storage system. Next, I transcribed the

audio files verbatim using Microsoft Word's audio transcription tool, comparing the transcription with the audio files and correcting transcription errors. Once transcribed, I read stage one transcriptions "to obtain a sense of whole," reviewed and analyzed field notes (Elo & Kyngäs, 2008, p. 109), and added follow-up questions to stage two semi-structured interview guide before stage two sessions (see Table IV.3). I drafted follow-up questions following Patton's (2000) guidelines to avoid yes/no questions. Instead, I asked opinion/value, feeling, and experience/behavior questions written to get "words to fly," as Glesne (2016) encouraged (p. 96).

Stage Two Focus Groups. After a two-week pause, I welcomed attendees to stage two focus groups (and interviews for participants who could not attend the scheduled focus group time). I strove for a comfortable atmosphere for all participants, moving from the general conversations on PAL conducted during stage one to more specific questions related to the study's constructs. The interview guide's semi-structured questions were tied to the same research questions while guided by themes that emerged in stage one remarks. I, together with participants, "explore[d] experiences and counter-experiences" in what felt like a "calmer atmosphere" as the participants became familiar with others (Hummelvoll, 2008, p. 6). I began by asking participants follow-up questions that arose from analysis from their respective stage one focus group, then moved on to prepared semi-structured questions and asked remaining questions from the group's stage one interview the group did not previously cover (see Table IV.3). State two sessions were recorded, transcribed, and corrected as with the stage one sessions.

Table IV.3

Semi-Structured Interview Guide: Stage One and Two Focus Groups

Formal research question	Stage one focus group questions	Stage two focus group questions
RQ1: How do members describe the strengths and weaknesses of the Hope Squad training and their level of preparation for helping student peers with appropriate referrals?	• Can you tell me the story of how you came to join your Hope Squad? • Can you tell me why you chose to join your Hope Squad? • From a teaching perspective, what do you hope to achieve when you teach Hope Squad members parts of the curriculum? • Can you tell me a story about an experience you've had preparing for and leading a session with Hope Squad members? • What challenges and victories do you see regarding the Hope Squad training? • What are some things Hope Squad members can do to improve how they teach Hope Squad content?	Begin with questions that arose from analyzing stage one responses, then move on to the following questions: • How did you prepare to teach a lesson? Follow-up questions: What resources did you use? What training did you get? • How can the Hope Squad program develop the Hope Squad member experience for future members? Then, time permitting, discuss any remaining questions not asked from stage one's focus group.

Formal research question	Stage one focus group questions	Stage two focus group questions
RQ2: How do members experience tutoring their Hope Squad member peers in training sessions?	• Tell me some stories about taking on the tutor role. What were the topics? Follow-up question: Have you ever had experiences applying what you learned? • How has your experience teaching your peers affected your understanding of what being a Hope Squad member means? • What challenges have you had with teaching Hope Squad lessons to other Hope Squad members?	Begin with questions that arose from analyzing stage one responses, then move on to the following question: • How knowledgeable were you about the information you taught? Then, time permitting, discuss any remaining questions not asked from stage one's focus group.

Formal research question	Stage one focus group questions	Stage two focus group questions
RQ3: How do members experience social and cognitive congruence with their Hope Squad member peers?	• In what ways did your peers show interest or openness to your point of view? • How did you perceive your peers' understanding of the information you taught them? • Can you elaborate on the reasons behind your observation? • How has the atmosphere felt while teaching Hope Squad lessons to Hope Squad members?	Begin with questions that arose from analyzing stage one responses, then move on to the following questions: • How would you approach explaining concepts in the lessons to ensure clarity and comprehension? Follow-up question: Can you provide examples or insights into your thought process? • How did you perceive your peers' level of engagement in the lessons you taught? • How would you describe your peers' level of concern for your well-being? • How would your peers listen for feedback? Then, time permitting, discuss any remaining questions not asked from stage one's focus group.

Formal research question	Stage one focus group questions	Stage two focus group questions
RQ4: To what extent do Hope Squad members feel positive and negative emotional affects—including nervousness—while tutoring their Hope Squad member peers?	• What was going through your mind as you got ready to teach a lesson? • Can you describe the emotions or thoughts you experienced while you were teaching? • After wrapping up your lesson, how did it make you feel, and what stood out to you about the experience? • What parts of teaching peers have you liked the most? Follow-up question: Why did you like those parts of teaching?	Begin with questions that arose from analyzing stage one responses, then move on to the following question: • What lessons have been the most helpful for you as a Hope Squad member? Then, time permitting, discuss any remaining questions not asked from stage one's focus group.

Note. I adapted questions to elicit the cognitive congruence, social congruence, and perceptions of tutors' expertise constructs from the assessment offered in the presentation "What Makes a Tutor Effective?" by H. G Schmidt and J. H. C. Moust, 1995, at the Annual Meeting of the American Education Research Association in San Francisco, CA (https://doi.org/bgcp8g). The semi-structured questions in this table were categorized by how they tie to each research question and are not in the order I asked them to participants, the flow of which I have outlined in the Focus Group Agenda (see Figure G2). I drafted additional stage two focus group questions as they arose in analyzing stage one data before holding the stage two focus groups.

Stage Three Journey Map Interviews. I invited participants to create a journey map following stage one focus groups, asking participants to "illustrate [their] journey into joining [their] Hope Squad and eventually helping to teach its curriculum. Include [their] process of preparing and teaching a lesson(s) to Hope Squad members and what [they] did and felt before, during, and after teaching it (the lessons)," and provide visual examples of journey maps. I emphasized that drawing quality is unimportant and encouraged participants to be creative in their design approach. I instructed participants to submit an image of their completed journey map to me via email before joining a journey map interview, which six of the eight study participants did.

I invited participants to register for a small group–setting interview alongside one or two additional participants to share and discuss their submitted journey maps or to register for a one-on-one interview on Zoom. All participants registered for one-on-one interviews. As each participant joined our journey map interview, I displayed their submitted journey map on Zoom and followed a semi-structured interview guide to review each journey map (see Figure G2). Following Magnifico and Halverson's (2012) guidance on bidirectional artifact analysis, I asked participants to describe the context in which they created their journey map and moved the focus of questions bidirectionally between the starting and end points of their maps, exploring the symbols, icons, and paths participants chose to represent their journeys and the significance of those symbols. We explored if and how participants received feedback or comments from family, friends, and peers in developing their journey maps. In cases where participants confirmed

sharing their map with others, we explored how they incorporated or disregarded others'

feedback in their journey map creation.

Following the end of each interview, I thanked the participant for their

contributions throughout the study, shared details on the anticipated study completion

date, and discussed compensation for the study. I then sent the close-of-stage-three

message with compensation to the participant, cc'ing their parent or guardian (see Figure

H9). Sessions were recorded, transcribed, and corrected as with the stage one and two

sessions.

Data Storage and Transcription

I deployed several security tactics to ensure that data gathered throughout the

study was secure. To ensure data storage security throughout the study, I hosted focus

groups on a secure HTTPS connection to the Zoom platform (https://usu-edu.zoom.us/). I

required participants to register for the focus groups before receiving meeting invitation

information, including a six-digit security passcode. Participants were additionally

required to authenticate themselves on the Zoom platform (sign in to Zoom) to join the

focus group. I utilized the waiting room function by ensuring each participant in the

waiting room was on the registration list before admitting her/him/them to the focus

group. In setting up the meetings, I established approval rights to approve or block entry

for users from specific countries/regions, including all those but the United States.

I collected consent and assent information using a Utah State University–

authorized multifactor authentication–protected Qualtrics account. I further maintained

my passwords with strong, randomly generated passwords once per year in alignment

with the University's password security guidelines (Utah State University, n.d.-a). I will

retain consent forms for three years following collection, with plans to delete consent forms collected on Qualtrics on March 31, 2027. I used the same security protocols to host focus groups and interview conversations on a Utah State University–authorized multifactor authentication–protected Zoom account.

I downloaded video recordings of each 90-minute focus group and 60-minute journey map interview, along with a text file of comments submitted through the Zoom chat function, to my password-, firewall-, and encryption-protected, private ethernet–connected computer. Then, I immediately moved the files to Box and deleted them from my computer, where I recorded the Zoom conversation.

I securely stored Zoom's in-meeting chat using a restricted-access folder on Box.com, an encrypted, cloud-based storage system. I then destroyed video files and chat text following the transcription of the focus group recordings. Transcription and the destruction of the files occurred within one week after each focus group and interview. Audio files from the video recordings were preserved to be named by session and then transcribed verbatim (Halcomb & Davidson, 2006; Hill et al., 2022) using Microsoft 365 Word's auto transcription tool. I aimed to create naturalized transcriptions of each file, representing the research participants' experiences and feelings (Oliver et al., 2005). I additionally assigned pseudonyms to research participants' statements using the transcription tool in Word. I spot-checked each transcription, verifying each session's transcript, and made corrections to ensure the transcription accurately represented recorded audio from all sessions (MacLean et al., 2004) with the intent that transcription was "intentional and careful" (Vanover, 2022, p. 73). I then stored verified transcripts on Box.com for analysis.

Analysis

Data Analysis Approach

I took two primary approaches to analyze the study's collected data concerning my research questions. First, I conducted a thematic analysis of focus group and journey map interview transcripts, guided by Braun and Clarke's (2006) thematic analysis. Second, I conducted a bidirectional artifact analysis (Magnifico & Halverson, 2012) on submitted journey maps and data collected in journey map interviews (see Table IV.4).

Thematic Analysis Procedure

I followed a systematic and verifiable process (Hummelvoll, 2008) to analyze transcripts from stages one and two focus groups. My analysis followed Braun and Clarke's (2006) recommended six-phase procedure for thematic analysis, including first, familiarizing oneself with the data; second, generating initial codes; third, searching for themes; fourth, reviewing themes; fifth, defining themes; and sixth, producing the report. The study's transcripts were analyzed to "describe, compare, create explanations … and possibly pose hypotheses" about the study's research questions (Glesne, 2016, p. 183). After gathering data for each research stage, I conducted an initial analysis of that data by following thematic analysis phases one through three. Once I gathered all the data and completed the initial studies, I reviewed all focus group transcripts, following phases four through six.

Table IV.4

Data Collection Methods and Data Analysis Approach to Address Research Questions

Research questions	Collection method	Data analysis approach
RQ1: How do members describe the strengths and weaknesses of the Hope Squad training and their level of preparation for helping student peers with appropriate referrals?	Focus groups Journey maps Journey map interviews	• Bidirectional artifact analysis of journey maps and journey map interviews (Magnifico & Halverson, 2012) • Thematic analysis of focus group transcripts (Braun & Clarke, 2006; Glesne, 2016)
RQ2: How do members experience tutoring their Hope Squad member peers in training sessions?	Focus groups Journey maps Journey map interviews	• Bidirectional artifact analysis of journey maps and journey map interviews (Magnifico & Halverson, 2012) • Thematic analysis of focus group transcripts (Braun & Clarke, 2006; Glesne, 2016)
RQ3: How do members experience social and cognitive congruence with their Hope Squad member peers?	Focus groups Journey maps Journey map interviews	• Bidirectional artifact analysis of journey maps and journey map interviews (Magnifico & Halverson, 2012) • Thematic analysis of focus group transcripts (Braun & Clarke, 2006; Glesne, 2016)

Research questions	Collection method	Data analysis approach
RQ4: To what extent do Hope Squad members feel positive and negative emotional affects—including nervousness—while tutoring their Hope Squad member peers?	Focus groups Journey maps Journey map interviews	• Bidirectional artifact analysis of journey maps and journey map interviews (Magnifico & Halverson, 2012). • Thematic analysis of focus group transcripts (Braun & Clarke, 2006; Glesne, 2016)

Familiarizing Oneself with the Data. Once data collection on each study stage was complete, I initiated phase one of my thematic analysis by becoming familiar with the data while spot-checking and verifying each session's transcript. I reviewed the field notes in my electronic fieldwork diary during focus groups and interviews the week following the interactions (Hill et al., 2022). I also became familiar with the data by listening to recordings of each focus group and reading the associated transcripts. I directed special attention toward parts of the transcripts where there was either consensus or disagreement among participants (Hummelvoll, 2008).

Generating Initial Codes. I used NVivo 14 to support all analysis phases, including generating initial codes and developing a codebook. After familiarizing myself with the data, I established a new NVivo project for further analysis. I used NVivo 14's import feature to import Qualtrics responses from the demographic data into the project, automatically creating and classifying cases for each study participant. I ensured pseudonyms were assigned, then created and populated each participant's "beginning PAL tutor" or "experienced PAL tutor" attribute. I then created stage one, stage two, and

stage three folders and imported all transcripts from the analyzed research stage into their folders.

Once transcripts were imported and classified in the process of being imported, I created an initial codes node in NVivo for initial code organization. I then used NVivo's auto-code function to code transcripts by the speaker. I then coded each transcript line by line, generating initial codes by creating a rudimentary coding scheme by watching for comments on how participants talked about their experiences (Glesne, 2016). I noted "interesting ideas" I encountered in my electronic fieldwork diary (Braun & Clarke, 2006, p. 87), "coding for as many potential themes/patterns as possible" (Braun & Clarke, 2006, p. 89). Transcripts were also coded and collated by the research question that prompted each semi-structured focus group and journey map interview question.

Searching for Themes. With all transcript data coded and collated, I began searching for "repeated patterns" by reviewing the generated codes from the initial coding process (Braun & Clarke, 2006, p. 86). I sought ways to categorize codes based on participants' responses to research questions, creating initial themes and subthemes. I explored ways to categorize codes by broad concepts rather than specific topics (Saldaña, 2009). I used NVivo's visualization tools, including NVivo's hierarchy charts, mind maps, comparison diagrams, and explore diagrams, to reflect on the relationship between codes and themes. I then sorted codes into candidate themes during this phase of analysis.

Reviewing Themes. After I developed the initial set of themes from analyzing stage one, two, and three study data individually, I initiated phase four of my thematic analysis by refining and reviewing themes from each research stage. I followed Braun & Clarke's (2006) two levels to review themes, starting with reading collated extracts for

each theme, keeping the themes that "form a coherent pattern," and discarding those that do not (p. 91). I built a thematic map in NVivo to review the entire data set, refined codes, and adjusted it to reveal the data's core themes and "how they fit together" (Braun & Clarke, 2006, p. 92). In reviewing themes, I met with a qualitative expert, Dr. Deborah Fields, to review gathered data and discuss themes in review during this phase of the thematic analysis.

Defining Themes. Phase five entailed defining and naming themes to clearly describe what each theme is and is not (Braun & Clarke, 2006, p. 92). I refined the thematic map further and identified each participant's statement's "core essence" (p. 92), breaking themes into subthemes in cases where they were large and complex. I reviewed how each theme related to others. I created descriptions of each theme in a few sentences in my codebook and then moved on to producing the report.

Producing the Report. Phase six involved producing a portion of this report from the thematic analysis. I aimed to describe themes I discovered, supported by extracts from data collection. I strove to share findings related to this study's research questions.

Bidirectional Artifact Analysis Procedure

Halverson and Magnifico (2013) encouraged researchers to first "identify a learner-created digital artifact" (p. 409). I viewed submitted journey maps as learner-created digital artifacts for analysis in this research. I then worked to "document relevant data around the artifact" (p. 409) with semi-structured interview questions to trace each participant's steps in creating their map and explore how they finalized their journey maps.

The final step Halverson and Magnifico (2013) suggested researchers take is to "construct narrative threads across the data types and trace the core ideas and tools present in the final product back through their development" (p. 409). Finally, I worked to weave narrative threads across the data types, including an artifact analysis of the journey maps themselves, multimodal analysis in cases where a change to the journey map was detected in either the submitted maps or in responses to journey map interview questions, and discourse analysis of the journey map interview (Halverson & Magnifico, 2013).

I conducted an individual bidirectional artifact analysis on data collected from each of the six participants who participated in a journey map interview using the interview transcript and who submitted a journey map, reviewing that participant's journey map as part of the analysis (Magnifico & Halverson, 2012). For each case, I analyzed collected data on the context in which the participant created their journey map, descriptions of the symbols, icons, and paths they chose to represent their journeys, and the significance they attributed to those symbols.

I added journey maps to NVivo and analyzed them in tandem with journey map interview transcripts to facilitate the discourse analysis of journey map interviews. As outlined in Table IV.4, I aimed to answer research questions three and four, in part, with journey map and journey map interview data, analyzed with bidirectional artifact analyses. Thus, I analyzed data with the lens of Schmidt and Moust's (1995) instruments, measuring the degree to which individuals experience social and cognitive congruence with others, making use of participants' notations, illustrations, and comments to identify clues as to their emotional affects while tutoring their Hope Squad member peers.

Trustworthiness

I have sought to strengthen the trustworthiness of reported results from this study through prolonged engagement with study participants, the use of multiple analysis methods and data collection methods, numerous perspectives of research participants spread across diverse geographies, and debriefing with a qualitative expert, Dr. Deborah Fields, on my analysis of collected data. I disclosed my research perspective in the dissertation, acknowledging my perspective's subjectivity before and during the analysis of gathered data. As such, I monitored my subjectivity during analysis and writing guided by Holloway and Jefferson's (2000) questions of "What do you notice? Why do you notice what you notice? How can you interpret what you notice? How can you know that your interpretation is the 'right' one?" (p. 55).

Findings

In the sections below, I outline reflections from eight Hope Squad members on their experiences acting as PAL tutors teaching other Hope Squad members its curriculum in response to the following four research questions:

1. How do members describe the strengths and weaknesses of the Hope Squad training and their level of preparation for helping student peers with appropriate referrals?

2. How do members experience tutoring their Hope Squad member peers in training sessions?

3. How do members experience social and cognitive congruence with their Hope Squad member peers? and

4. To what extent do Hope Squad members feel positive and negative emotional affects—including nervousness—while tutoring their Hope Squad member peers?

Hope Squad members described several strengths of their Hope Squad training. All participants shared examples of the QPR training, indicating some level of preparedness to initiate the referral process. Hope Squad members used collaborative teaching methods to teach its curriculum. Additionally, these PAL tutors and their students benefited from social congruence and, to a lesser extent, cognitive congruence. Moreover, they experienced positive and negative emotional affects—including nervousness—while tutoring their Hope Squad member peers.

Answering RQ1: How Do Members Describe the Strengths and Weaknesses of the Hope Squad Training and Their Level of Preparation for Helping Student Peers With Appropriate Referrals?

Responses to semi-structured interview questions throughout the study were coded as outlined in Table IV.5. I found eight themes that each helped to answer or otherwise bring insight to RQ1. In alignment with those themes, Hope Squad members Brittany, Julia, and Sophia each shared unique insights in their submitted journey maps that touch on the Hope Squad training they experienced or provided.

Joining for Impact and Aspirations: Understanding Motivations

Hope Squad members' journeys into their respective Hope Squads started with a nomination, followed by an invitation to join. This process initiated their learning of the Hope Squad suicide prevention curriculum.

Members indicated several motivations for joining when considering whether to accept the nomination. The desire to help others (Aiden, Brittany, Sophia), give back to the community (Brittany), and the perceived leadership opportunities (Brittany) associated with Hope Squad membership were all motivations. Others joined having navigated mental health challenges themselves and wanted mental health support. Brittany shared, "I personally was going through a lot of negative feelings … I think joining Hope Squad, kind of, like, how, how do we say turn the tables on me. … It just made me really happy to be a part of the group."

Table IV.5

Finalized Codebook for RQ1 Depicting the Number of PAL Tutors (and Occurrences) for Whom Codes Were Applied

Code				
Name	Definition	Example	No. tutors	No. occurrences
Joining for Impact and Aspirations: Understanding Motivations	Tutors expressed reasons for joining Hope Squad (e.g., they felt they would be able to make a positive impact on the health and well-being of others).	"I just remembered, like, the impact that the girls, like, those girls had on me, like, when, I was, like, starting school, and I kind of wanted to, like, pass it on, like, pay it forward kind of thing. So, I joined to, like, just to, like, be that impact in someone else's life" (Emma).	8	76
Learning the Essentials of Being a Hope Squad Member	Tutors shared details on learning what being a Hope Squad member means.	"This is mostly since you're trying to learn how this New Hope Squad works" (Julia).	4	9
Engaging Actively as a Hope Squad Member or Leader	Tutors described instances when they engaged with their Hope Squad chapter to organize various events and other activities.	"Currently, I'm helping to organize our next Rainbow Run for this year. It's going to be in April" (Ava).	5	30

	Code			
Navigating Challenges in Hope Squad Activities and Instruction	Tutors shared details on their experiences becoming Hope Squad members and the challenges they experienced when learning Hope Squad materials.	"My 8th grade year, we ended up doing, we ended up having COVID shut us down … It wasn't fun that we couldn't be together, but it was fun that we were able to do still activities and service that way" (Julia).	5	14
Undergoing QPR (Question, Persuade, Refer) Training	Tutors shared details on their training that would indicate their level of preparedness to initiate the question, persuade, refer (QPR) model to refer at-risk individuals to appropriate resources.	"For the first, for the QPR lesson, one of the questions was like, 'Have you ever been in this situation before?' And a few people actually did raise their hand, and they were able to talk about how they approached the situation" (Ava).	8	91
Sharing the Strengths of Hope Squad Training	Tutors described the strengths of the Hope Squad training.	"I just feel, like, like, the, the face-to-face of the Hope Squad feels more, like, genuine, more, like, give, like a more, like, interpersonal connection with the teacher" (Aiden).	5	21
Improving Training and Hope Squad: Identifying Opportunities	Tutors expressed ideas on ways to improve the Hope Squad curriculum or the Hope Squad organization at large.	"Some of the challenges is just the size of our Hope Squad, makes things like side conversations make the classroom really loud, or sometimes people can be goofing off because it's right after class." (Sophia).	8	15

	Code			
Integrating Lessons into Daily Life	Tutors described how they have integrated Hope Squad training and experiences into their lives; tutors shared how they have experienced personal growth due to teaching in the Hope Squad program, participating in the program, or both.	"It's also been a personal journey with me in my, in myself. You know, learning how to, you know, talk to myself if that's the right word and process my own emotions when I might be struggling or something might be weighing on my head" (Jack).	8	63

Study participants shared feeling motivated and a sense of purpose tied to being a member. Some highlighted perspectives on the positive impact of Hope Squad on their schools (Emma), of members on high school students (Emma), and of PAL tutors on their students (Jack). The sense of impact was particularly evident for Jack when he observed that Hope Squad members had learned something he had taught them in a lesson. "The change that you see in understanding from a student from the time of the presentation had started to the time of the presentation had ended really kind of leads you to 'I am making an impact'" (Jack).

Learning the Essentials of Being a Hope Squad Member

New Hope Squad members seem to begin a process of acclimatization to the organization, its curriculum, and what it means to be a member before teaching the curriculum to peers. Hope Squad members spoke about learning the essentials of being a member. "You cannot just join Hope Squad and teach Hope Squad members or teach Hope Squad curriculum. It's important that [you become] acclimated with Hope Squad members and that you're learning what Hope Squad truly is and the role that you play," Jack stated. This process of learning and acclimating to one's squad may take place over several school years.

Julia reflected on her first two years of experience in her Hope Squad chapter, focusing on "trying to learn how this new Hope Squad works." Lessons taught during Hope Squad meetings seemed to play a significant role in helping some members develop their understanding of what it means to be a Hope Squad member. As they began teaching Hope Squad members their lessons, their understanding of Hope Squad deepened.

> When you're teaching it, you kind of have to, like, dive a little bit more deeper [*sic*] into it and then, like, pull from different resources. So, I think that really helps, like, you, like, learn more about, like, what you're standing for and what, just, like, Hope Squad stands for, and when you learn more about it. (Emma)

Engaging Actively as a Hope Squad Member and Leader

In taking on the Hope Squad member role, research participants shared their experiences engaging actively as a Hope Squad member and leader. High school students engage with several entities: their Hope Squad, school, and community. Many study participants indicated they engaged with their Hope Squad in many ways, including serving in leadership roles ($n = 5$).

Like other extracurricular high school clubs, some Hope Squads have formalized leadership roles that members can take on, including "vice president, secretary, social media person, senior class rep, junior class rep, [and] sophomore class rep" (Julia).

Additionally, Hope Squad members engaged with their Hope Squad by planning and running Hope Squad suicide-prevention-themed events at their school ($n = 5$) and events in their community ($n = 4$). These events allowed Hope Squad members to communicate with attendees on the role and purpose of Hope Squad.

> We'll set up tabling events and talk about mental health … and, admittedly, we had to get very creative in our engagement because, for those who don't really know about Hope Squad or what we do, or for those who don't necessarily encounter those issues on their own, or even more so, those who do but may not want to seek out help or guidance because they may be unable to, they may be embarrassed to, appealing to groups of people outside of Hope Squad can be difficult at times, but we combated this to coming [*sic*] up with incentives for student engagement and some really fun activities. (Alyssa)

As members engaged with Hope Squad in leadership roles and organized and planned events, they synthesized what it means to be a Hope Squad member and what support they could provide to the student body.

Navigating Challenges in Hope Squad Activities and Instruction

Hope Squad members shared their experiences navigating challenges in Hope Squad activities and instruction. COVID-19 came up unprompted in focus groups and appeared to have impacted several Hope Squad members' ($n = 5$) experiences in the program in various ways. Firstly, Hope Squad chapters moved from meeting in person to meeting remotely. Some Hope Squad members perceived that the pandemic negatively affected the mental health of the student body; others felt it adversely affected their mental health.

Some students brought a pre-COVID baseline experience into their Hope Squad membership. One student described the initial difficulty as follows:

> My freshman year started off in COVID year, so I started off digitally; and, um, obviously, being online, it's hard to, like, have, like, interactions with people, like, just, like, on a day-to-day basis. So, I felt a little bit more, like, isolated in my own thoughts, and, like, less engaged in school, and then uh, and then, you know, my mental health, like, degraded. (Aiden)

For Aiden, the pandemic began before he was nominated and joined Hope Squad. He stayed connected with his friends throughout the pandemic and noticed that his connection to others about whom he cared positively affected his mental well-being. This experience shaped his belief that a supportive community can impact community members' mental well-being, which motivated him to choose to join his Hope Squad later.

Undergoing QPR (Question, Persuade, Refer) Training

The QPR Gatekeeper Training for Suicide Prevention program is central to the Hope Squad's curriculum. Members shared several examples of undergoing QPR training and applying its principles in their schools. Sophia highlighted how Hope Squad members likely learned about QPR during an initial training session at the beginning of the school year.

Members reviewed the three steps of QPR—question, persuade, refer—in combined and individual lessons. However, the real test of QPR's effectiveness is its application. Participants shared examples of conversations in which they took at least one QPR step, potentially equipping Hope Squad members with the tools to save lives.

Julia shared an experience of noticing warning signs in a classmate, engaging in a conversation that went through all three QPR steps, and eventually connecting the student with the school counselor. Another member described how classmates approached him when experiencing various struggles, allowing him to apply the skills he learned in Hope Squad.

Sophia added that applying her training in real-life situations deepened her understanding of QPR, affirming, "You really learn it when you actually need to put the training into use." Jack reflected on the impact of his training, stating, "It goes to show that the work we are doing in our community is translating into being a person that someone can come to if they are struggling."

While not all participants confirmed that they directly applied QPR in crises, referring a classmate to needed resources, evidence from this study's interviews suggests

that Hope Squad members have actively connected at-risk students with the necessary resources at various times.

Sharing the Strengths of Hope Squad Training

Five of the participants commented on sharing the strengths of Hope Squad training. Some members shared that they felt they could distinctly relate to their peers teaching the lessons in ways that might be hard for a Hope Squad advisor to replicate. "When you're talking from, like, a peer point of view to another peer, it's, like, it feels, like, it's something that you can definitely relate to, to 'cause you're both in the same boat" (Emma).

Hope Squad members could also find peer-taught lessons relatable. Alyssa shared that she has only sometimes felt she could relate to lessons in other school settings.

> I've had a couple of times in, like, elementary [and] middle school, where people would come in and, like, talk to us about certain things. Umm. But then, among the students, there would just kind of be this. And then we give us different strategies to deal with things that would kind of be the sense among some students that, like, "This doesn't happen in real life." (Alyssa)

However, Hope Squad members may find the curriculum taught by peers relatable. For example, Alyssa worked alongside a teaching partner to prepare a Hope Squad lesson for members on establishing healthy boundaries. Her partner and Alyssa developed and shared two scenarios for their lesson that illustrated moments when a student crossed another student's boundaries. Then, they engaged the squad members in a conversation about how they might respond in a similar situation.

> It was interesting because a couple of them in both scenarios had said that they had gone through something similar, which I was quite happy with that, not that they had to go through it, but the fact that they looked at it and went, "This is actually relatable." (Alyssa)

The ability of peers to potentially develop and deliver lessons to which their member peers can relate seems to be related to some chapters' flexibility with students personalizing their lessons. "I would say that I think that what Hope Squad does really well on, and you know, compared to other things, is that they want to encourage youth to get involved in this lesson-making process" (Jack), which he felt increased engagement during lessons.

Improving Training and Hope Squad: Identifying Opportunities

Study participants shared a handful of insights on potential opportunities to improve training. Sophia mentioned that some lessons others had taught her felt repetitive, while Ava and Julia shared that instructors tried to include too much information in individual lessons. Alyssa shared that members of her Hope Squad also tended to be enrolled in academically rigorous programs and did not believe members in her Hope Squad reflect the demographics of the student body at large and expressed a desire for "more representation" and "more perspectives" in her Hope Squad.

> I feel that the more people we have outside of [an academic program], the more balanced out it becomes and the more perspectives that we get to hear from, and I feel that hearing from those different perspectives will enrich our lessons and our teaching and engagement in the future. (Alyssa)

Integrating Lessons Into Daily Life

While study participants shared opportunities for Hope Squad to improve its instruction, all participants ($n = 8$) shared examples of integrating the lessons into their lives by activating QPR steps with someone at risk or applying the mental well-being lessons in their own lives. Two study participants shared that their participation in Hope Squad and the lessons they learned helped them improve their mental well-being.

I struggled a lot with mental illness … a lot of the lessons that I've learned, they've helped me become a lot more healthy, like, impact [*sic*] of self-care that you know, sometimes you gotta [*sic*] care for yourself before you can help others, or you know it's OK to set boundaries. It's OK to, you know, have these boundaries and things like that. And so, a lot of what I've learned from Hope Squad has just helped me in my life in general. But a lot of it has also given me friends. But it's also help[ed] me to be able to help others in other aspects and to be able to feel like I'm doing some good. (anonymous)

Participants (*n* = 5) additionally shared that they supported Hope Squad events in leadership roles, using transferable skills in other settings outside of Hope Squad.

Brittany's Journey Into Hope Squad and Toward a Career in Medicine

Brittany's journey map illustrates her reasoning for joining her high school's Hope Squad, the opportunities it brought her, and how she integrated lessons into her life (see Figure IV.4). Her journey started in high school and is depicted toward the top-left corner of her map. When nominated to join, Brittany reflected on some of her future aspirations and "big dreams" of a career in medicine, symbolized by the cross: "I thought it represented the cross of healthcare," she shared. She expressed interest in the medical and behavioral health fields, possibly as a future psychiatrist. "That mental health aspect of medicine is also a great part where you can help others." Brittany also wanted to help support others struggling with suicide ideation and self-harm. She thought joining Hope Squad would help her get relevant experience supporting mental health and opportunities to volunteer and serve in leadership roles. "I thought Hope Squad would be a great way that I could give back to the community and provide me the experience that I needed to deal with tough topics."

Figure IV.4

Brittany's Journey Map
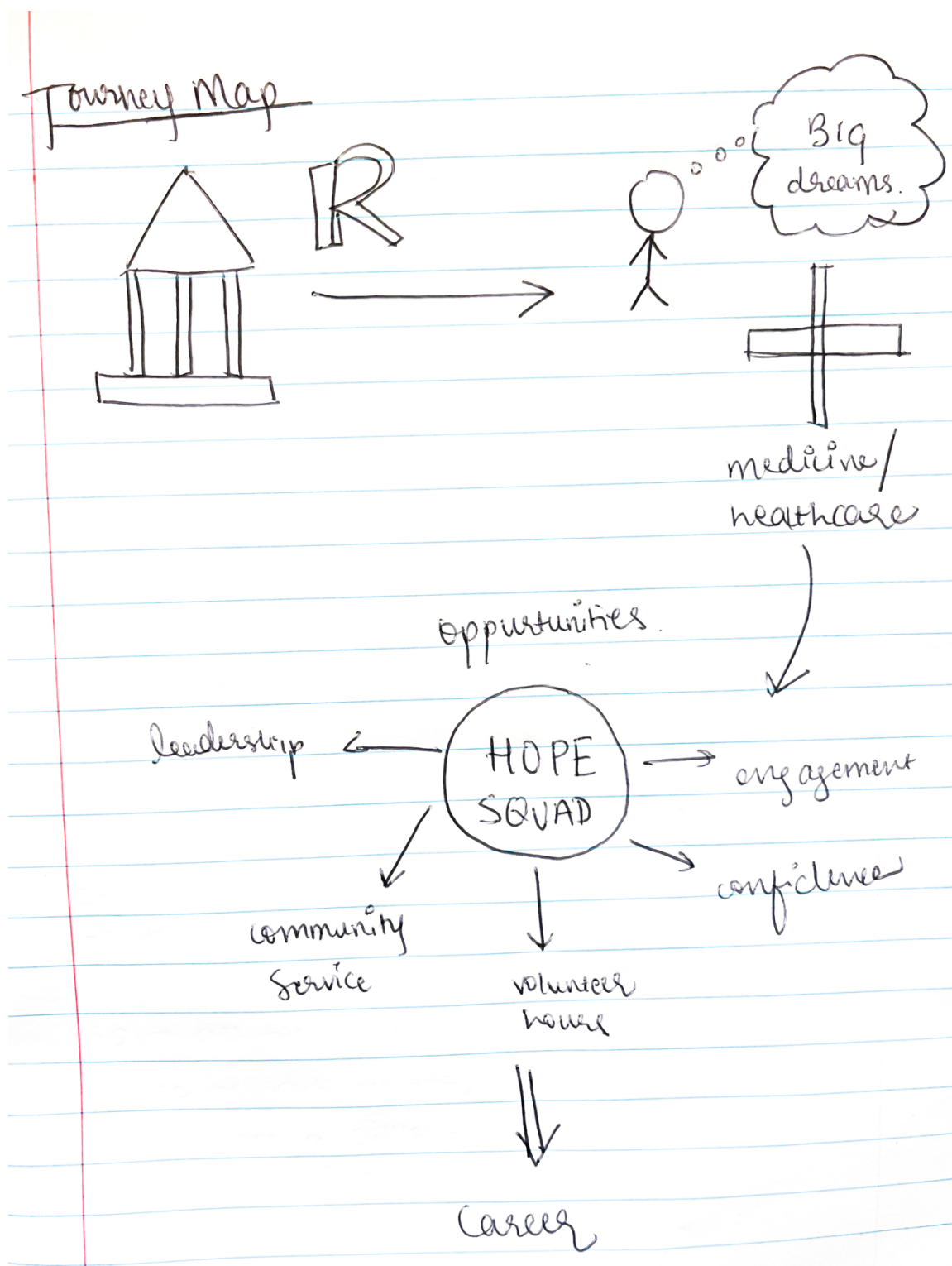
Once she joined her Hope Squad, she shared the benefits of being a member as she experienced them. She could engage with her Hope Squad in several ways. She could participate in "community service," she got involved in "leadership," "as in being a leader and being engaged with others." She clocked volunteer hours, which she said is essential for medical school. "All of these things, apart from 'volunteer [hours],' are also what I gained from being in Hope Squad." She shared that joining her Hope Squad felt like "it's kind of a big commitment" and that in the early weeks of joining Hope Squad, it "kind of [felt] intimidating, but once you are involved with it, it just feels [like] a great opportunity and a way to give back to the community."

Brittany tied the "confidence" and "leadership" notations to her experience preparing for and teaching a lesson.

> I would say that preparing for the lessons helped me a lot with confidence and presenting myself in front of others … organizing [the] material, teaching it to others, help[ing] me revise the basics of Hope Squad, and just, like, mental health, to me, as much as the, as much as these students that I was teaching; so, I think it's helped me a lot with leadership, confidence, and public speaking. (Brittany, journey map interview)

Some of her confidence was rooted in her apprehension to learn and discuss the challenging topics related to suicide prevention. "Sometimes, it's hard to discuss about [*sic*] self-harm and topics that are too intimate with others, and they might feel too frightening or overwhelming." When she first joined Hoped Squad and learned some of the initial lessons, she remembered feeling "that a lot of the topics were very intense … these conversations are not easy to have when you're, like, a beginner … once you get more involved with Hope Squad, you understand the broader aspect of them."

Brittany shared that there was also much material to learn, which might be overwhelming for some hopeful Hope Squad members. "There's a lot of content, and it

can be intimidating, and the language can be hard to process at the beginning. Starting is definitely the hardest part."

Brittany gained additional "confidence" when she applied the skills she learned in Hope Squad to her conversations with others. "Having conversations, open conversations with others about the resources that are available, just being able to talk to them about what difficulties they're facing has helped me understand a lot about myself."

Brittany shared that the most impactful moments of her time as a Hope Squad member have been "being able to be there for others and talk to them … through this process, making them aware about the resources of Hope Squad."

Brittany did not revise her journey map; however, designing it and reflecting on her experience helped her get perspective on the learning and growth she experienced as a Hope Squad member. "When I was drawing the journey map, I didn't realize how much I had gained from Hope Squad and how much of it wasn't something that I was expecting to gain after joining Hope Squad." Drawing her journey map helped Brittany look back at her experience and look forward to her career in medicine, illuminating unanticipated learning outcomes from her Hope Squad experience. It also helped her identify how those skills and experiences could translate into her career.

> Thinking back and reflecting about everything, my journey, and specifically laying it down on a piece of paper helped me, like, realize how much I had gained, and there was, and there were so many amazing things that I had learned that I could in incorporate into my future career, and all these skills are valuable at any stage of life with high school or college. So, I would just say that it makes me grateful for everything that I have learned. (Brittany)

Brittany's experience as a Hope Squad member allowed her to develop skills, teach them to others, and lay the foundation for a future career.

Julia's Journey From a Hope Squad Newcomer to an Engaged Leader

Julia's journey map weaves across three rows from left to right, starting when she "joined Hope Squad" and ending with her involvement with the "leadership conference" (see Figure IV.5). Julia included four emojis throughout her journey map's milestones, to indicate feelings of happiness with the yellow emoji, stress with the purple emoji, sadness with the blue emoji, and relief with the green emoji. After being nominated, she joined Hope Squad at the start of her seventh-grade school year, a moment she indicated feeling mixed emotions of stress and happiness. "This [stress] is mostly since you're trying to learn how this new Hope Squad works," Julia explained.

The COVID-19 pandemic affected her school, and she went to school remotely through the end of her eighth-grade school year. Still, her Hope Squad continued to meet virtually. Julia remembers her "advisor would send out, like, a list or something, of things to do, um, like, 'Hey, will you guys take a picture of, or will you guys write thank you note to the mailman and then take a picture with the sign.'" She focused her Hope Squad interactions on activities and service projects during that school year. She shared that the sad emoji at this moment represents some of the feelings she had as her school was navigating the pandemic. "We ended up starting with only half the school came on AB days. If you. If your name fell into this section of the alphabet, you could do some days, and then eventually, we went to in-person completely but masks."

Figure IV.5

Julia's Journey Map

Joined Hope Squad

Covid remote activities

Elected Hope Sqaud President

Taught 1st Lesson

[High school logo]

1st year at [High School]

Hope Squad Activities

Santa's Workshop

[High school logo]

[High School] Hope Sqaud Confrence

Joined National Hope Squad

Inclusivity

National Confrence

Leadership Confrence
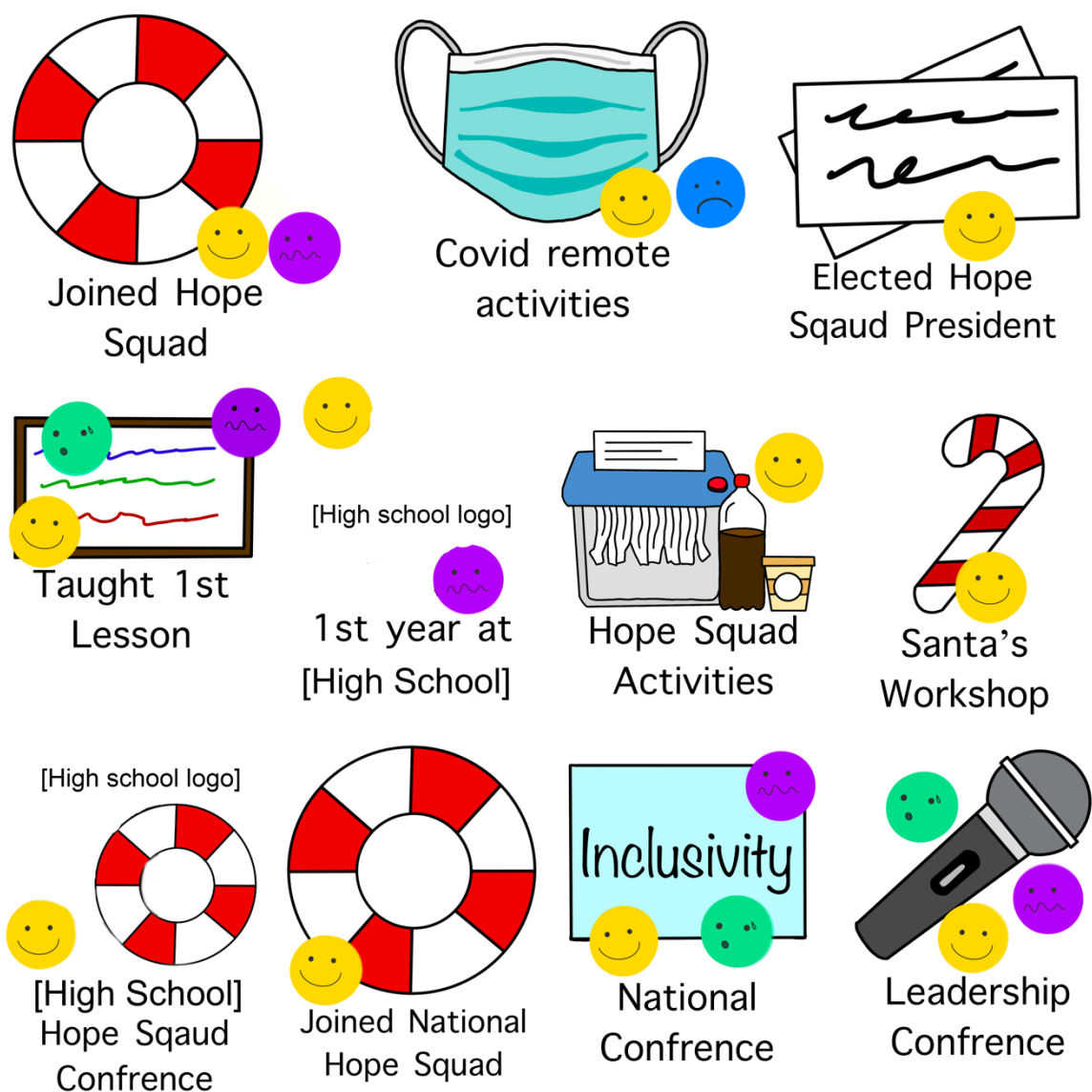
Note. The high school's name and logo were removed to protect the participant's privacy.

The moment along her journey when Julia was "elected Hope Squad president" occurred at the beginning of her ninth-grade year. Julia taught her first Hope Squad lesson later during that school year, a moment marked with emotions of stress, happiness, and relief. Julia shared that the stress was tied to her first lesson. "It was our first time

teaching, so that was obviously a little stressful there. I had prepared. I've been preparing. … but, like, it was just stressed about, like, 'How is it all going to go?'" The Hope Squad members responded well to her lesson, alleviating her initial concerns about how her lesson would go. "We end up having one of the other classes telling us to be quiet because they were like, 'You're too loud.' We were having fun. And so, it was a good lesson." She said she felt relief after beginning her lesson and immediately following its completion. "It's like … 'OK, I did it. There we go.'"

Julia's high school experience began as a 10th-grade student, a school year she described as "exciting and stressful." She shared that she didn't participate much in her Hope Squad chapter this school year. "We would have activities, we would have things, that I wouldn't show up. I just struggled my 10th-grade year with being involved and wanting to do some of those things." Julia shared that she was working through relationship issues that affected her motivation and capacity to participate with her Hope Squad. In addition, her Hope Squad interactions happened during class time as a junior high student. Julia's high school Hope Squad met after school, a change she had to adjust to and caused her some stress. "We went from a class in junior high in [inaudible] to now it's a club. And so, the stress of that."

The "Hope Squad activities," "Santa's Workshop," and "Hope Squad Conference" icons represent moments in Julia's journey that all took place during her 11th-grade year. "We did lots of activities. Like, we did root beer floats … we'll do activities all the time, usually once a month." The "Santa's Workshop" activity is another event Julia was involved with. "It was more of a community-based activity. We ended up getting the advisor's parents, um, and they, um, dressed up as Santa and Mrs. Claus.

Provided the community [the opportunity] to come take pictures, and we didn't charge

anything." Julia's Hope Squad hosted the Hope Squad Conference at her high school.

Other Hope Squad junior high and high school chapters and members of the national

Hope Squad attended their conference. "That's actually where I first learned about

National Hope Squad." Julia shared that her friends started attending Hope Squad events

more than they had in past school years, which helped her to further immerse herself in

the club. "I think the other thing that changed [during 11th grade] is a lot of my friends

were in Hope Squad and started showing up more, too." Her connection to friends

motivated her to attend events. "I ended up [becoming friends with] a lot more people in

the Hope Squad. And so, it helped me want to go, and it helped me connect with them a

lot more, like, and to feel, like, I belonged a lot more in Hope Squad because I knew the

people and I knew more." Julia shared that the club format in which Hope Squad

members met together after school helped her build friendships with other members since

it allowed for more time to meet than they had during her sophomore year when they met

during "homeroom" at a time that was primarily dedicated to watching her high school's

broadcast news program.

> A lot of that love for Hope Squad, like that I had in my 9th grade, that I had in my 7th and 8th grade, wasn't there because all of a sudden, you're not really interacting with each other. And so, it kind of took out a lot of the feeling of togetherness and a lot of the same page and connection.
> But by the time we hit the [*sic*] my 11th-grade year and 12th-grade year, you started, the people started showing up more, and because we did it as a club, we had a lot more time to interact. A lot of our meetings, we oftentimes will before the meeting starts, we'll sit there and talk with each other. (Julia)

Julia had joined the national Hope Squad as a senior. A leader with the National

Hope Squad encouraged her to submit a proposal to present at Hope Squad's national

conference; she submitted and was accepted to present on "inclusivity, and how that, how important [inclusivity] is, how it can help in your Hope Squad and how it can help in your school," a moment Julia marked with feelings of happiness, stress, and relief. Her presentation involved extended coordination and practicing with her co-presenters: "We did quite a bit of research and meetings" to prepare. "My group, we met, I want to say, like, three times. Then, we had our dress rehearsal, and then having the national our national leader come and overview, like, come and watch us." Her national leader provided some feedback on their presentation and how they might improve their presentation approach. Julia and her group made final adjustments and recorded their presentation. The recorded presentation was then played at the conference. "It was really, like, fulfilling when it was done," Julia said.

The final point in Julia's journey was engaging with a Hope Squad leadership conference for all Hope Squad chapters in her home state. The conference was themed on the knowledge and skills that leaders of Hope Squads need to help their chapters thrive. Her chapter's president and social media person attended the conference alongside her. Julia helped organize "a brain break" activity for conference attendees. She additionally acted as a panelist during a panel discussion.

Julia designed her initial Journey Map on her iPad, but someone got ahold of it and accidentally deleted her design. In redoing her map, she revised some of the elements she initially designed, adding the detail on inclusivity she delivered at the national conference.

Throughout Julia's experience, feeling connected to others in the program played a role in her engagement. She said:

> I think a lot of Hope Squad is the people … I feel like that's what's amazing … it's a place where you feel like you belong. And it's a place where you're … it's a safe place where you're able to learn about some of these harder topics and some of the ways that you can help others. (Julia)

Sophia's Journey to Develop Knowledge on Hope Squad and its Curriculum

Sophia charted her journey from joining her Hope Squad to where we met for our interview, plotting the months and years across the x-axis and the level of Hope Squad knowledge she obtained along the y-axis (see Figure IV.6). She joined her Hope Squad during the fall of her ninth-grade year. The red on Sophia's journey map at the beginning of her journey highlights that "nothing really happened there, Hope Squad-wise … [she] wasn't a Hope Squad member yet, so [she] didn't really do much, but [she] was kind of learning about it."

She had previously been invited to join Hope Squad as a middle school student but chose not to. However, she reconsidered when she was nominated to participate during the fall of her ninth-grade school year. "And then, like, don't remember exactly when, but September to November-ish time, I was elected as a member of Hope Squad, so I was, like, officially in."

Sophia believed her nomination to her Hope Squad was one of a handful of "key points" she marked along her journey toward developing her knowledge of Hope Squad. At the end of her ninth-grade year, Hope Squad held elections for the upcoming school year, and she was "elected treasurer" of her Squad for the following year.

Figure IV.6

Sophia's Journey Map
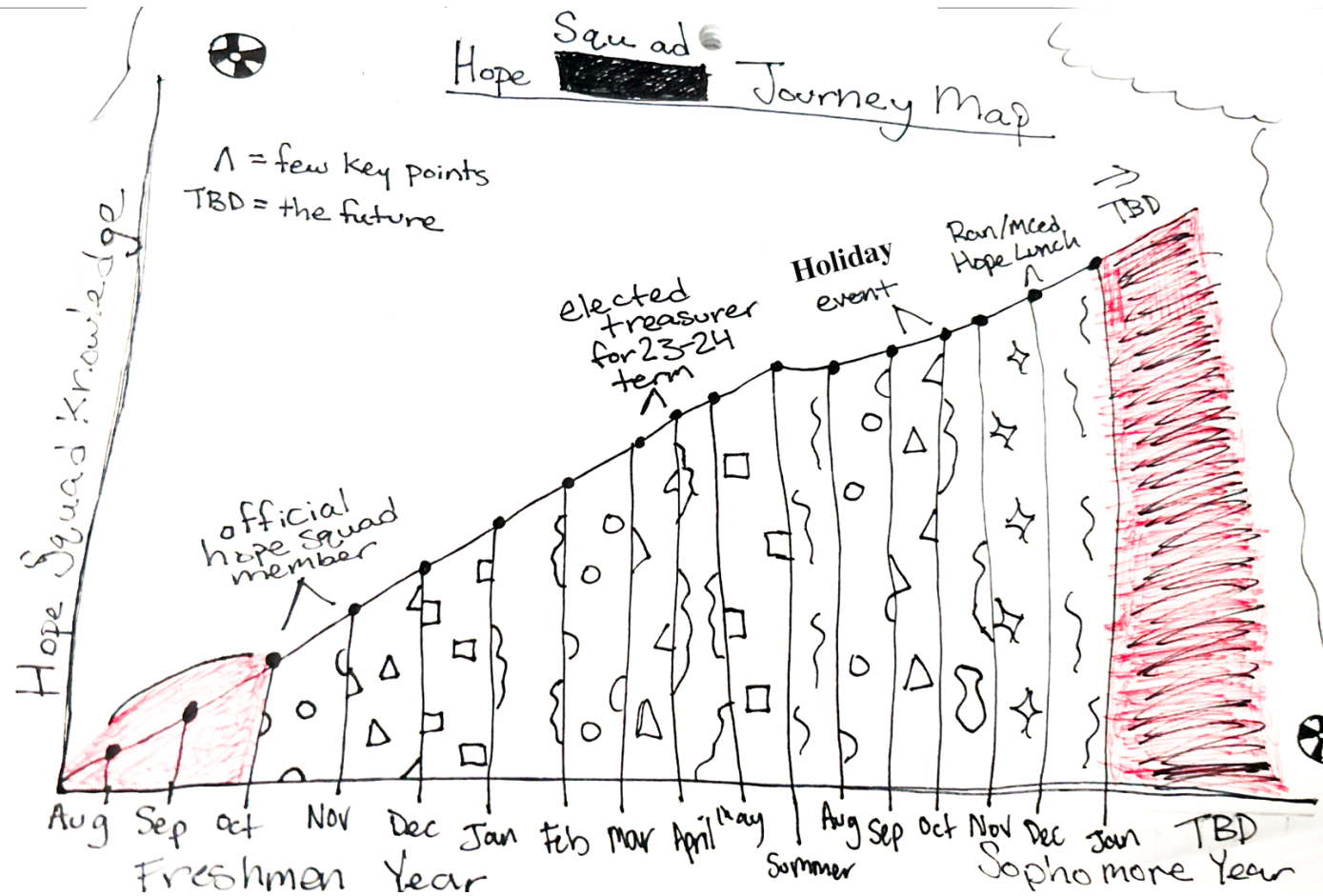
Note. The name of the "holiday event" on Sophia's journey map was removed to preserve her anonymity.

Between her ninth-grade and 10th-grade school years, she compressed the timeline on her x-axis, mentioning that "summer was kind of a slump because we had a few things over the summer, but it was mostly just, I don't know, summer." She leveled off the Hope Squad knowledge she gained during that time.

As a sophomore, the "holiday event" and running and emceeing a "Hope Lunch" stood out to Sophia as "key points" during a school year full of learning. "Throughout the year, I felt like I learned a lot." Hope Squad members plan out Hope Lunches in Sophia's squad to reach members of their student body through messaging, introducing Hope Squad to the student body, sharing information on available resources, and prompting conversations on mental health. Sophia got to plan the first Hope Lunch of the school year and was involved in others. She stated that planning helped her "play around with a lot of ideas that [her Hope Squad] had." For her lunch, she reviewed potential ideas for engaging with members of her student body who were on their lunch break. She thought about strategies to reach students who might be suspicious about students approaching them and starting a conversation. She opted to prepare hot apple cider that members of her Hope Squad gave out to students in their school while trying to engage in discussions with recipients.

> When they handed it to them, then they could start the conversation and kind of ease their way into, like, talking about it, 'cause I understand it's, like, it's, like, handing somebody, like, a flyer or, like, some sort of thing when you're walking down the street. It makes it like, "You've got my attention now," kind of thing, even if it's only for a few more seconds than it would have been. It's, like, a good conversation starter. (Sophia)

Once Hope Squad members started conversations, they would try to share critical resources. "'988 is important.' 'The advisor's room is in this room.' 'My name is this.'" Some Hope Squad members might provide their Instagram handle, phone number, and

other alternative ways students in their school could reach them. "We just try and make sure that, like, we're just trying to make sure that they have somebody to go to by name. … It's so much easier to talk to a friend than a stranger."

Sophia shared that many members of her student body are focused on their academic performance and can feel stress toward the end of each academic term. "A lot of our students are, like, in AP or APs, are dual credits, so they really care about grades or the number that's gonna appear on the paper at the end of the test." The holiday event Sophia helped organize was intentionally scheduled during this time of stress for her student body. Sophia and her squad aimed to encourage classmates during that academically challenging period of their school year:

> We gave people, like, just nice notes, like, "You've got this. Don't stress out, like, if you ever need to talk to us about that," because we know that, for at least our school, and I think it went pretty well because we did manage to reach a lot of people through there. (Sophia)

Sophia's experience participating in and leading various aspects of Hope Squad events seemed to help her grow within the organization. She indicated that her chart's monthly column symbols represent her multiple experiences in Hope Squad. "Each month, something was different. Each month of Hope Squad was, I felt, like, I learned something, and I felt like things kind of changed." The red coloring indicates the "past" and that "there's still more to come." Sophia first drew her journey map with a pencil. "I kind of had an, an idea in my mind, so I drew kind of a pencil sketch." She shared it with a friend for feedback on how she might modify her map to represent her experience more accurately. Her friend said he liked her layout. Sophia recalls him suggesting that "'maybe [she] could, like, even the lines up a little bit.'"

She commented that she was selective in what moments she added as "key points" for her final design. She remembers thinking:

> "I'll include four or five points because I don't want to, like, I don't know if I, if I could, like, go back." There's probably so many other things that happened, but honestly, high school is flying by for me, like, it's, it's just going, like, it's speeding down the freeway right now. (Sophia)

Sophia did not include her Hope Squad member teaching experience(s) as a "key point" on her journey map. She shared that "there's a lot of things you can learn" during Hope Squad lessons, "but you really learn when it when you actually need to put the training into use."

Answering RQ2: How Do Members Experience Tutoring Their Hope Squad Member Peers in Training Sessions?

Six themes stood out prominently in the data when reviewing transcripts and journey maps to answer research question two (see Table IV.6). Jack, one of the study's experienced PAL tutors who has taught more than three lessons to his peers, shared his methodical approach to preparing for and teaching Hope Squad lessons. This section ends with insights from Jack's journey from nomination through teaching lessons.

Table IV.6

Finalized Codebook for RQ2 Depicting the Number of Pal Tutors (and Occurrences) for Whom Codes Were Applied

	Code			
Name	Definition	Example	No. tutors	No. occurrences
Preparing for Teaching Responsibilities	Tutors described steps they took to prepare to teach; tutors shared what curriculum they taught.	"We made the slideshow, and that was the simple part. The difficult part was getting everything into words and kind of discerning what we're going to talk about because we were given a really long list of topics. So, like, we spent two days just kind of deliberating what we wanted to do" (Alyssa).	8	217
Sharing Epistemology of Pedagogical Strategies	Tutors shared details on the origins of their strategies to teach the curriculum and how they developed their strategies; tutors shared experiences teaching.	"So, I think since I had, for two years, I'd already, like, been on the receiving side of the lessons, I thought that maybe by how I say things, I could help people better understand, like, the actual lesson itself, to keep them engaged, and, like, just, really, I could see both viewpoints now" (Ava).	7	23

	Code			
Implementing Collaborative Teaching Methods and Tools	Tutors shared their methods for collaboratively teaching in the curriculum and the tools and instructional technology they used to teach it.	"So, like, you'd ask them, like, oh, like, 'What do you think, like, went wrong?' and stuff, and then at the very end, we did an activity" (Aiden).	8	164
Addressing Challenging yet Important Teaching Topics	Tutors commented on the challenges they experience teaching mental health-related curriculum or directly acknowledge that the topic is challenging. Tutors commented on the importance of the subject they taught.	"But then especially talking about things that can be very difficult topics. It was a bit tricky at first to try it for me to try to figure out, like, what I should say and how I should say it, but after talking with my guidance counselor, I got it figured out. And I'd say it went well" (Alyssa).	7	25
Exploring Tutor and Learner Dynamics	Tutors shared details related to the teaching atmosphere they shared with learners.	"[Senior Hope Squad members will] just stand behind me during a meeting, or if the crowd gets rowdy, they'll be like, 'Guys, can we please calm down just for the next 2025 minutes and let her speak. Let her get across her point'" (Sophia).	7	67

	Code			
Assessing Learning Outcomes	Tutors described their methods for assessing learning outcomes for those they taught.	"And, like, the other main factor we looked at is, like, whether they were participating in, like, when we would ask some questions, or, like, or, like, when we were giving them, like, scenarios, would they have to, like, point out, like, certain issues that they saw, and the interactions and they're, like, participating or, like, they, like, disagree with someone else, they know that they're actively, like, like, interacting and, like, participating" (Aiden).	8	42

Preparing for Teaching Responsibilities

Tutors recounted *preparing for teaching responsibilities* by selecting a topic,

preparing a lesson, and practicing it before teaching it. Sometimes, the topic is assigned

by their advisor, while other times, the advisors give the tutor the latitude to select a Hope

Squad–related topic to teach, with oversight from their advisor. The most common

lessons tutors shared selecting to teach were related to one or more of the QPR steps;

other topics tutors noted either teaching or being taught include becoming comfortable

with not knowing all the answers to mental health questions as a Hope Squad member,

coping with change, compassion, depression, empathy, managing the stress associated

with the college application process, self-care, passive suicide ideation, stress

management, and safe language when discussing mental health.

With a topic selected, Hope Squad members reported consulting with many

resources to build on their knowledge of the subject before teaching it. Hope Squad

resources, other mental health resources online, and conversations with friends, family,

and Hope Squad advisors were all shared as examples of resources they used. Julia

shared her lesson preparation process:

> I just go over what I know about that topic first. And then, based from
> there, as soon as, like, I'll talk to, like, an advisor, I'll talk to a parent or
> something and be, like, "Hey, are there any other ways that you can see
> this," and they'll be, like, "Oh yeah," and then they'll either point me in a
> direction that I haven't thought of or things like that. Or I'll go over
> material online or the Hope Squad material. (Emma)

Emma shared that the TED Talks her advisor previously shared were helpful,

"Some of those are really good, and they make, like, really good points." She referenced

reviewing notes in a Hope Squad notebook when preparing a lesson to recall potential

ideas and resources she could review to prepare her lesson.

> We also have, like, a Hope Squad notebook, so whenever I go back, I just
> go back to, like, my notes, and I'll be, like, "OK, this is where," well, like,
> "This is how my teacher taught it." Or, like, "This is just, like, a book that
> we pulled stuff from. This is, like, the things that he pulled stuff from."
> (Emma)

Reaching out to her advisor was also a step Emma took. "I'll always, like, ask my

advisor. I'll just be, like, 'OK, what do you think about this?'" Once she prepared her

materials before teaching a lesson, Emma said she would "always, like, check-up with

[her advisor] before I actually present something to the rest of the class."

Many participants noted that once they prepared their lesson, they practiced

teaching it before presenting it to the class. Brittany said, "A lot of practice and

preparation took place" before her lesson. Aiden practiced his lesson but felt he should

have practiced more:

> I feel, like, me [sic] and my partner should have practiced a little bit more,
> because there is sometimes that we were, like, overlapping kind of, like,
> forget who is presenting which slide, and that definitely cause, like, a little
> bit of, like, of a break in our first lecture, like, after that, like, we were,
> like, on a roll and I feel, like, everything went pretty well. (Aiden)

Sharing Epistemology of Pedagogical Strategies

Hope Squad members teaching other members developed their lessons freely,

sharing comments in the focus groups and interviews that hinted at the *epistemology of*

their pedagogical strategies. Julia and Sophia reflected on their learning experiences and

approached teaching in ways they valued learning. Julia shared that engaging in activities

that involved the whole class and that included a metaphor helped her remember lessons.

Wanting her lesson to be memorable, she incorporated a metaphor and activity. Sophia

shared, "I learned best from visualization, for example. So, the best example is for me, I guess so, like, when we, like, kind of role play or act out things." Alyssa learned the importance of eye contact and body language from an extracurricular club competition in which she had to prepare and deliver convincing arguments, something she applied to her approach to teaching her Hope Squad lesson.

For organizations like Hope Squad, therein lies a potential opportunity to provide training on effective teaching strategies, helping to guide tutors in practical strategies and tools they can use to teach core curriculum. While PAL tutors are natural educators (Schmidt & Moust, 1995; Tosgaard et al., 2007), providing training on peer tutoring skills can improve the teaching and learning experience. With training, PAL tutors like those I interviewed in this study may lean less heavily on their self-developed pedagogical strategies, resulting in potentially more consistent learning experiences among Hope Squads and similar organizations. As Topping (2001) describes it, PAL implementers should train tutors on "how to give systematic instruction, how to observe responses closely, how to give encouraging but accurate feedback regarding the response, and how to respond differentially to different kinds of student response" (p. 61).

Implementing Collaborative Teaching Methods and Tools

I discovered a prominent theme in the data: Hope Squad members primarily designed and delivered lessons *implementing collaborative teaching methods and tools.* All study participants noted they taught their lesson(s) with a co-teacher in a group. Ava felt this co-teaching approach helped lighten the preparatory burden she otherwise would have faced when teaching a lesson alone.

I think it definitely helps that I have a partner to help me teach. So, we collaborate on it. And like I said, we don't have a lot of time, so our presentations aren't that long. So, it's not like a lot of work to prepare for. So, it's not that challenging, and again, I'm not doing it all by myself, so I don't, I don't really find other challenges with it. (Ava).

Hope Squad PAL tutors shared that they use analogies and metaphors in instruction ($n = 2$). Julia mentioned building in "brain break" activities. Ava, Julia, and Jack referenced "turn and talks," in which they would ask students to discuss a prompt with someone nearby. Rather than didactically transmitting material to their peers, Hope Squad members, acting as PAL tutors, also asked students questions to assess comprehension and drive engagement during their lesson ($n = 7$).

Another collaborative tool Hope Squad members often used to teach was pairing scenario sharing with a role-playing activity in which they were asked to respond to a scenario that might reflect something they could encounter in their school or community. All research participants said they created a presentation to deliver their lesson, with some ($n = 3$) specifying using Microsoft PowerPoint and one using Google Slides for their lesson(s).

We talked about in our lesson, different types of boundaries and how to put in place healthy boundaries in order to take care of your physical and mental health. And in that slideshow, we gave scenarios of how to deal with certain things in the hopes that people will look at these situations that they face in real life and be like, "Oh wait, I've talked with members of Hope Squad, and I've learned about something similar." And hopefully, that equips them with the tools necessary to kind of navigate these various encounters for themselves. (Alyssa)

Jack said he has seen his peers collaborate with tools including Canva, Google Docs, and Word to organize their lessons and create lesson materials. Some Hope Squad members ($n = 3$) said they shared personal experiences related to the lesson as part of

their instruction, something that tutees remarked they valued hearing in my (Morris, 2024b) study. For Emma, experience sharing was a highlight of her teaching experience.

> I would say the part that I like the most is probably just being able to share my own experiences and especially the topic that I could relate to; and I started with, like, or start or and or somewhere in there that I had, like, my own experience and my own story and seeing that as, like, something that helps, like, motivate them since we're all, like, like, going through the same thing, it's something that motivates them. And I would say that's my favorite part about teaching. Yeah. I just really, like, sharing something that's really important to me. It's that I'm passionate about. (Emma)

From his perspective of the dual roles Hope Squad members can play as teachers and learners in PAL-participating chapters, Aiden shared that hearing others' experiences has been helpful for him in his learning. "How, like, they talked about it and how they approached it really helped me." As a result, he and his co-teacher shared experiences related to their lesson and then asked their students to share their experiences.

> We would show a term, describe it, give a personal experience of how, like, we would do uh, what, like, so, like, how it happened to us, like, how was the problem for us? And then we would ask them, like, like, "Did you have something experience, like, this or how did you deal with, like, this type of emotion?" (Aiden)

Addressing Challenging yet Important Teaching Topics

Hope Squad PAL tutors frequently shared statements indicating that the curriculum is full of challenging yet essential topics. Hope Squad members describe the curriculum as "difficult and emotional" (Jack), "hard to discuss" (Brittany), and consisting of "difficult topics" (Alyssa). Others said the topics were "very intense" (Brittany) and "very sensitive to some people" (Emma). However, despite the inherently challenging curriculum that Hope Squad members might deliver and from which they learn, many acknowledge that it is vital material to teach and learn. "We're hoping to get

important messages not only about how you can effectively be a Hope Squad member but also, in general, about, you know, mental health and dealing with your own mental health," Jack said. Ava shared that a lesson on recognizing the warning signs of suicide was beneficial to her as a Hope Squad member since recognizing those signs is a cue for someone to initiate the QPR steps.

> I think the lessons about the warning signs of suicide was [*sic*] probably the most important to me because we were taught, like, the actions and words [of] someone who is considering [dying by] suicide and what they would do. And so, I thought that was [the] most important information to know. So, like, if I'm ever in that situation, I'd be able to spot it and be able to maybe find them the help that they need. It was definitely influential to [*sic*] how I perceive other people. It kind of made me recognize people's actions and words a little more carefully, I guess, and not just brush things over and just being [*sic*] more aware of how people act and speak because of that lesson. (Ava)

All study participants made at least one comment that indicated they found the curriculum taught in Hope Squad *challenging yet important teaching topics,* and some participants emphasized that view more than once throughout the study.

Exploring Tutor and Learner Dynamics

Hope Squad members acting as PAL tutors shared insights on the unique tutor and learner dynamics at play during the lessons they taught. They described how their classrooms felt with a variety of words (followed here by the respective number of references), including comfortable ($n = 2$), easygoing ($n = 3$), emotional ($n = 4$), excitement ($n = 3$), on-edge ($n = 1$), positive, and serious or somber ($n = 3$). The description of engaged ($n = 7$) in the learning environment often appeared in discussions. For Alyssa, engagement meant that her students appeared excited about her lesson on establishing boundaries and "were contributing" to it by coming up with ideas in

association with the scenarios she presented. Jack posited that the engagement he has seen in the lessons he has taught is partly tied to the novelty of the curriculum: "I found that students are more engaged because it's something that is completely new and unfamiliar to them." Hope Squad members teaching their peers would rely on visual cues to assess engagement, such as "eye contact, looking up at the board, or writing things down" (Julia). PAL tutors (Emma, Jack, Julia) perceived some students' periodic use of phones during their lessons as an indicator of disengagement. "When the phones start coming out, that's, like, when you know, like, you kind of just, like, lost their attention for a bit" (Emma).

Assessing Learning Outcomes

Hope Squad members acting as PAL tutors shared insights into their strategies and tactics for *assessing students' learning outcome*s. Ava and Jack created and assigned a quiz at the end of their respective lessons to test what knowledge their students gained. Other tutors looked for evidence of learning in how students responded to questions they asked the group at large, indicating they understood the core concepts that the tutors taught. Ava shared that she understood what her students were learning when they asked her questions about her lesson, helping her gauge what they knew and did not know. She used this heuristic to perceive that the entire class understood a segment of her lesson: "There weren't any questions this time, so I assume everybody understood and understood what was being taught."

Jack's Journey From Hope Squad Member to Methodical Teacher

Jack's journey map begins at the point peers nominated him through the point he delivered a lesson to Hope Squad peers. He mapped several points that took place in between those events that took place over more than two years (see Figure IV.7). Jack shared that at his school, his Hope Squad chapter distributed "a random[ized] survey" to his student body and recipients nominated "students that [*sic*] they [thought were] worthy of such a position." Once his Hope Squad chapter notified Jack that he was nominated, he chose to complete and turn in the required "permission slips." Then, he was "inducted" during a meeting where his Hope Squad advisors met with all parents of willing Hope Squad members to share information about the club and its purpose. Once inducted, Jack completed the initial QPR and Hope Squad training.

Jack continued attending Hope Squad meetings and learning about "important topic[s] for Hope Squads [*sic*] that, in some cases, are delivered by advisors, in other cases are delivered by other students." Jack emphasized that this first period on his journey map, before the one labeled "spoke on local Hope Squad panel," was one of acclimation:

> You move on to kind of getting acclimated. And I thought that this was important to include because you cannot just join Hope Squad and teach Hope Squad members or teach Hope Squad curriculum. It's important that [you] acclimate with Hope Squad members and that you're learning what Hope Squad truly is and the role that you play. (Jack)

Figure IV.7

Jack's Journey Map
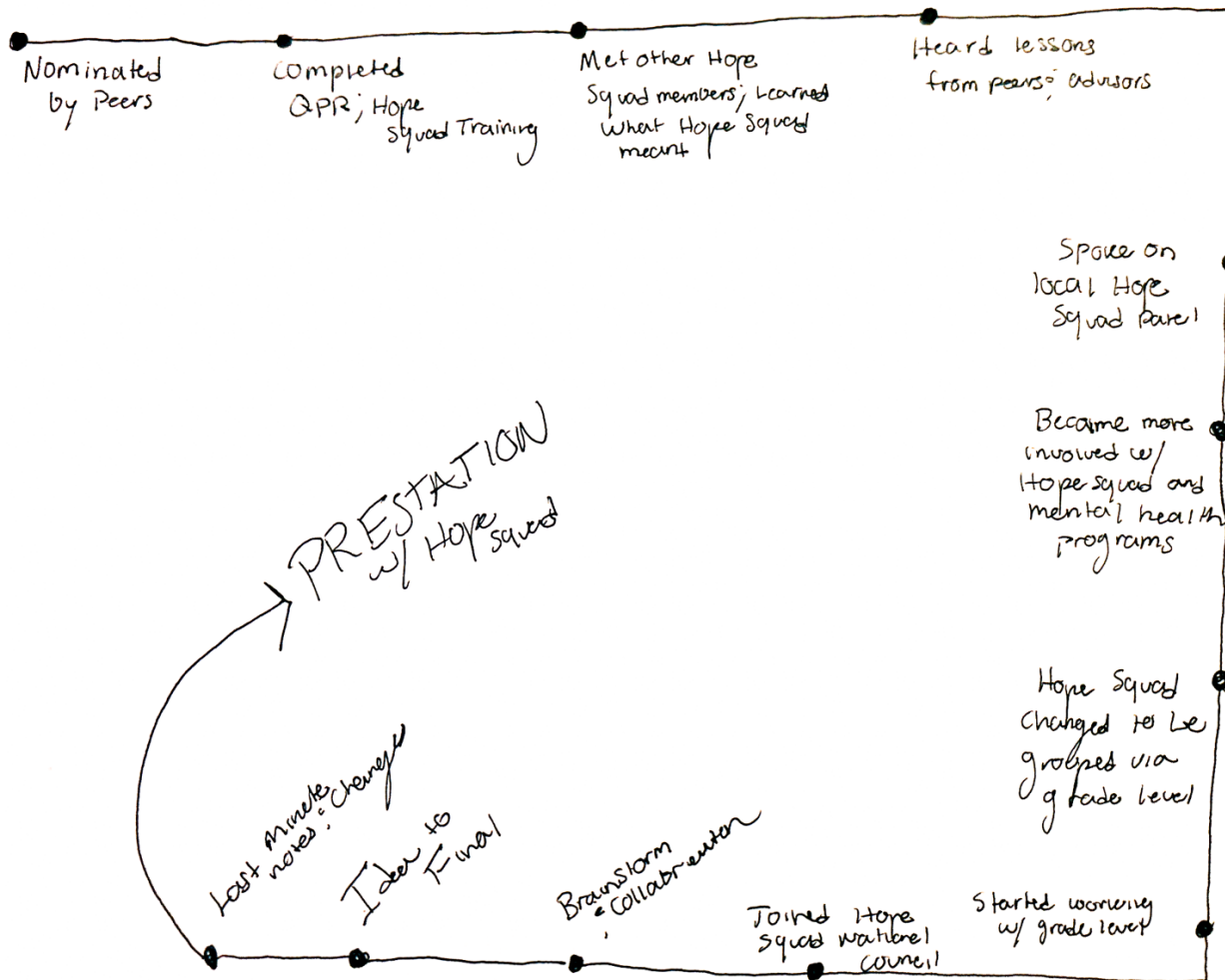
During the "heard lessons from peers and advisors" phase of his Hope Squad experience, Jack said, "The people that [he has] met, the community that [he has] built and transform[ed]," all helped him learn what "Hope Squad means" and was "important" to him and his development. When peers taught lessons, they were "typically older students."

A community nonprofit invited Jack to join a two-person mental health panel as the youth panelist alongside one adult panelist at an event it organized that Jack notated with the "spoke on local Hope Squad panel" timeline point. He asked, "What Hope Squad is, what it does, how we help students with the referral process." Jack mentioned the bend in his journey map between the point he illustrated he heard "lessons from peers and advisors" and his "spoke on a panel" illustration representing "a huge gap between Hope Squad programming" caused by the COVID-19 pandemic.

However, his Hope Squad experience changed with the panel he participated in. "Speaking on [the] local panel, like I said, that kind of lit a fire inside of me," Jack recalls. Following Jack's paneling experience, he shared that "becoming more involved with Hope Squad and mental health programs was kind of the next step" in his journey. Some of this involvement entailed supporting "different events at the high school level that we can do, like Mental Health games." Jack felt that supporting his Hope Squad events and "being an advocate for Hope Squad is great because then [he has] conversations with other students and other parents and other community members about Hope Squad and about what Hope Squad does and how [Hope Squad] assist[s]." Jack viewed his conversations in these event settings and at the panel as a form of instruction

as he responded to questions. "I'm not outright teaching a 45-minute PowerPoint, but I am still delivering that curriculum. I'm delivering the things that we do and how do [*sic*] them. That's really, that's really important."

Part of Jack's experience at this point in his journey was engaging with other mental health programs in his school. He shared that his school has a "mental health team in the building" available to respond to Hope Squad members' questions. He has also spoken as his chapter's Hope Squad representative at various school district engagements.

When Jack joined his Hope Squad, Hope Squad members met after school for their lessons, which Jack felt came with its challenges in capturing the attention of Hope Squad members during lessons. "When you're dealing with kids after school, it's more considered a club, and you think about a club, you think of this as somewhere fun to go, you know, whatever, whatever. But this is very serious." However, at the point in his journey where he wrote that "Hope Squad changed to be grouped via grade level," his school brought the Hope Squad curriculum into regularly scheduled classes, which Jack said opened up teaching opportunities for peers and changed the learning atmosphere. "The work that [we] do is very important. I really found [the transition] to be, like, a really good segue into students in general teaching lessons." Jack hypothesized that the formal structure additionally helped aid students' learning.

> By grouping it by grade levels and going to more, like, a class, so now it happens during the day, it's something a little bit different where it's, like, "OK, this is the lesson that I need to learn today," and treat it, like, a math and science to, you know, whatever type of classes. So, you, I feel like people are retaining more knowledge; I would say that I am as well. (Jack)

With this change, Jack "started working with [his] grade level," which involved supporting "different projects and activities." Jack continued to be active in his Squad, joining the Hope Squad National Council, where he said he could get "additional resources," including "themes of the month" that he brought back to his high school.

After Jack received his first formal teaching assignment, he "partner[ed] up with someone" to teach the lesson and engage in the "brainstorming and collaboration" session notated on his map. During his first meeting with his teaching partner, they tried to address "how we want to take this, what does this mean to us" in their initial thinking. They also reviewed the teaching tools, including Canva, word processing options, and presentation slide software options, which they would collaborate on to build, discuss teaching approaches, and deliver their lessons. Jack shared that he took "a bunch of notes about what I want[ed] to do, or how I want[ed] to do it." He remembers working alongside peers to develop their teaching outlines, planning the instruction flow, and identifying who will teach each section of their lesson. "I could be talking, talking with my peers, and, like, 'OK, well, I will handle this section, and then I can add this picture in there, and then I can add this specific wording that we're supposed to use. And I can do this.'"

With an outline and teaching assignments, Jack "put all that into, like, a final product, or, like, an idea," as indicated by the "idea to final" notation on his journey map. Once the lesson was finalized, Jack and his teaching partners "would probably meet in person once again and then make any final changes." Jack said the advisor would typically attend this final review and provide feedback.

> A lot of what happens there is kind of fine-tuning, like, "Make sure you
> say it in this way." "Make sure you say it in this way." "Let's go over

what I, the resources that [have] been provided to the Hope Squad by me, and let's make sure that things match correctly." (Jack)

Jack spoke about the presentation process's general "brainstorming and collaboration" aspects and shared that he teaches many high school students outside Hope Squad. "Maybe we're teaching it, like, in an activity or in a group."

Jack's preparation to teach spanned over the years, and his experiences and the changes his school made in incorporating Hope Squad into its school day helped prepare him.

I had to really go through some time, and I know this doesn't really depict this, but I had to go through some time, get involved with some people. You know, there had to be some kind of structural changes and things of that nature for me to even get the opportunity to teach lessons. (Jack)

In Jack's Hope Squad, "not all members will teach a lesson; it's the members that are truly dedicated and who are truly passionate about the work and have shown themselves to be committed to Hope Squad as an organization." Jack felt a sense of honor for having had the opportunity to teach, something that at his school "it's really seen as, like, a sacred thing, like, not everyone's teaching Hope Squad."

Answering RQ3: How Do Members Experience Social and Cognitive Congruence With Their Hope Squad Member Peers?

Several statements shared by Hope Squad members indicated they experience some level of social and cognitive congruence with their peers. I also found an additional theme in Hope Squad members' responses around connectedness, which I highlight in detail below (see Table IV.7). Aiden shared how his connection with peers and community impacted him as a Hope Squad member. I have shared highlights from my bidirectional analysis of Aiden's journey map below.

Table IV.7

Finalized Codebook for RQ3 Depicting the Number of Pal Tutors (and Occurrences) for Whom Codes Were Applied

	Code			
Name	Definition	Example	No. tutors	No. occurrences
Experiencing Social Congruence	Tutors described various experiences that indicate they experience social congruence with Hope Squad members. E.g., they indicated an ability to communicate comfortably and informally (Lockspeiser et al., 2008; Ten Cate & Durning, 2007) and related to their peers.	"When you're talking from, like, a peer point of view to another peer, it's, like, it feels, like, it's something that you can definitely relate to, to 'cause you're both in the same boat" (Emma).	5	16

	Code			
Experiencing Cognitive Congruence	Tutors described various experiences that indicate they experience cognitive congruence with Hope Squad members. I.e., they indicated they used language that learners are more likely to understand while using concepts that learners easily comprehend (Schmidt & Moust, 1995).	"It's different from, like, an adult, like, a teacher to a peer, peer versus, like, a peer-to-peer. And, like, they're they, I don't know if this happened; this would happen all the time, but they could be more, like, open to questions, like, that you're asking because you're a peer, or, like, if you, like, personally know someone just, like, for them to understand it, it could, like, maybe, like, it's just the way of, like, the way that you're talking or the way that you explain it" (Emma).	4	7
Building Connectedness	Tutors described how Hope Squad experiences connect them to various individuals and entities including community, Hope Squad, leaders, et al.	"We had a few other high schools there. And then, like, the people who show up, who, like, sponsor Hope Squad or our Hope Squad, or, like, other events, like, people from their group showed up to directly talk to us kind-of-thing" (Sophia).	7	50

Experiencing Social Congruence

Hope Squad members (Aiden, Emma, Jack, and Sophia) shared some insight into their teaching and learning experiences that indicate that they experience social congruence with peers in their chapters. Aiden felt that teaching peers in the same social setting as a high school was an advantage for teachers. He noted that Hope Squad members are all "going through the same thing," creating a shared experience. He suggests that as others prepare to teach a lesson to Hope Squad peers, they should "act like you're talking to, like, one of your friends" to help them "feel more comfortable talking to you because they feel like they relate to you." Jack recalled seeing a distinct difference in the attention students give an adult instructor compared to a peer: "There's a little bit of an element of surprise because you're so used to having adults communicate information that when a student is communicating that information, it's just a little bit different." Jack's perspective was that this difference is due to peers' shared experiences and that a PAL tutor's inherent ability to relate to their students was an advantage of peer teaching: "At the beginning, you usually have everyone hooked, whereas if it's an adult, a lot of times you have to work on hooking them, versus, like, when a student, everyone's already kind of tuned in to what you're saying because you're more relatable to them."

Conversely, Emma spoke about feelings of awkwardness and challenges of not being taken seriously: "It's hard for them to, like, take you more seriously, too, since you got, like, it is, you are just, like, the same age as them," and shared that she might not experience that challenge teaching younger students in middle school as a high school student. Emma shared that despite that stated challenge, "it's easier for, like, high schoolers to connect to high schoolers," which aligns with Jack's remarks.

Experiencing Cognitive Congruence

Some Hope Squad members shared evidence of feeling *cognitive congruence* with their peers. Jack shared that it may be easier to connect with peers than adults, "And that's because, you know, in that present moment, our mind and how we communicate is built as a 15-year-old, not a 30-year-old." Alyssa shared that teaching peers using language they can understand is something she assessed in her lesson. After responding to a student's question, others with raised hands lowered their hands, indicating to Alyssa that they "explain[ed] things in a way to where people generally understood what we were saying to the point where there wasn't much confusion."

Building Connectedness

Hope Squad members shared that their teaching and participation in Hope Squads helped them build connectedness with other Hope Squad members ($n = 5$), leaders ($n = 2$), their student body ($n = 2$), other schools ($n = 3$), and the community ($n = 4$). Julia shared that her group of friends changed during high school and that she went "to many more people on the Hope Squad as friends. It helped me want to go, and it helped me connect with them a lot more, like, and to feel like I belonged a lot more in Hope Squad." Sophia mentioned that Hope Squad helped her develop friendships with members she may not have met in other settings. "There's [*sic*] a few girls in my class who I don't think I would have talked to them if I wasn't in Hope Squad. There's [*sic*] so many people on our campus, it's like you have to choose."

Brittany and Sophia shared that Hope Squad helped connect them to leaders. Brittany shared that she worked to improve her mental health as a Hope Squad member

while applying QPR skills to help others. She shared her appreciation for her Hope

Squad–enabled connections with peers and leaders:

> Being able to talk to them about what difficulties they're facing has helped
> me understand a lot about myself. And the feeling that I'm not alone in
> the, in these, in feeling and thinking these thoughts, so I would just say
> that it has helped me connect a lot with my peers and leaders. (Brittany)

Sophia connected with both leaders and the community at a mental-health-themed

community event the Hope Squad organized, noting that it was a crucial moment in her

experience as a Hope Squad member:

> You could see that adults were, like, taking us seriously and kind of, like,
> understood that we were actually trying, what we were trying to do, that
> we actually, it, it felt like we were, it felt like evidence that kind of that we
> were being appreciated or making a change in a way. (Sophia)

For Hope Squad and other similar organizations, evidence that some of its

members are finding friendship and experiencing connection with others within its

chapters should be encouraging due to the protective factor connectedness has in suicide

prevention, including among adolescents (Barrow & Thomas, 2022; Wasserman et al.,

2021; Whitlock et al., 2014).

Aiden's Journey from COVID-19 Isolation to Connectedness

Aiden's journey into the Hope Squad program and his experience teaching peers

Hope Squad lessons began at the start of his time as a high school student and spanned

over more than three school years through his current senior year of school (see Figure

IV.8). Aiden aimed to map out "significant moments in [his] life" in this map. His first

significant moment was during his first year as a high school student when the COVID-

19 virus became a pandemic. In response, his school moved its instruction online.

Figure IV.8

Aiden's Journey Map
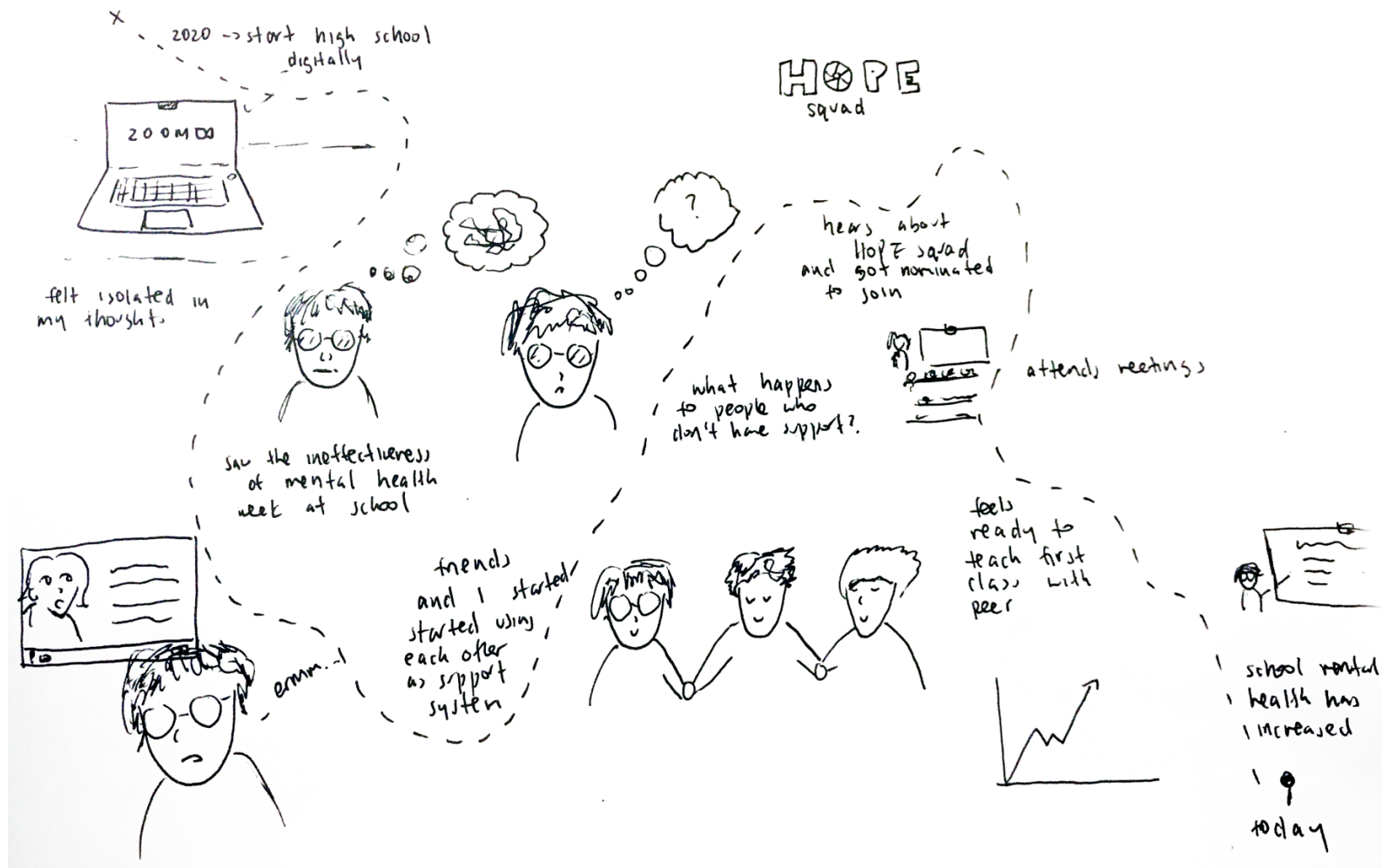
School administrators eventually discontinued the school year early, ending earlier than the typical length of a school year in his school district. "It was, like, a long summer break," all of which left Aiden feeling "isolated in [his] thoughts," as noted on his map.

> Being online, it's hard to, like, have, like, interactions with people, like, just, like, on a day-to-day basis. So, I felt a little bit more, like, isolated in my own thoughts, and, like, less engaged in school, and then uh, and then, you know, my mental health, like, degraded. (Aiden)

Other students also naturally felt isolated, so administrators at Aiden's school took steps to address student mental health needs during a mental health awareness and support week. "It was just, like, we joined a Zoom meeting, and they would talk about, like, mental health and stuff. And then I felt, like, that was, like, very ineffective," Aiden shared.

Aiden's illustration of himself reflecting on the effectiveness of mental health awareness and support during the week's Zoom meeting was a memorable moment in his journey toward connectedness. "[The Zoom meeting] wasn't really helpful. And so, um, I was just so, like, that caused me to, like, question it, and, like, be, like, 'OK, like, how do I work on my mental health when the school is never finding something for, like, me?'" While the Zoom meeting was not helpful for Aiden's mental health, he found something that helped: As he continued to attend his classes remotely, as illustrated in the next image along his journey, he began reaching out to his friends who were experiencing similar feelings of isolation.

> I started turning to my friends, and then we became each other's support system. We would, like, talk about the stress of school and, like, navigating, like, a whole, like, different, like, high school, and, like, just, like, being digitally for, like, the first time. (Aiden)

Aiden indicated that this connection to caring and supportive friends helped him alleviate some of the effects of isolation he was experiencing and was a fulfilling realization for him. Aiden remembers reflecting on the positive impact his network of friends had on his mental health and the lack of effect his school's mental health week seemed to have had. "I started wondering, like, 'What happens if you don't have, like, support, like, this? Like, how do people who don't have the easy access to, like, mental health resources, like, how can they, they get the support they need?'" He started thinking about ways he could impact the mental well-being of his student body in more pronounced ways than he felt the Zoom meeting had. "At that point, I was thinking, like, 'Oh, like, I could work, like, the student government to, like, initiate, like, [mental health] weeks or something, like, to, like, increase the engagement."

At that contemplative point of his journey through high school, a peer had nominated him to become a member of his school's Hope Squad. He expressed excitement about being nominated, partly because he felt that joining his Hope Squad could help him reach his goals of supporting his classmates while being supported by "an organization to back it up through their expertise." He decided to join his Hope Squad. He indicated this moment with the Hope Squad logo on his map. "I was really excited that I got nominated to do, like, the program. And, so, for, like, the, the second half of, like, junior year, I started attending meetings. I started, like, taking notes from, like, the educators."

For Aiden's Hope Squad, advisors or peers delivered those lessons in a traditional classroom layout in which they stood at the front of the classroom and taught Hope Squad members, whom he sketched in his journey map, sitting "in rows" with "a small

table in front of [each row of Hope Squad members]" with "a smart board at the very

front." He recalled his interactions with Hope Squad members in these settings, where

"some of them would tell me how they would deal with certain issues" that Aiden may

not have yet encountered. "I was able to, like, learn more about, like, how to, like, hear

other people's issues that might not apply to me." He shared that much of his learning has

occurred in break-out conversations with peers. The tutor in his Hope Squad gave

members a scenario to discuss, specifically peers with whom Aiden would not typically

have had the prompted conversation.

He indicated that after attending several Hope Squad lessons, he then felt "ready

to teach [the] first class with [a] peer." Aiden taught his lesson under the supervision of

the Hope Squad advisor. "Eventually, I felt ready to teach a class on my own or with a

peer without, like, a lot of guidance from our sponsor." As illustrated in his journey map,

Aiden used the aid of a PowerPoint presentation to deliver his lesson on "boundaries," a

topic he felt "everyone's, like, experienced, and like, growing up, like, everyone figures

out, like, what their boundaries are." Aiden shared that a moment that stands out to him

from his experience teaching was initially feeling "like I was, like, very, like scared," but

then he became:

> More comfortable in the environment, I guess. Um, and then seeing, like,
> the people in the classroom, like, engage with the lesson. I guess there
> wasn't, like, a specific moment where I just, like, it clicked. But, like, I
> think, like, it was, like, a gradual, like, like, just seeing how everyone gets
> more comfortable, and then I also got more comfortable and, like, teaching
> too. (Aiden)

Aiden noted that just after completing teaching, a moment stood out to him as

fulfilling when he felt like he "made a difference in, like, the younger classes." To

conclude his journey, Aiden shared that he has "started to notice that, like, people started

to seem a lot more, like, happier at school" and that he perceives his school's "mental health has increased" at the time of our journey map interview, indicated by the upward-trending line graph.

Aiden showed his journey map to a few friends in his Hope Squad (see Figure IV.9). It was Aiden's first and only draft of his journey map. He shared that if he designed it again, he would add more detail toward the end of his journey, outlining more experiences with Hope Squad. He shared that his experience in Hope Squad has helped him to learn more about himself and develop tactics to deal with obstacles in his life in safe and healthy ways. He also noted that he feels more comfortable "talking to, like, people that [he] wouldn't have." He shared that he used to keep feelings "bottled up inside" but learned to share his feelings with others from the instruction and interactions he has encountered in Hope Squad.

Answering RQ4: To What Extend Do Hope Squad Members Feel Positive and Negative Emotional Affects—Including Nervousness—While Tutoring Their Hope Squad Member Peers?

I coded related data to RQ4 as outlined in Table IV.8. Peer tutors shared experiencing various emotions, which I categorically divided into generally positive and negative segments. In addition, I discovered a surprising shift in emotions that some participants detailed, including Ava, whose journey map highlights this shift, among other details tied to her experience.

Table IV.8

Finalized Codebook for RQ4 Depicting the Number of Pal Tutors (And Occurrences) for Whom Codes Were Applied

	Code			
Name	Definition	Example	No. tutors	No. occurrences
Experiencing Positive Emotions	Tutors commented on positive emotions they experienced during teaching (e.g., excitement, happiness, pride, relief, etc.)	"I would just say that it made me definitely happy that I was able to um convey certain amount of information to the members so that they themselves could involve and include other members" (Brittany).	7	23
Experiencing Negative Emotions	Tutors commented on negative emotions experienced during teaching (e.g., anxiousness and nervousness).	"I think a little part of me was always, like, nervous that I would say the wrong thing since it's, like, a very, like, sensitive topic that we're talking about" (Emma).	4	43
Experiencing Shifts in Emotions	Tutors commented on their emotions during teaching, shifting from one emotion to another during instruction or from one lesson to the next.	"I was a little nervous at first because it was my first lesson, but as it went on, I felt a little better about it, and it was really smooth sailing" (Ava).	3	9

Experiencing Positive Emotions

Hope Squad members noted *experiencing positive emotions* while teaching their lesson(s) to other members, including that they felt comfortable ($n = 1$), happy ($n = 3$), and inspired ($n = 1$). After concluding their lesson, they shared feelings of excitement ($n = 3$), gratitude ($n = 3$), and pride ($n = 3$), with half of the participants sharing feeling a sense of relief ($n = 4$). The sense of relief for Alyssa was tied to worries about the level of engagement she might get from students. "Finishing the lesson, there was relief because we managed to get through it without any major hiccups, and it was also relief because I was worried that there wouldn't really be a response, and I was glad to see that that was not the case."

Experiencing Negative Emotions

The most prominent negative emotion Hope Squad members experienced when teaching their lesson was feeling anxious or nervous. Five of the eight participants shared this emotion. PAL tutors shared that they were nervous for several reasons, including the perception that the topic was challenging to teach, wanting to avoid being anything but inclusive, worrying about how the Hope Squad members would respond to their lesson, and worrying about saying the wrong thing. In Emma's words, "I think a little part of me was always, like, nervous that I would say the wrong thing since it's, like, a very, like, sensitive topic that we're talking about." Tied to the concern about saying the wrong thing was a desire to be accurate in her lesson. Ava said her nervousness before teaching was rooted in a desire to "not have a misunderstanding with, like, my information and

making sure that, like, I'm very clear and concise in it. I didn't want to, like, mess up my words or have anyone misunderstand anything."

Experiencing Shifts in Emotions

Three Hope Squad members (Aiden, Alyssa, and Ava) shared experiences of emotional shifts while teaching. Alyssa said her initial nervousness subsided when she saw signs that her lesson was helpful to her students. "I was slightly nervous that I wouldn't be able to teach it as adequately as I wanted to or answer their questions. But once we got into the actual lesson, I was told that it was actually helpful for our members, and I was very happy about that" (Alyssa). Aiden also indicated feeling nervous as he began teaching and that his nervousness disappeared during instruction. For Aiden, indicators that learners were engaged put him at ease. He recalled, "It was like a gradual, like, like, just seeing how everyone gets more comfortable, and then I also got more comfortable and, like, teaching, too." Ava also remembered feeling nervous before teaching her first lesson despite practicing before teaching. However, she remembers making an internal assessment of how well her lesson was being received by the students, sharing that "as it went on, I felt a little better about it, and it was really smooth sailing. … It went really well." She shared that "it's definitely normal to feel nervous for your first time, but it's rewarding in the end because you don't continue to feel that way."

Ava's Journey Toward Overcoming Nervousness While Teaching and Beyond

Ava segmented her experiences on her journey map through Hope Squad by school year, from her first year in high school year through her junior year when we met for our journey map interview, with the chronological order of events within each school

year organized in ascending order from top to bottom from earliest to most recent (see

Figure IV.9). Ava said that she first heard about Hope Squad during her first year in high

school. Ava's middle school had also had a Hope Squad, which she mentioned she

"technically … had already known of Hope Squad from middle school." However, in the

first cell of her "Freshman" year column, she shared that her friend had shared

information on Hope Squad with her. Ava indicated she was interested in the

organization. After she "put [herself] out there," she was eventually "nominated by [her]

peers."

She then chose to join the club and "went to a bunch of informational … consent

forms and stuff to be able to be a part of it." As her journey map indicated, peers who

were part of her Hope Squad chapter's board led the organization; these board members

also taught Hope Squad lessons to peers on "the warning signs, how to approach

someone, resources, and people to talk to." Ava indicated that her first year in the

program "was a fairly slow year" for her. She reflected, "I didn't really put myself out

there that much, so I didn't make a lot of friends. It was still really new to me." Still, she

began to engage with her Hope Squad in attending "maybe one or two events that they

held," where she helped "set up, take a part of, like, a tailgate or any activities [they] had

during lunches." Ava shared that it "was a really fun experience."

Figure IV.9

Ava's Journey Map

Freshman

2021-22

- I hear about Hope Squad from a friend of mine and decide to check it out

- I officially join the club after going to a couple informational meetings

- I learn the lessons that are taught by the board members (the warning signs, how to approach someone, resources, and people to talk to)

- I help organize, set up, and clean up multiple events that spread the word about our cause. Hope Week, Hope Lunches, and tailgates.

Sophomore

2022-23

- I rejoin Hope Squad the next year, excited to help as many of my peers as I can.

- I try to put myself out there more while getting more involved in the events that we plan. I start to speak up more to the board members.

- I help organize, set up, and clean up my first Rainbow Run. We had a huge turn out with many sponsors. The local news does a story on the event.

- At the end of the year, I run for the position of vice president for the 2023-24 school year. I was elected.

Junior

2023-24

- I teach my first lesson on ACT to new and existing members. I collaborate with a partner to make a slideshow to use for the lesson. We practice together to make sure we have the material memorized. At first I'm nervous but as I teach the lesson, I become more confident. After the lesson, we take questions from the club and we feel relieved to have finished teaching my first lesson.

- I'm currently helping to plan the decorations for our next Rainbow Run and to teach the next lesson our meeting. The lesson will be passive suicide.

- I hope to run for president next year.

Moving on to her sophomore year, she indicated that she rejoined her Hope Squad to "be a little more out there, in a part of the club." She shared that she began talking to other Hope Squad members more as a sophomore, learning people's names, and "started to raise, come up with, like, ideas, and vocalize those things to the club." She noted that her "I try to put myself out there" cell during her sophomore year represents a meaningful point in her Hope Squad journey that led to her teaching experience. She shared that she tried "to be more a part of the club, and like, not hideaway," and that her engagement expanded her opportunities in Hope Squad. "Without, like, the confidence that I gained in my sophomore year, I wouldn't have been able to run for a board position, thus being able to teach a lesson. So, I think that was really, like, a turning point for me." She shared that having friends in her Hope Squad helped her become more engaged during her sophomore year of school:

At the beginning of sophomore year, I had some friends who were nominated, and so they got to join the club, too. So that kind of helped me become more social, rather or compared to in freshman year, I didn't have any friends going into it. So, it was, like, a clean slate, almost, so that definitely helped when I already knew people sophomore year to make me have the confidence to try and meet new people. (Ava)

Alongside her friends and other Hope Squad members, Ava worked to "help organize, set up, and participate in a lot more activities, a lot more lunch activities," such as her school's Rainbow Run.

> We have a Hope Week, where we do different activities every day. And then we did do, our main focal point was the Rainbow Run, is what we call it. It's basically just, not necessarily a fundraiser, but a [sic] event where we just try to bring in a lot of aspects of our local community to just raise awareness of suicide, how to prevent it, and things like that in our local community. And it was really successful. There was a lot of turnout;

a lot of businesses and groups around our county came, and, like I said,
the news came. So it was, it was really cool, and so we really got to reach
out to a lot of different aspects. (Ava)

Ava had run for and was elected vice president of Hope Squad during her sophomore

year.

We met for Ava's journey map interview about midway through her junior year,

during which she shared that she "got to see behind the scenes on how [Hope Squad

board members] organize events." After engaging with her Hope Squad for two years as

a member, she taught her first lesson to other Hope Squad members. Ava shared that

"only board members can teach lessons" in her Hope Squad chapter. "So, I got to teach

my first lesson on, we call it ACT." The ACT (Acknowledge, Care, Tell) technique

outlining the steps a respondent should take when identifying someone who is at risk for

suicide by acknowledging there is a serious concern, showing the person you care, and

telling a trusted adult, is a suicide prevention gatekeeping model similar to QPR and

central to the SOS Signs of Suicide® prevention program (Clark et al., 2022; Morton et

al., 2021). Ava was uncertain why her Hope Squad did not use QPR, stating, "I think it

was, like, copyrighted or something."

Ava prepared her lesson, which included a slideshow with a teaching partner. In

her journey map, she mentioned practicing "together to make sure [her co-teacher and

she] [had] the material memorized." She then indicated that, as the lesson started, she felt

nervous at the beginning of her lesson but that she became more confident as the lesson

continued. She shared in our interview that she had been "a little nervous at first because

it was [her] first lesson, but as it went on, [she] felt a little better about it, and it was

really smooth sailing." And then, following the delivery of the instruction Ava and her

co-teacher had prepared in their slide show, they "took questions from everyone, and [Ava and her co-teacher] did a little practice activity afterwards with the club, and so and it, it went really well." After concluding her lesson, she felt "relieved to have finished teaching [her] first lesson."

Ava continued to engage with her Hope Squad following her first lesson during her junior year of high school, working to "plan the decorations for [her Hope Squad's] next Rainbow Run. "It's going to be in April. Very excited. Yeah, it's, it's a lot of work. [I] kind of took that for granted, I think. But it's so much fun. … The rest of the people on the board are very helpful, very friendly, very open." Ava shared plans to continue her involvement in her Hope Squad through her final year of high school. "At the end of this year, I hope to run for president for next year."

Ava said that by drawing her journey map and adding details, she revised her junior year column, wanting to "go a little more in-depth on, like, teaching the lesson as a whole." Beyond noting the emotions she felt during and following the class she taught, Ava described the emotions she felt throughout the period as nervousness during her first year as a high school student when she "just did what [she] was told and didn't really engage as much." Ava shared that as a sophomore, she "didn't want to, like, mess anything up" as she was "putting herself out there more and talking to more people," as a junior acting as vice president of her Hope Squad when she shared that "It's a lot of responsibility, and I just don't want to let my club down, and especially with, like, teaching the lessons." Ava shared that she began to trust that her Hope Squad members were available and willing to support her when needed.

> As I talked to my board more and socialized with them more, it definitely
> eased up on my nervousness, and it made me feel more relieved and,

again, more confident in what I was doing because I had, like, a support system and we worked as a team. And, so, it's not as stressful because I know there's other people who are willing to help … it's very relieving to know that they're there. (Ava)

Reflecting on her experiences, which she had outlined in her journey map, Ava said she felt that her Hope Squad had created an environment that helped her grow. "I think the environment itself is perfect for growth; it's perfect to become more social, to be a [*sic*] more part of your community, and to make a big impact on your school. It just is really up to the person to see what do with it." She was surprised by how much she had accomplished:

> When I looked back at it, I just think, "Oh, yeah, like, I was in Hope Squad." But then, when I put down the specifics [*sic*] experiences, there was [*sic*] a lot of opportunities and events and stuff like that. And, so, it was really insightful, and I was, "Wow, I, I was, I was busy." (Ava)

Discussion

As organizations like Hope Squad and similar organizations operating in high school settings work to effectively educate their members, PAL tutors like those who participated in this study can play a critical role in delivering instruction. Because less is known about PAL in noncompulsory settings than in other settings, this study helped bring new insight into its application in such a setting. Namely, it investigated PAL in a peer-based high school suicide prevention-oriented organization where participation is voluntary and positive learning outcomes are not graded, yet potentially vitally important.

This research relied on the PAL tutors' retrospective memories of their experiences in Hope Squad and teaching Hope Squad lessons, some more recent than others. The data-collection method may have been susceptible to social desirability biases

that are somewhat challenging to overcome due to participants hearing about the study from Hope Squad and knowing me only briefly. Still, this study helped bring to light insights into Hope Squad members' experiences in Hope Squad, where they learned to activate intervention techniques when recognizing individuals at risk for suicide.

Adding to my previous work on PAL in noncompulsory settings (Morris, 2024b), the eight PAL tutors who participated in this study reflected on their teaching and membership experiences in their respective Hope Squad chapters. They demonstrated varying approaches to teaching and engaging peers in their lessons while experiencing a shifting range of positive and negative emotions. The study participants shared their perspectives on preparing for and teaching challenging yet essential curriculum to their peers and experiencing emotions throughout the instructional process. Hope Squad member PAL tutors' insights may have several implications for scholars exploring PAL. Some of the themes discovered in the data may be valuable for Hope Squad and other similar programs to consider.

Implications for PAL Scholarship

While scholars have laid a solid foundation of research on PAL in graded, academically rigorous STEM settings, they are still laying the foundation in noncompulsory settings such as those in which this study's participants taught. This study identified many themes in its data that align with and add to the established research on PAL. Some scholars have noted the nervousness of tutors (Morris, 2024b; Sanchez-Aguilar, 2021; West et al., 2017); however, this is the first study of which I am aware that assesses the emotional states of tutors specifically during instruction.

We learned from Hope Squad PAL tutors that many experience nervousness before and during teaching and that those feelings can shift during and after instruction. In this study, PAL tutors also experienced cognitive and social congruence with their peers. Hope Squad instruction differs by squad, which affects the learning atmosphere and the time it takes to deliver the lessons. Tutors were nervous, but those emotions could change with the formal and structured feedback they gathered during and after teaching.

Connectedness is a protective factor for mental well-being. In the Hope Squad, some PAL tutors shared a sense of connectedness to Hope Squad members, leaders, their student body, and the community, improving their program experience. In instructional settings where the connection between student and teacher is as valuable as in Hope Squad, delivering instruction with PAL pedagogy may offer added merit.

Future research can continue to explore PAL in noncompulsory settings. Researchers who may want to explore PAL in Hope Squad and other similar organizations could establish longitudinal studies to examine the effects of PAL instruction on long-term career trajectories and investigate its impact on learning outcomes. There are additional opportunities to conduct comparative studies across different noncompulsory settings to identify PAL's unique challenges and benefits in these settings. Moreover, some PAL tutors' emotions seemed to shift during and after instruction based on feedback they informally gathered during instruction. Researchers might be able to uncover valuable insights into what signals prompt these shifts in emotions and how they can affect PAL for tutors and those they teach.

Implications for Hope Squad and Other Similar Organizations

Prior research has shown PAL's benefits for tutors and tutees (Oliveira et al., 2015; Williams et al., 2014). Experiences shared by this study's participants align with and add to the PAL research that PAL helps tutors learn the content they are teaching (Lockspeiser et al., 2008) and that tutors experience cognitive and social congruence with those they teach (Lockspeiser et al., 2008; Schmidt & Moust, 1995). The Hope Squad members who volunteered to participate in this study reflected on their journeys into Hope Squad when nominated by peers, acquiring core Hope Squad knowledge and engaging with the organization as leaders in their local chapters and communities. Participants shared examples of their training to learn and implement the QPR model when recognizing others who are showing signs they are at risk for suicide. They recounted engaging with various Hope Squad events to connect to their school, often doing more, growing more than they realized, and developing interpersonal and leadership skills beyond the skills taught to question, persuade, and refer effectively.

Moreover, Hope Squad members who taught their peers valued the opportunity to teach despite feeling nervous before and during teaching. Hope Squad members who taught their peers valued their opportunities to teach, with some identifying their teaching experiences as significant moments for them as Hope Squad members. Hope Squad members also recognized the content's vital nature and expressed nervousness about adequately teaching it, "not wanting to say the wrong thing."

However, Hope Squad members shared that the instructional context in which PAL tutor-led lessons were delivered differed from Hope Squad to Hope Squad, with some teaching lessons during regularly scheduled school classes and others teaching

lessons after school hours. The contextual setting where and when Hope Squad members taught lessons varied by participant, and study participants commented on those settings' impact on the length of time to teach and the learning atmosphere at large. In preparing and refining instruction, tutors valued close coordination with their advisors, who could help them navigate the challenging yet essential topics they aimed to teach. Hope Squad and similar organizations should consider implementing PAL in its chapters, given some of the benefits outlined here and in the literature. However, Hope Squad members recounted developing pedagogical strategies to prepare for and teach lessons. Therefore, tutors should be trained in teaching before assigning them a lesson, as Shapiro et al. (2013) and Williams et al. (2014) recommended. Organizations hoping to implement PAL systemically in each of its chapters might explore the Structured Planning Format that Topping (2001) established for implementing PAL, which could help them develop materials to support PAL tutors around the subjects and areas of learning objectives, curriculum area, participants, helping technique, contact, materials, training, process monitoring, assessment of students, evaluation, and feedback to ensure the most favorable outcomes for tutors and those they teach.

CHAPTER V

EXPLORING PEER-ASSISTED LEARNING IN A HIGH-SCHOOL-BASED

SUICIDE PREVENTION INTERVENTION

Introduction

This dissertation's overarching objective was to explore peer-assisted learning

(PAL) as a high-school-based suicide prevention intervention. To this end, I conducted an

in-depth review of the existing literature on PAL in Chapter II and identified its

affordances and limitations. Based on the perspectives provided by multiple scholars in

the reviewed literature, I then conducted two qualitative studies: The first study, in

Chapter III, explored PAL's application in Hope Squads from the perspectives of tutees

(Morris, 2024b), and the second, in Chapter IV, recruited new participants who had acted

as PAL tutors and investigated their experience teaching Hope Squad curriculum (Morris,

2024c). In both studies, I sought to investigate the experiences of Hope Squad members

learning or teaching its curriculum, analyzing collected data guided by Braun and

Clarke's (2006) thematic analysis recommendations, and in the case of my study on PAL

tutors, Magnifico and Halverson's (2012) bidirectional analysis. Findings add to the

literature on PAL in noncompulsory and sensitive settings, providing insight that Hope

Squad and other similar organizations can draw from to educate their members on core

curriculum. For example, I found evidence that participants share social and cognitive

congruence with peers in their program, which can support learning (Lockspeiser et al.,

2008; Schmidt & Moust, 1995). Additionally, I identified an opportunity for

organizations to train tutors on teaching strategies before asking them to teach per

Toppling's (2001) recommendations. In the following sections, I give an overview of dissertation findings by chapter, discuss discovered themes and insights that cross into multiple chapters, discuss implications for theory and practitioners, and share potential directions for future research.

<center>**Synthesis of Findings**</center>

Overview of Main Findings

In reviewing the PAL literature, I found PAL's effectiveness well documented in formal, graded, often STEM-oriented settings, including math, computer science, and engineering, among other fields (Le Doux & Waller, 2016; Pon-Barry et al., 2017; Sun & Clarke-Midura, 2022; Tucker-Raymond et al., 2016). Scholars have found that PAL benefits tutors and tutees (Turner, White, & Poth, 2012) and have illustrated how it reduces the administrative burdens educators often grapple with (Burke et al., 2007; Gallan et al., 2016). Additionally, tutors and tutees seemed to benefit from social and cognitive congruence that eased the learning process (Loda et al., 2019; Murphey & Arao, 2001). However, PAL is not without its complexities. PAL tutors should be taught and understand the material they will eventually teach. Administrators should train tutors on effective teaching methods (Topping, 2001, 2005). Additionally, tutees sometimes noted that they did not fully trust their tutors' expertise and content knowledge on the topics taught (Bulte et al., 2007; Morris, 2024b). An instructor monitoring tutoring sessions could address this. For example, Allison shared that advisors monitored lessons to ensure "what's taught is accurate" (Morris, 2024b, p. 125). Topping (2001) provided a

framework educators could consider following when implanting PAL, which I cross-compared with the literature (Morris, 2024a).

Recognizing the relative gap of research on PAL in noncompulsory settings compared to traditional settings, I sought to learn more about PAL in a space like Hope Squad, where students might have different incentives to learn the curriculum. Research participants who participated in my Hope Squad tutee study helped provide insight into research questions exploring their experiences as PAL tutees, whether they experienced social and cognitive congruence with their tutors, and how they perceived their tutors' expertise. I found that some Hope Squad Members felt they could relate more with their peers than their advisors, which put them at ease. Additionally, some participants shared that they trusted the knowledge of their peer teachers, in contrast to Bulte et al.'s (2007) report. While they appreciated learning from their peers, many Hope Squad members shared the perception that their PAL tutors appeared nervous while teaching (Morris, 2024b).

The study I included in Chapter IV explored teaching from the perspectives of PAL tutors. I found that many tutors confirmed they felt nervous before and during teaching but that those feelings seemed to shift toward more positive emotions when their students received and understood their lessons well. Additionally, research participants shared variability in learning environments from one Hope Squad to the next, with some meeting after school and others having a short time to teach lessons during a class period or over a lunch break (Morris, 2024c).

Cross-Chapter Themes and Insights

Implications for Theory

This dissertation identified perceived nervousness among tutors in PAL settings, contributing to the existing knowledge and theories on PAL. It then confirmed that, in this noncompulsory context, some tutors feel nervous leading up to teaching lessons. Some PAL tutors shared that they experienced changes in nervousness and other emotions during and after instruction was delivered as they metacognitively monitored feedback on the reception of their instruction. Expanding our understanding of the spectrum of emotions and measures of a PAL tutor's experience could help scholars. This study uniquely investigates PAL in a setting where sensitive topics are taught and discussed. Researchers could continue down this research path, investigating the application of PAL in similar settings where mental health skills and information are being taught. Tutees and tutors feel a sense of social and cognitive congruence with each other in this context. This adds to the evidence that these congruences, defined by Schmidt and Moust (1995), are present in multiple compulsory and noncompulsory PAL settings.

Hope Squad members joined other learners in expressing appreciation for learning from and teaching their peers, adding to the literature that PAL participants appreciate this form of instruction. They additionally shared that they felt their communication skills improved, following the findings from Topping (2005). Some challenges in implementing PAL in Hope Squad are not unique to Hope Squad. For example, implementing PAL requires up-front costs, including training tutors on the subject matter and pedagogical skills (Topping, 2005). Though feedback is essential, administrators may

find challenges in developing effective mechanisms to provide feedback to tutors and

tutees (Bulte et al., 2007). Ensuring that the delivery of PAL-led instruction is

consistently high quality is an additional challenge educators face (Lockspeiser et al.,

2008). Thus, those preparing to incorporate PAL may benefit from implementing training

requirements, finding ways to manage peer dynamics, and following Topping's (2001)

recommendations to ensure the sustainable effectiveness of their PAL instruction,

develop mechanisms to provide participants with feedback (Bulte et al., 2007), and

monitor instruction for consistency (Lockspeiser et al., 2008).

Participation in Hope Squads, more broadly and not only as a tutor or a tutee,

seems to lead members who participated in this study to feel a sense of connectedness

with Hope Squad members, many of whom they call friends and their advisors, student

body, and community. These connections are all protective factors for the mental well-

being of participants.

Implications for Practice

This dissertation presents several results that organizations like Hope Squad might

find informative as they implement PAL. Specifically, it found that tutors and tutees in

Hope Squads value their experiences, learned how to implement QPR, and have

experience implementing it. Many members who acted as PAL tutors shared that they

were surprised by how much they had done and learned during their time in Hope Squad.

Hope Squad members shared that they value hearing from peers at other schools.

First, in suicide prevention settings, tutors could benefit from training on

instructional approaches and instruction about their curriculum. Organizations could

further train their PAL tutors on strategies to create supportive learning environments,

something that many participants in our PAL tutor study shared that they valued and some strove to foster.

Finally, while tutors shared evidence that they coordinated with their advisors on lessons, we need to find out how standardized this coordination is. Monitoring and evaluating learning outcomes could be valuable. The organization could benefit from providing opportunities to reflect on their impact, which participants in the PAL tutor study sensed from participating in the journey mapping activity (Morris, 2024c).

Limitations and Context

Limitations

The studies on both PAL tutees and PAL tutors are subject to sampling limitations, including sample size, leading to potential insufficient saturation for some of the research questions I aimed to answer. This study was limited by time and resource constraints. With more time and resources, further work could have been done. I experienced recruiting challenges for both the tutee and tutor studies. With more participants, I would have been able to increase data saturation, which could have made themes more apparent during my qualitative analyses.

I strove to overcome the challenges associated with fewer study participants than hoped for by implementing extended interactions with each participant in the PAL tutor study and gathering data in unique ways, including through journey maps and journey map interviews. Additionally, I conducted this study independently of Hope Squad; still, the collected data might be subject to social desirability bias. Possible desirability bias could arise given Hope Squad's positive mission and the potential that participants

believe their concerns and negative comments might affect their position in their squad. Respondents tend to be positive until trust is built because of the nature of the research. Therefore, responses may have been biased more positively despite reassurances of anonymity.

To mitigate these biases, I worked to address this in the recruitment phase by indicating we were researchers with Utah State University and not with the Hope Squad. Once interested participants consented and registered for the study, I worked directly with them, independent of their Hope Squad chapters, in our focus groups, interviews, and journey map interviews, building some level of trust throughout the Chapter IV study. During the study, I assured participants their responses would be kept anonymous, asked neutral questions, and worked to triangulate the data between focus groups and with journey map interviews.

Researchers who extend this research could address this limitation further by embarking on longitudinal studies after identifying eligible research participants. What is more, PAL is implemented differently in each Hope Squad. While some meet during school, others meet after school, which can affect the learning atmosphere for Hope Squad members (Morris, 2024b).

Research participants in both studies shared insight into some variability in the learning environment where Hope Squad lessons were taught. In both Chapter III and Chapter IV studies, participants' classroom sizes, meeting locations, times, and PAL structure, as defined by Olaussen's (2016) classification of PAL tutoring, all had some variability. The methods I used to evaluate data did not allow me to determine how implementations affect findings.

Context

  I specifically recruited PAL participants who reflected on their experiences within high school settings, particularly those who were members of a local Hope Squad for both studies. Similar organizations operating in colleges or middle schools may find some preceding data less relevant to their work. Both studies involved teaching vital, sensitive topics related to suicide prevention, and thus, profoundly different than other PAL-delivered curricula in the STEM fields and beyond. Both studies were also constrained to states within the United States where Hope Squad operates, except for Utah in the case of the PAL tutor study, which aligned with Utah State University's Institutional Review Board guidance. I applied qualitative methods to analyze data for both studies, which brought rich insights into PAL tutor and tutee experiences. However, this methodology delimits both studies to the depth and richness of individual experience rather than quantitative measures evaluating overall instructional effectiveness. The literature review and studies took place between 2018 and 2024; future changes in Hope Squad and the broader educational environment could influence the successful implementation of PAL programs in Hope Squad and similar organizations.

Recommendations for Future Research

  There is still more to discover about the long-term outcomes of PAL. Researchers might investigate how different schools implement PAL within suicide prevention programs, identifying challenges, best practices, and the role of school culture in the success of PAL. While these studies touched on some of the perceived and experienced emotions PAL tutors experienced before, during, and after teaching, more insight into

PAL instruction's effects on its participants in all settings could help guide its practical application.

Scholars could further investigate the causes, presence, and impacts of social and cognitive congruence in PAL. While PAL participants in this dissertation study shared social congruence based on shared experiences as high school students who were members of their respective Hope Squads, PAL members naturally experience PAL uniquely. Our race (Dixson et al., 2015), gender (Ding & Hall, 2007), socioeconomic status (Davis-Kean, 2005), and LGBTQ+ identities (Millar & Brooks, 2021) can influence our educational experiences and possibly experience with an instructional method like PAL. Therefore, exploring the effects of diverse PAL participants' complex and intersecting identities on their experience with PAL can broaden PAL literature and help us better understand its application. Researchers could also explore the success of PAL in online settings, such as digital peer support networks and online high schools in our increasingly connected world.

While Topping suggests PAL tutors should be trained before instructing others (2001, 2005), researchers have yet to investigate the effects of tutor training and instructional outcomes, to my knowledge. Hope Squad and other similar organizations could consider including professional development opportunities to train its chapter advisors on how to support Hope Squad members planning to teach a lesson, including guiding them to appropriate evidence-based resources in and outside of Hope Squad. Researchers could then study the impacts of this training.

Scholars could add to the literature by conducting future work to examine individual Hope Squad chapters using a multi-case study approach. For example, they

could evaluate the parity or lack of parity in PAL tutees' and tutors' experiences between chapters and the consistency of PAL implementation in Hope Squads.

Addressing these areas would allow future research to deepen our understanding of PAL's role in supporting learning in noncompulsory settings, including suicide prevention interventions like Hope Squad. Findings from the ongoing research on PAL in informal settings complement existing research on PAL in compulsory settings. An expanded understanding of PAL could contribute to safer, more supportive, and more inclusive educational environments.

Conclusion

This dissertation aimed to expand research on PAL in noncompulsory contexts, specifically in a sensitive setting where high school students learn steps they can take to help prevent suicide. Hope Squad and other similar organizations may gain new perspectives on the experiences of members in their programs who are working together to learn the presented materials to prevent suicide. Recruiting eligible participants was challenging, and future researchers in this space should consider ways to identify and recruit tutors and tutees in PAL-participating programs more efficiently.

This multi-year journey to study this space, conduct my research, and publish this dissertation has given me the time and space to reflect. At various moments since beginning to study instructional technology and learning sciences through completing the final study in this dissertation, I have thought about those I know who have died by suicide. I have wondered how their families cope with the grief tied to the loss of life. My friend, Martha, who lost her daughter, Ella, to suicide, described this grief. She shared,

"Grief, to me, is like the waves. Having a wave crash over you, and it slams you to the sand. You can't fight it. Because if you fight it, you're going to lose all your energy. But if you kind of go with it, you get to eventually get back up to air" (Thomas, 2021).

Reflecting on the grief that families and friends experience and considering the innumerable other complex outcomes associated with suicide, I have tried to keep my attention turned toward hope—hope that we save as many lives as possible through collective efforts by organizations like Hope Squad, through the impactful work the research participants have led in their schools, and through the continued investment in and deploying of evidence-based best practices in our communities.

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APPENDICES

Appendix A. Institutional Review Board Documentation for Peer Tutee Study

Figure A1

Institutional Review Board Letter of Approval for PAL Tutee Study

Institutional Review Board

OFFICE OF
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UtahStateUniversity.

Full
Accreditation

Expedite #7
Letter of Approval

From: Melanie Domenech Rodriguez, IRB Chair

Nicole Vouvalis, IRB Director

To: ***Andy Walker***

Date: ***July 15, 2021***

Protocol #:   ***11919***

Title: ***Peer-Assisted Learning in a High School Suicide Prevention Intervention***

Your proposal has been reviewed by the Institutional Review Board and is approved under expedite procedure #7 (based on the Department of Health and Human Services (DHHS) regulations for the protection of human research subjects, 45 CFR Part 46, as amended to include provisions of the Federal Policy for the Protection of Human Subjects, January 21, 2019):

Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

This approval applies only to the proposal currently on file for the period of approval specified in the protocol. You will be asked to submit an annual check in around the anniversary of the date of original approval. As part of the IRB's quality assurance procedures, this research may also be randomly selected for audit. If so, you will receive a request for completion of an Audit Report form during the month of the anniversary date of original approval. If the proposal will be active for more than five years, it will undergo a full continuation review every fifth year.

Any change affecting human subjects, including extension of the expiration date, must be approved by the IRB **prior** to implementation by submitting an Amendment request. Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Institutional Review Board. If Non-USU Personnel will complete work on this project, they may not begin until an External Researcher Agreement or Reliance Agreement has been fully executed by USU and the appropriate Non-USU entity, regardless of the protocol approval status here at USU.

Prior to involving human subjects, properly executed informed consent must be obtained from each subject or from an authorized representative, and documentation of informed consent must be kept on file for at least three years after the project ends. Each subject must be furnished with a copy of the informed consent document for their personal records.

Upon receipt of this memo, you may begin your research. If you have questions, please call the IRB office at (435) 797-1821 or email to irb@usu.edu.

The IRB wishes you success with your research.

Figure A2

Letter of Certification of Spanish Translation for PAL Tutee Study Recruiting and

Consent Materials for Parents and Guardians

Salt Lake City, 11/08/2023

LETTER OF CERTIFICATION

We, **inlingua Utah,** certify, under penalty of perjury, that we have translated and proofread the English to Spanish translation requested by Utah State University, consisting of the following:

- Adult Informed Consent_SPA updated
- Recruiting message to parents_SPA updated

We certify that inlingua translated the English to Spanish, and that the translation is a true and accurate reflection of the content of the original document.

Executed this 8th of November 2023, at Salt Lake City, Utah

11/08/23

Date

Bailey Benjamin
TRANSLATIONS DEPARTMENT
inlingua Utah
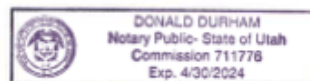
State of Utah

County of Salt Lake

Subscribed and sworn to before me on this __8__ day of __NOV__, 2023.

Don Durham

DONALD DURHAM
Notary Public- State of Utah
Commission 711776
Exp. 4/30/2024

Appendix B. Recruitment for Peer Tutee Study

Figure B1

Guardian Informed Consent Form for PAL Tutee Study

Informed Consent

Learning From Hope Squad Peers

Introduction

Your high school student is invited to participate in a research study overseen by Principal Investigator (PI), Andy Walker, PhD, a faculty member in the Department of Instructional Technology and Learning Sciences at Utah State University and Student Investigator and focus group host, Sterling R. Morris, a graduate student in the Department of Instructional Technology and Learning Sciences at Utah State University. The purpose of this research is to understand how Hope Squad members learn from and relate to their high school Hope Squad peers who have taught them Hope Squad curriculum. Your high school student's participation is entirely voluntary.

This form includes detailed information on the research to help you decide whether to consent to your high school student's participation. Please read it carefully and ask any questions you have before you agree consent to your high school student's participation.

Procedures

Your high school student's participation will involve selecting and attending one virtual one-hour conversation on Zoom with approximately seven other Hope Squad members from various Hope Squads in Utah.

The host, Sterling Morris, will open the meeting by welcoming participants and providing guidance on using participation features on Zoom like raising one's hand to speak, muting and unmuting, and adding comments to the chat. The host will note that while the conversation will be recorded, footage for the conversation will not be published and the names and schools of individuals making comments will not be published. The host will emphasize the importance of and ask for a verbal commitment to keeping comments made by other participants confidential.

The host will then guide the group through a series of questions the learn more about their experiences being taught the Hope Squad curriculum from other high school students during the conversation. Participants will be encouraged to raise their hand, unmute themselves, and respond to questions. Participants may also submit their responses through Zoom's in-meeting chat function.

We anticipate that six to seven high school Hope Squad members will participate in each conversation and that a total of 24 to 28 Hope Squad members will participate among a total of four conversations. The total participation for your high school student is expected to be one hour.

You can view the full agenda of the focus group in the *Learning From Hope Squad Peers Information Packet* attached to the email inviting your student to participate in this study. If you did not receive the above-mentioned *Information Packet,* please request it from Sterling Morris at A00662498@usu.edu.

Alternative Procedures

Rather than granting consent for your high school student to participate in this research, you might prefer alternatives such as encouraging your high school student to share feedback on her his, or their learning experiences of Hope Squad curriculum with your school's Hope Squad Advisor, or by contacting Hope Squad's headquarters by mail, phone, or email:

OFFICE OF
RESEARCH
UtahStateUniversity.

Full Accreditation

v.9

Mail	Phone	Email
Hope Squad 5455 River Run Dr Provo, UT 84604	(801) 342-3447	support@hopesquad.com

Risks

While the risks of participating in a one-hour focus group might be no more likely or serious than those an individual might encounter in everyday activities, there are potential risks from participating, including the risk of:

- Topics like suicide and self-harm being discussed due to the nature and purpose of the Hope Squad Program. Although we do not have questions asking about suicide and outlined below, those conversations could have some associated risks.
- The discomfort of participating in a focus group if a participant recognizes an alternative participant and does not feel comfortable engaging in the conversation with that known participant present
- A participant breaching confidentiality and sharing information outside of the focus group
- Data gathered during the focus groups being accessed and potentially by a database breach

Benefits

We cannot guarantee that you or your high school student will directly benefit from this study. Although your high school student may not directly benefit from this study, it has been designed to understand how Hope Squad members learn from and relate to their high school Hope Squad peers who have taught them Hope Squad curriculum. Knowledge gathered from participants of the study will be shared with the Hope Squad organization which may improve program operations for current and future Hope Squad advisors and members.

Confidentiality

The researchers will make every effort to ensure that the information you and your high school student provides as part of this study remains confidential. Neither you nor your high school student's identity will be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your high school student's particular responses despite the researcher's efforts to anonymize findings. While the focus group's host, Mr. Morris, will ask all group members to keep the information they hear during the group conversation confidential, the researchers cannot guarantee that every participant will do so.

The researchers will collect your high school student's responses to focus group questions with a video recording of the one-hour conversation along with responses to questions submitted through the Zoom chat function. Consent information will be collected using Qualtrics. Contact information will be collected from Zoom's event registration tool. Online activities always carry a risk of a data breach, but the researchers will use systems and processes that minimize breach opportunities. The video files and comments submitted through Zoom's in-meeting chat will immediately be securely stored in a restricted-access folder on Box.com, an encrypted, cloud-based storage system. The researchers will then work to transcribe the conversation, replace names of participants with pseudonyms, and delete video and chat files within one week of the focus group. This consent form will be kept for three years after the study is complete, and then it will be destroyed.

It is unlikely but possible that others (Utah State University or state or federal officials) may require us to share the information you and your high school student give us from the study to ensure that the research was conducted safely and appropriately. We will only share your and your high school student's information if law or policy requires us to do so.

If the researchers learn that your child is being subjected to abuse/neglect or is going to engage in self-harm/intends to harm another, state law requires that the researchers report this behavior/intention to the authorities.

If we learn that a child is in imminent danger of suicide, we are required to take action, including or up to the involuntary commitment.

Voluntary Participation & Withdrawal

Your consent of your high school student's participation in this research is completely voluntary. If you agree to allow your high school student to participate now and change your mind later, you may withdraw at any time by contacting the principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or student Investigator Sterling Morris by phone at (435) 760-4388 or by email at A00662498@usu.edu. If you inform us that you choose to withdraw your consent or your high school student chooses to withdraw from the study after we have already collected information about you and your high school student and before the report is finalized, Sterling Morris will identify and delete responses submitted by her/him/them and not include their responses in the final research report. If you decide not to participate, participation in the Hope Squad program will not be affected in any way.

The host will need to terminate your high school student's participation in this research study if he, she, or they cannot agree to keep comments made during the focus group confidential. If a participant is being disruptive, we will ask her/him/them to discontinue the disruption. If the participant's behavior continues, we will ask her/him/them to leave the study. If a participant does not stay until the end of the hour when the focus group concludes, we will withdraw the participant from the study. Should any participant refuse to leave, we will politely but assertively remove the disruptive participant using Zoom's host management tools. If we remove your child from participating in the study for any reason listed above, will will notify you with the phone number you provide.

Compensation

For your high school student's full participation in this research study, he/he/they will receive a $15 Amazon gift card. Full participation is defined as attending a scheduled focus group, responding to questions where possible, and staying until the end of the focus group. Participants who leave the focus group early or withdraw from the research before the focus group begins will not receive a gift card.

Participants will receive the $15 Amazon gift card by email with the email address they provide for registration in the registration field, "Amazon Gift Card email address."

Findings & Future Participation

Identifiers will be removed from your high school student's information. These de-identified data may be used or distributed for future research without additional consent from you. If you do not wish for us to use your information in this way, please state so below.

Once the research study is complete, the PI will email you the findings of the study including aggregate results relating to your participation using the email submitted to register for a focus group.

IRB Review

The Institutional Review Board (IRB) for the protection of human research participants at Utah State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or the Student Investigator, Sterling Morris, at (435) 760-4388 or sterling.morris@aggiemail.usu.edu. If you have questions about your rights or would simply

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like to speak with someone *other* than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

_____
Sterling R. Morris, MS
Student Investigator
(435) 760-4388; A00662498@usu.edu

_____
Andrew E. Walker, PhD
Principal Investigator
(435) 797-2614; andy.walker@usu.edu

Informed Consent

By signing below, you agree to grant your high school student permission to participate in this study. You indicate that you understand the risks and benefits of your high school student's participation, and that you know what your high school student will be asked to do. You also agree that you have asked any questions you might have, and are clear on how to stop your participation in the study if you choose to do so. Please be sure to retain a copy of this form for your records.

_____   _____   _____
Guardian's Signature   Guardian's Name, Printed   Date

_____
Guardian's phone number

☐ I do **not** agree to allow my de-identified information to be used or shared for future research.

Figure B2

Guardian Informed Consent Form in Spanish for Peer Tutee Study

Consentimiento informado

Aprender de los pares de Hope Squad

Introducción

Invitamos al alumno de la escuela secundaria a participar en un estudio de investigación supervisado por el investigador principal (IP) Andy Walker, PhD, miembro del cuerpo docente del Departamento de ciencias de aprendizaje y tecnología de instrucción de Utah State University, y el investigador estudiante y anfitrión del grupo de discusión, Sterling R. Morris, estudiante de posgrado en el Departamento de ciencias de aprendizaje y tecnología de instrucción de Utah State University. El propósito de esta investigación es comprender cómo los miembros de Hope Squad aprenden de sus pares de Hope Squad de la escuela secundaria, quienes les han enseñado el programa de Hope Squad, y cómo se relacionan con ellos. La participación del estudiante de la escuela secundaria es totalmente voluntaria.

Este formulario incluye información detallada sobre la investigación, para ayudarlo a decidir si permitirá que el alumno participe en él. Léalo con detenimiento y haga todas las preguntas que tenga antes de autorizar la participación del estudiante de la escuela secundaria.

Procedimientos

La participación del estudiante de la escuela secundaria implicará seleccionar y asistir a una conversación virtual de una hora llevada a cabo por Zoom, con aproximadamente otros siete miembros de Hope Squad de diferentes Hope Squads de Utah.

El anfitrión, Sterling Morris, iniciará la reunión dándole la bienvenida a los participantes y guiándolos sobre cómo utilizar funciones de Zoom como alzar la mano para hablar, silenciarse y activar el micrófono, y agregar comentarios en el chat. El anfitrión les indicará que, aunque la conversación será grabada, el video no se publicará, como tampoco serán publicados los nombres y las escuelas de los participantes que hagan comentarios. El anfitrión hará hincapié en la importancia del compromiso oral para que los comentarios realizados por otros participantes sean confidenciales, y pedirá el compromiso oral de todos.

Luego el anfitrión, durante la conversación, guiará al grupo por una serie de preguntas para saber más sobre su experiencia al haber aprendido el programa Hope Squad de otros estudiantes de la escuela secundaria. Se alentará a los participantes a que alcen la mano, activen el micrófono y respondan las preguntas. Los participantes también pueden presentar sus respuestas a través de la función de chat de Zoom.

Estimamos que en cada conversación participarán seis o siete miembros de Hope Squad de secundaria y que, en total, participarán entre 24 y 28 miembros de Hope Squad entre las cuatro conversaciones. La participación total del estudiante de la escuela secundaria se estima que será de una hora.

Podrá ver el orden del día completo del grupo de discusión en el paquete *Aprender de los pares de Hope Squad* adjunto a este correo electrónico, para invitar al alumno a participar en este estudio. Si no recibió el paquete mencionado anteriormente, solicítelo a Sterling Morris enviando un correo electrónico a A00662498@usu.edu.

Procedimientos alternativos

En lugar de autorizar la participación del alumno de la escuela secundaria en esta investigación, tiene alternativas como alentar al estudiante a que comparta una opinión de su experiencia de aprendizaje del programa Hope Squad con el asesor de Hope Squad de su escuela, o puede comunicarse con las oficinas centrales de Hope Squad por correo, teléfono o correo electrónico:

Correo	Teléfono	Correo electrónico
Hope Squad 5455 River Run Dr Provo, UT 84604	(801) 342-3447	support@hopesquad.com

Riesgos

Aunque los riesgos por participar en un grupo de discusión de una hora no son más probables ni más graves que los encontrará el alumno en las actividades de la vida cotidiana, existen ciertos riesgos, como:

- Se hablará sobre temas como el suicidio y la autolesión, debido a la naturaleza y el propósito del programa Hope Squad. Aunque no haremos preguntas sobre el suicidio y los temas detallados más adelante, esas conversaciones podrían implicar algunos riesgos relacionados.
- La incomodidad al participar en un grupo de discusión si un estudiante reconoce a otro participante y no se siente cómodo involucrándose en la conversación con esa persona presente
- Que un participante viole la confidencialidad y comparta información fuera del grupo de discusión
- Que se acceda a los datos recopilados durante los grupos de discusión y exista una posible filtración de datos

Beneficios

No podemos garantizar que usted o el alumno de la escuela secundaria se beneficien directamente a partir de este estudio. Aunque el estudiante no se beneficiará directamente, este estudio ha sido diseñado para comprender cómo los miembros de Hope Squad aprenden de sus pares que les han enseñado el programa de Hope Squad y se relacionan con ellos. El conocimiento adquirido gracias a los participantes del estudio será compartido con la organización Hope Squad, y permitirá mejorar las operaciones del programa para asesores y miembros actuales y futuros de Hope Squad.

Confidencialidad

Los investigadores harán todo lo posible por asegurar que la información que usted y el estudiante de la escuela secundaria brinden como parte de este estudio sea confidencial. Ni su identidad ni la del estudiante de la secundaria serán reveladas en publicaciones, presentaciones o informes que deriven de este estudio de investigación. No obstante, es posible que algunos reconozcan las respuestas particulares de un alumno, a pesar de los esfuerzos del investigador por mantener el anonimato. Aunque el anfitrión del grupo de discusión, el Sr. Morris, solicitará a todos los miembros del grupo que mantengan la confidencialidad de la información que escuchen durante la conversación grupal, los investigadores no pueden garantizar que todos los participantes lo hagan.

Los investigadores recopilarán las respuestas a las preguntas del grupo de discusión del estudiante de la escuela secundaria con una grabación de video de la conversación de una hora, junto con las respuestas a las preguntas presentadas a través de la función de chat de Zoom. La información de consentimiento se recopilará utilizando Qualtrics. La información de contacto se recopilará a partir de la herramienta de registro de eventos de Zoom. Las actividades en línea siempre conllevan el riesgo de filtración de datos, pero los investigadores utilizarán sistemas y procesos que minimicen las posibilidades de filtración. Los comentarios y archivos de video enviados a través del chat de Zoom durante la reunión se almacenarán de inmediato y de manera segura en una carpeta con acceso restringido de Box.com, un sistema de almacenamiento cifrado en la nube. Los investigadores luego transcribirán la conversación, reemplazarán los nombres de los participantes por seudónimos, y eliminarán los archivos de chat y video dentro de la semana posterior al debate. Este formulario de consentimiento se guardará por tres años después de haber finalizado el estudio, y luego se destruirá.

Es posible, aunque poco probable, que otros (funcionarios estatales o federales, o de Utah State University) nos exijan que compartamos la información que usted y el alumno de la escuela secundaria nos brinda a partir del estudio, para asegurar que el estudio se haya llevado a cabo de forma segura y apropiada. Sólo compartiremos los datos suyos y del estudiante de la escuela secundaria si la ley o una política nos exigen hacerlo.

Si los investigadores descubren que el alumno es víctima de abuso o negligencia, o que se lesiona a él mismo o intenta hacerle daño a los demás, la ley estatal exige que los investigadores informen este comportamiento o intención a las autoridades.

Si descubrimos que un niño sufre peligro inminente de suicidio, estamos obligados a actuar (incluso a solicitar la hospitalización involuntaria).

Participación voluntaria y renuncia

Su consentimiento para la participación del estudiante de la escuela secundaria en esta investigación es totalmente voluntario. Si usted autoriza al estudiante de la escuela secundaria a participar ahora y luego cambia de parecer, puede retirar la autorización en cualquier momento, comunicándose con el investigador principal, Andy Walker, al (435) 797-2614 o por correo electrónico a andy.walker@usu.edu, o con el investigador estudiante Sterling Morris, por teléfono al (435) 760-4388 o por correo electrónico a A00662498@usu.edu. Si nos informa que desea retirar su consentimiento o el alumno de la escuela secundaria opta por excluirse del estudio una vez que hayamos recopilado información sobre usted y el alumno de la escuela secundaria y antes de finalizar el informe, Sterling Morris identificará y eliminará las respuestas del estudiante y no incluirá sus respuestas en el informe final de la investigación. Si opta por no involucrarse, la participación en el programa Hope Squad no se verá afectada de ninguna manera.

El anfitrión deberá concluir la participación del estudiante en el estudio de investigación si el alumno no está de acuerdo con mantener la confidencialidad de los comentarios realizados en el grupo de discusión. Si un participante perturba el grupo, le solicitaremos que cese dicha conducta. Si el comportamiento del participante continúa, le solicitaremos que abandone el estudio. Si un participante no permanece hasta finalizar la hora en que concluya el grupo de discusión, retiraremos al alumno del estudio. Si un participante se negara a abandonar el grupo, firmemente y con respeto excluiremos al participante perturbador utilizando las herramientas de administración para anfitriones de Zoom. Si separamos a su alumno del estudio por alguna de las razones enumeradas anteriormente, se lo notificaremos al número de teléfono que usted brinde.

Remuneración

Por su participación completa en este estudio de investigación, el estudiante de la escuela secundaria recibirá una tarjeta de regalo de Amazon de $15. La participación completa se define como asistir a un grupo de discusión

programado y responder las preguntas siempre que sea posible, y permanecer hasta que el grupo de discusión concluya. Los participantes que abandonen el grupo antes o que se excluyan de la investigación antes de que comience el grupo de discusión no recibirán la tarjeta de regalo.

Los participantes recibirán una tarjeta de regalo de Amazon de $15 por correo electrónico a la dirección que brinden al momento de la inscripción en el campo "Dirección de correo electrónico para tarjeta de regalo de Amazon".

Conclusiones y participación futura

Se eliminarán los datos que identifiquen al estudiante de la escuela secundaria. Estos datos anónimos podrán utilizarse o distribuirse para futuras investigaciones sin su consentimiento adicional. Si no desea que utilicemos su información de esta manera, aclárelo a continuación.

Una vez completado el estudio de investigación, el investigador principal le enviará por correo electrónico los hallazgos del estudio, que incluyen los resultados colectivos relacionados con su participación, a la dirección de correo electrónico declarada al momento de la inscripción al grupo de discusión.

Revisión del IRB

El Comité institucional de revisión (Institutional Review Board, IRB) para la protección de los participantes humanos en los estudios de Utah State University ha revisado y aprobado este estudio. Si tiene preguntas sobre el estudio de investigación, comuníquese con el investigador principal, Andy Walker, al (435) 797-2614 o por correo electrónico a andy.walker@usu.edu, o con el investigador estudiante, Sterling Morris, al (435) 760-4388 o a sterling.morris@aggiemail.usu.edu. Si tiene preguntas sobre sus derechos o simplemente desea hablar con alguien que no forme parte del equipo de investigación por preguntas o consultas, comuníquese con el director del IRB al (435) 797-0567 o por correo electrónico a irb@usu.edu.

Sterling R. Morris, MS
Investigador estudiante
(435) 760-4388; A00662498@usu.edu

Andrew E. Walker, PhD
Investigadora principal
(435) 797-2614; andy.walker@usu.edu

Consentimiento informado

Al firmar a continuación, usted autoriza al estudiante de la escuela secundaria a participar en este estudio. Afirma que comprende los riesgos y los beneficios de la participación del estudiante de la escuela secundaria, y que sabe qué se le solicitará que haga. También afirma que ha hecho todas las preguntas que tenía, y que sabe claramente cómo cancelar su participación en este estudio si opta por hacerlo. Asegúrese de guardar una copia de este formulario para su registro.

Ciencias de aprendizaje y tecnología de instrucción | itls.usu.edu | 2830 Old Main Hill | Logan, UT 84322

_____ _____ _____
Firma del tutor   Nombre en imprenta del tutor   Fecha

_____
Número de teléfono del tutor

☐ **No** autorizo a que la información anónima del estudiante se utilice ni comparta para investigaciones futuras.

Ciencias de aprendizaje y tecnología de instrucción | itls.usu.edu | 2830 Old Main Hill | Logan, UT 84322

Figure B3

Youth Assent Form for PAL Tutee Study

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Youth Assent

Hello,

I am Sterling Morris, and I'm a college student and Utah State University. I am joining a professor at Utah State University, Andy Walker, in researching how high school students like you learn Hope Squad material from other high school students, how you relate to students who have taught your Hope Squad material, and how they have related to you.

Research studies like this help us understand more about the best ways we can learn new things like the material you have been taught in Hope Squads. If you would like to be a part of this research study, you will have the opportunity to participate in a one-hour conversation on Zoom with about six to seven other high school students who participate in Hope Squads.

Our conversation on Zoom will start with me welcoming you and other students to the call, talking about the purpose of the study, reviewing meeting rules, and the importance of keeping comments made by you and other participants private. I'll share details about how I will keep comments anonymous, and that participating in the conversation is optional, and that you can leave it at any time for any reason. We will need to ask any student, including you, to leave the call if they cannot agree to keep comments made during the focus group confidential or if they are repeatedly disruptive. And we will need to withdraw any participants who do not stay until the end of the hour when the focus group conversation ends. Should any participant refuse to leave, we will politely but assertively remove the disruptive participant using Zoom's host management tools.

After introducing yourself in the Zoom chat, I will ask the group of participants questions about their experience with learning Hope Squad members and encourage you and others to respond by coming off mute and sharing your thoughts or adding them to the chat.

We will record a video of our conversation and comments submitted in the chat and securely and privately store the files in a secure online storage site for a week while type out your comments into a document, remove your name and school, then delete the video file, all to protect your privacy.

The whole conversation will last one hour. At the end of the hour, I'll take the role and send an Amazon gift card to each participant who stayed for the entire hour.

We will spend about two months reviewing things I learned during conversations, including the one in which you would participate. Then, we plan to send a report of lessons I learned to the Hope Squad organization, your guardians, and you.

When the researchers gather participant information like we will do in this focus group, lead and record online focus groups, some negative things could happen. For example, participants in the focus group could not keep our conversations confidential – despite the request to do so. In addition, a database breach could access information researchers capture and store. We will do everything we can to prevent those things from happening, but there is still a chance, so we want you to know that first.

If we see or hear signs that participants, including you, are experiencing abuse or neglect, the law requires that we report those to the Division of Child and Family Services. And suppose we learn that you are in imminent danger of suicide. In that case, we are required to take action, including or up to the involuntary commitment to your local

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mental health authority for mental health evaluation and care.

By agreeing to participate in the study and joining other Hope Squad members and me for a one-hour conversation over Zoom, you may benefit from improvements to the Hope Squad program that happen due to research from this study. In addition, future Hope Squad members may also benefit from the effects of this research on the Hope Squad program.

We will share what we learn from this study with you and with all participants. We won't tell anyone your name or that you were in the study. For your efforts in our study, we will give you a $15 Amazon gift card.

If this sounds like something you would like to do, we will ask you to say that you understand that we talked about the "Learning From Hope Squad Peers" study and that you do want to participate. You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay, too. To leave the conversation after it begins, simply leave a comment in the Zoom Chat that you need to leave, then close the Zoom call. No one will be upset if you don't want to participate in this study or change your mind during the conversation.

You can ask any questions you have, now or later. Your parents know about this research study, and they have said you can participate if you want.

If you agree to be in this study, please sign your name and write the date.

_____   _____
Name   Date

Figure B4

Recruiting Message for PAL Tutee Study Sent to Eligible Hope Squad Members in English

Focus Group Research
Learning From Hope Squad Peers
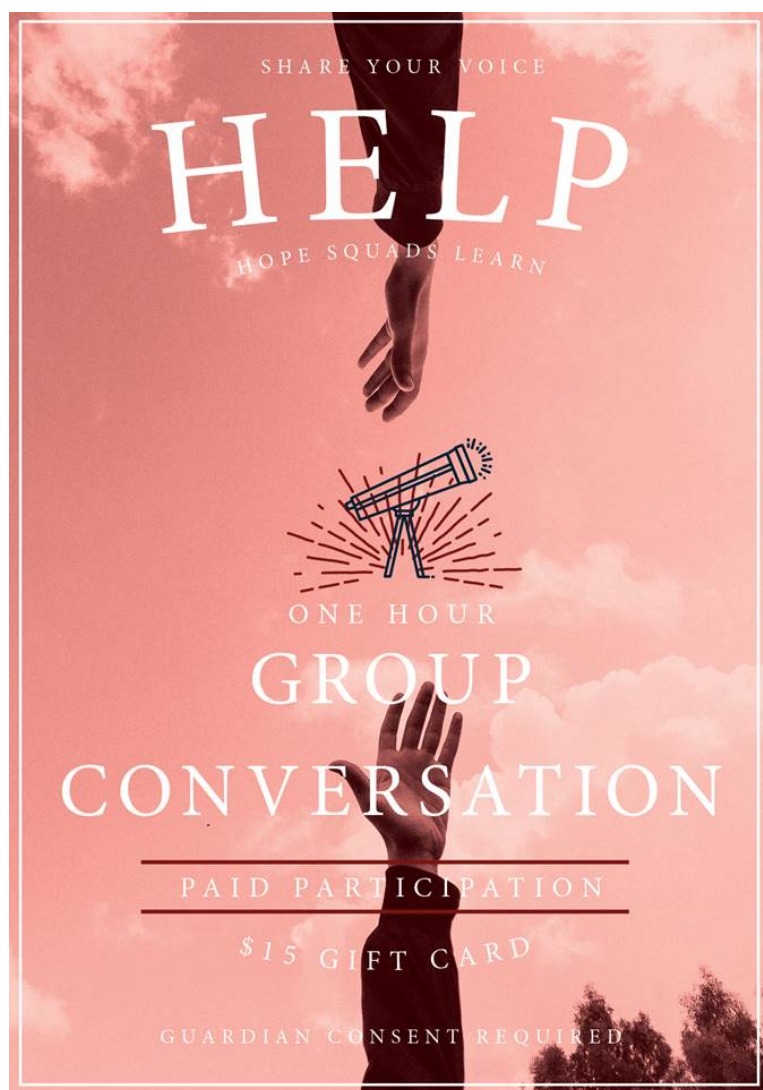
You May Be Eligible to Participate In Research

A message to Hope Squad members

Hello Hope Squad Members,

I am Sterling Morris, and I'm a college student at Utah State University. I am researching how high school students like you learn Hope Squad material from other high school students, how you relate to students who have taught your Hope Squad material, and how they have related to you.

Utah State University professor Andy Walker and I are inviting Hope Squad members to participate in one of the four following upcoming one-hour focus group conversations on Zoom:

Available Focus Group Times

- Monday, May 24, from 5 to 6 p.m.
- Tuesday, May 25, from 5 to 6 p.m.
- Wednesday, May 26, from 5 to 6 p.m.
- Thursday, May 27, from 5 to 6 p.m.

Eligible study participants must be high school students in at least their third school year participating as a Hope Squad member and have been taught Hope Squad curriculum by other high school-aged Hope Squad members.

Each Hope Squad member who participates in one focus group for a full hour will receive a $15 gift card to Amazon.

Comments made during the focus group will be made anonymous. Participating in the conversation is optional. Participating or not participating in the focus group will not harm your role in the Hope Squad program.

If you agree to participate, we need your parent or guardian's approval before you can register for one of our one-hour focus group conversations.

Please share this message with your parent so we can gather their authorization.

A message to Hope Squad members' parents and guardians

Dear parents and guardians of Hope Squad members,

I'm Sterling Morris, and I am a student at Utah State University. I am joining Utah State University professor Dr. Andy Walker to research Hope Squads. Specifically, we are hoping to investigate how Hope Squad members learn Hope Squad material from other high school students, how they relate to students teaching them the material, and how student teachers relate to the peers they teach.

This research may help programs including Hope Squads know more about students' experiences from learning from peer students.

Eligible study participants must be high school students in at least their third school year participating as a Hope Squad member and have been taught Hope Squad curriculum by other high school-aged Hope Squad members.

We ask study-eligible and interested high school students to join us for a one-hour conversation about their Hope Squad learning experiences. The available focus times are below.

Available Focus Group Times

- Monday, May 24, from 5 to 6 p.m.
- Tuesday, May 25, from 5 to 6 p.m.
- Wednesday, May 26, from 5 to 6 p.m.
- Thursday, May 27, from 5 to 6 p.m.

Each Hope Squad member who participates in one focus group for a full hour will receive a $15 gift card to Amazon.

Your child's comments made during the focus group will be made anonymous. Participating in any one of the scheduled conversations is optional. Participating or not participating in a focus group will not harm your child's role in the Hope Squad program.

If your child qualifies for and is interested in participating in our study, click here to review full details on the research and provide consent. With your permission, your child will then have the opportunity to review the study's details and agree to participate.

We will provide Hope Squad members whose parent or guardian consents and who would like to participate with registration links to participating during one of the focus group sessions at the end of this consent form.

The attached LearningFromHopeSquadPeers.zip file includes the focus group agenda, a copy of consent forms, the research flyer, and the research proposal, which describes the study in detail.

Utah State University's Institutional Review Board approved this study, and its protocol number is 11919.

If you have questions about the research study itself, please contact the Principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or the Student Investigator, Sterling Morris, at (435) 760-4388 or A00662498@usu.edu. If you have questions about your rights or would like to speak with someone other than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

CONTACT INFORMATION

Sterling R. Morris

Student Researcher

Utah State University

435-760-4388

A00662498@usu.edu

Andrew Walker, PhD

Department Head

Department of Instructional Technology and Learning Sciences

Utah State University

435-797-2614

andy.walker@usu.edu

Figure B5

Recruiting Message for PAL Tutee Study Sent to Eligible Hope Squad Members in Spanish

Puedes ser elegible para participar en la investigación

Mensaje para los padres y tutores de los miembros de Hope Squad

Soy Sterling Morris, estudiante en Utah State University. Junto con el catedrático de Utah State University, el Dr. Andy Walker, investigamos los Hope Squads. Específicamente, esperamos poder investigar cómo los miembros de Hope Squad aprenden el material de Hope Squad de otros alumnos de la secundaria, cómo se relacionan con los estudiantes que les enseñan el material y cómo los estudiantes instructores se relacionan con los pares a quienes enseñan.

Esta investigación puede ayudar a programas como Hope Squad a saber más sobre la experiencia de los alumnos al aprender de sus pares.

Los participantes elegibles para el estudio deben ser alumnos de la escuela secundaria en, al menos, su tercer año escolar participando como miembro de Hope Squad, y haber aprendido el programa de Hope Squad de otros miembros de Hope Squad en edad escolar.

Solicitamos que los estudiantes de la escuela secundaria que sean elegibles para el estudio y que estén interesados se unan a una conversación de una hora con nosotros para hablar sobre su experiencia de aprendizaje de Hope Squad. Los horarios disponibles figuran a continuación.

Horarios disponibles para el grupo de discusión

- Martes 5 de octubre, de 5 a 6 p.m.
- Miércoles 6 de octubre, de 5 a 6 p.m.
- Jueves 7 de octubre, de 5 a 6 p.m.
- Lunes 11 de octubre, de 5 a 6 p.m.

Los miembros de Hope Squad que participen en un grupo de discusión durante una hora completa recibirán una tarjeta de regalo de Amazon de $15.

Los comentarios que hagan sus hijos en el grupo de discusión serán anónimos. La participación en una de las conversaciones programadas es opcional. Participar o no en el grupo de discusión no afectará el papel de sus hijos en el programa Hope Squad.

Si sus hijos califican y están interesados en participar en nuestro estudio, hagan clic aquí para consultar todos los detalles de la investigación y brindar su consentimiento. Con su autorización, sus hijos tendrán la oportunidad de revisar los detalles del estudio y podrán acordar su participación.

A los miembros de Hope Squad cuyos padres o tutores autoricen a participar y que quieran participar, les entregaremos los enlaces de registro durante una de las sesiones del grupo de discusión, al final de este formulario de consentimiento.

El archivo adjunto LearningFromHopeSquadPeers.zip incluye el orden del día del grupo de discusión, una copia de los formularios de consentimiento, el folleto de la investigación y la propuesta de la investigación, que describe el estudio en detalle.

El Comité institucional de revisión de Utah State University aprobó este estudio y el número de protocolo es 11919.

Si tienen preguntas sobre el estudio de investigación, comuníquense con el investigador principal, Andy Walker, al (435) 797-2614 o pueden enviar un correo electrónico a andy.walker@usu.edu, o bien con el investigador estudiante, Sterling Morris, al (435) 760-4388 o A00662498@usu.edu. Si tienen preguntas sobre sus derechos o desean hablar con alguien que no forme parte del equipo de investigación por preguntas o consultas, comuníquese con el director del IRB al (435) 797-0567 o por correo electrónico a irb@usu.edu.

INFORMACIÓN DE
CONTACTO

Sterling R. Morris

Investigador

Estudiante de

Utah State University

Andrew Walker, PhD

Jefe de departamento

Departamento de ciencias de aprendizaje y tecnología de instrucción

435-760-4388

A00662498@usu.edu

Utah State University

435-797-2614

andy.walker@usu.edu

Appendix C. Conducting Research for Peer Tutee Study

Figure C1

PAL Tutee Study Focus Group Agenda

Learning From Hope Squad Peers Agenda

Activity	Time	Language

Welcome	5 p.m.	• **Welcome:** Welcome to tonight's conversation. Thank you for volunteering to participate.
		• **Introduction:** I am Sterling Morris, I am a PhD student researcher at Utah State University. And I'm studying how
		• **Purpose:** USU professor Andy Walker and I are researching how high school students like you learn Hope Squad material from other high school students, how you relate to students who have taught your Hope Squad material, and how they have related to you. The purpose of this call is to help us gather information to understand just that.
		• **Participation not required:** Participation in this conversation is fully voluntary. Participating in this research, not participating, or leaving early will not affect your standing in the Hope Squad program in any way. If you need to leave for any reason, you can click/tap "leave meeting." No one will be upset if you choose to leave the conversation.
		• **Meeting rules:**
		    o To keep our conversation flowing smoothly tonight, please raise your hand by clicking/tapping "reactions+" and then the "raise hand" button. We'll practice that function in just a moment.
		    o When you are not making a comment, please place yourself on mute. You'll know you are on mute if you see a red diagonal line going through your mic icon in Zoom.
		    o I want to feel comfortable coming off mute to make comments. I will also invite you to share your thoughts in our chat by clicking the speech bubble that says "chat."
		• **Privacy:** I want you to feel safe, welcome, and at ease to share your experiences and thoughts during tonight's conversation. To ensure we keep our space safe and confidential, I want you to each show your consent to keeping all comments made by other participants during confidential which means not repeating them or summarizing them after our conversation. Additionally, no identifying information and no comments or chat submissions you make about the Hope Squad program and its instruction will be shared with your advisor, your school, or the Hope Squad program officials. To show your consent, please use the "raise hand" function to raise your hand.
		• **Data:** A video of our conversation and comments submitted through chat will be recorded. No images from our recording will be published in our research, and any comments you make will be anonymized meaning I will not use your official name or school in any reports of this research. We will transcribe our conversation within 72 hours, removing your names and delete the video and audio file to protect your privacy.
		• **Thank you:** To thank you for your participation tonight, I will be sending each person a $15 gift card to Amazon right after our conversation ends.
		• **Questions:** Do you have any questions before we begin?

Disclaimer	5:07 p.m.	"Because we are talking about our experiences participating in the Hope Squad program this evening, topics related to suicide may come up in our conversation. If at any time during our conversation you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red leave conversation text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation, or leaving it early, will have no negative effect on your standing with the Hope Squad Program. As always, if you are struggling with depression and thoughts of suicide, call the National Suicide Prevention Lifeline (Lifeline) at 1-800-273-TALK (8255), or text the Crisis Text Line (text HELLO to 741741). Both services are free and available 24 hours a day, seven days a week. The deaf and hard of hearing can contact the Lifeline via TTY at 1-800-799-4889. All calls are confidential."
Focus group questions	5:09 p.m.	• **Introductions:** Let's start with brief introductions. Can you each enter your name and your High School where you participate as a Hope Squad Member in the chat? "We'll go in alphabetical order with Amber, then Brittany, then Casey, … Amber, go ahead." • How has your experience of being taught by a high school student impacted your understanding of what it means to be a Hope Squad member? • What parts of learning from a PAL tutor have you liked the most? • What lessons have been the most helpful for you as a Hope Squad member? • How has the atmosphere during learning felt Hope Squad lessons from a High School student? • What challenges have you had with learning Hope Squad lessons from a High School student? • What are some things student teachers can do to improve how they teach you? • How can the Hope Squad program develop the Hope Squad member experience for future members? • Did your tutor(s) seem like they understood the information they taught you, and if so, how did you believe they understood? • Did your tutors explain the lesson in ways that were easy to understand? • Did your tutor(s) seem to be interested in the lessons they taught? • Did your tutor(s) seem to be interested in your well-being? • Did your tutor(s) seem interested in and open to your point of view? • How would your tutor(s) listen for feedback? • How knowledgeable was your tutor(s) on the information they taught you? • How did your tutor(s) use their subject-matter knowledge to guide the group?
Self-care check-in	5:39 p.m.	"I want to pause for a minute and thank you for sharing your experiences during tonight's conversation. Because we are talking about our experiences participating in the Hope Squad program this evening, topics related to suicide may continue come up in our conversation. If at any time during our conversation you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red leave conversation text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation, or leaving it early, will have no negative effect on your

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		standing with the Hope Squad Program.
		And as always, if you are struggling with depression and thoughts of suicide, call the National Suicide Prevention Lifeline (Lifeline) at 1-800-273-TALK (8255), or text the Crisis Text Line (text HELLO to 741741). Both services are free and available 24 hours a day, seven days a week. The deaf and hard of hearing can contact the Lifeline via TTY at 1-800-799-4889. All calls are confidential."
Focus group questions continued	5:39 p.m.	We will return to the question that we left on prior to the 5:37 p.m. self-care check-in.
Conclude	5:57 p.m.	• We will now wrap up our focus group conversation. • If you have any questions or would like to withdraw your comments from the study, please contact principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or me by phone at (435) 760-4388 or by email at sterling.morris@aggiemail.usu.edu • I will now take role for the Amazon gift cards I will send out to thank you for your participation. Amazon gift cards will be sent to you this evening. Stay on until I have captured each of your names. • Thank you for attending. Your engagement and feedback is valued. • You may now drop off the call.

Appendix D. Data Analysis for Peer Tutee Study

Figure D1

Treemap Illustrating Thematic Map Hierarchy
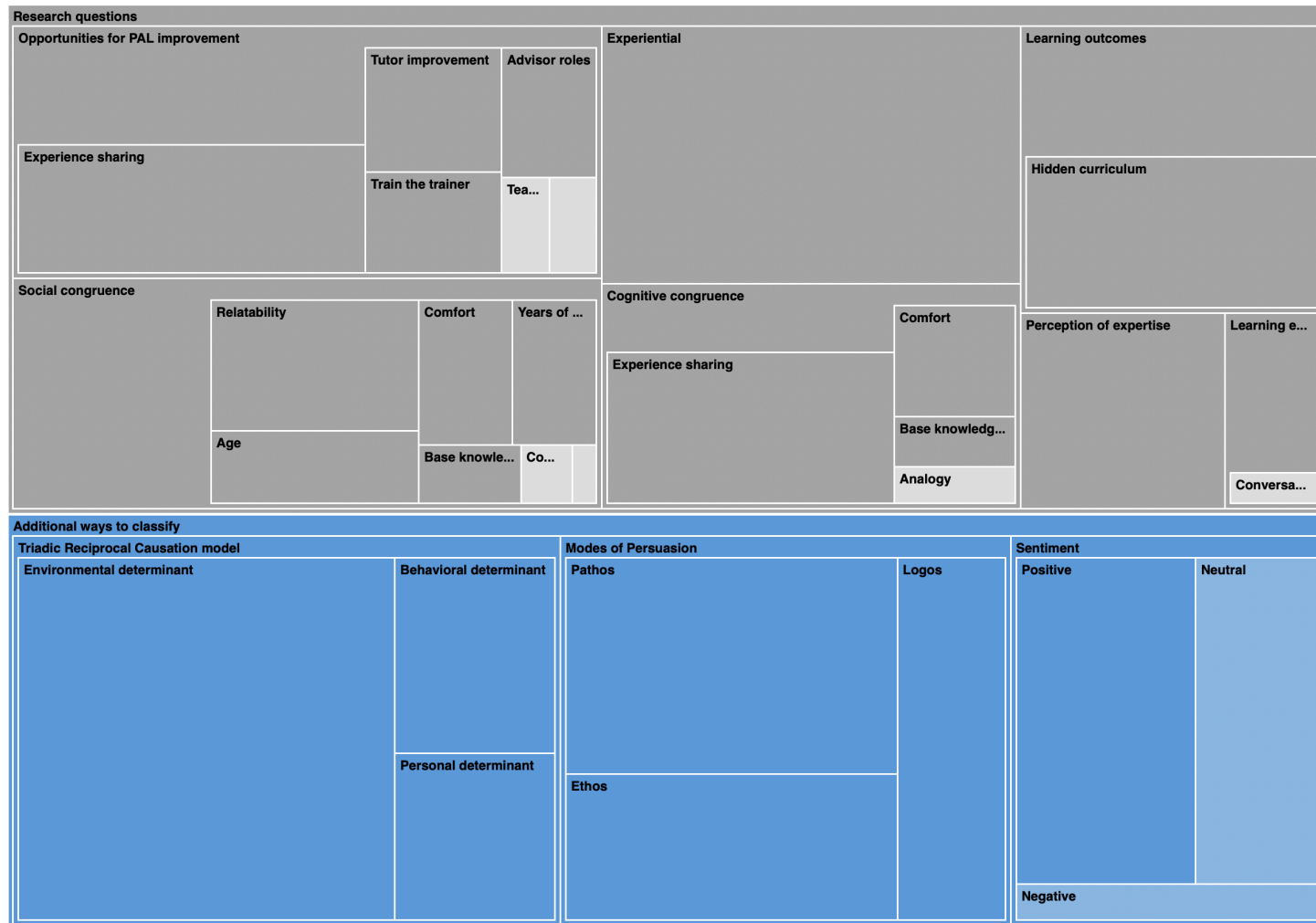
Appendix E. Institutional Review Board Documentation for PAL Tutor Study

Figure E1

Institutional Review Board Letter of Approval for PAL Tutor Study

Research UtahStateUniversity			Notification of Protocol Approval

From: Ronald Gillam, Ph.D.
Chair, Institutional Review Board

Nicole Vouvalis, J.D.
Director of Human Research Protections

To: Andrew Walker
Date: 2023-08-09
Protocol #: 13561
Title: Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad

Your proposal has been reviewed by the Institutional Review Board and is approved under Expedited procedure(s) Expedited Category 6,Expedited Category 7 (based on the Department of Health and Human Services (DHHS) regulations for the protection of human research subjects, 45 CFR Part 46, as amended to include provisions of the Federal Policy for the Protection of Human Subjects, January 21, 2019):

> Collection of data from voice, video, digital, or image recordings made for research purposes.,

> Research on individual or group characteristics or behavior (e.g., cognition, motivation, identity, communication, culture, social behavior) or research using methods such as survey, interview, oral history, program or human factors evaluation, etc.

This approval applies only to the proposal currently on file for the period of approval specified in the protocol. You will be asked to submit an annual check in around the anniversary of the date of original approval. As part of the IRB's quality assurance procedures, this research may also be randomly selected for audit. If so, you will receive a request for completion of an Audit Report form during the month of the anniversary date of original approval. If the proposal will be active for more than five years, it will undergo a full continuation review every fifth year.

Any change affecting human subjects, including extension of the expiration date, must be approved by the IRB **prior** to implementation by submitting an Amendment request. Injuries or any unanticipated problems involving risk to subjects or to others must be reported immediately to the Chair of the Institutional Review Board. If Non-USU Personnel will complete work on this project, they may not begin until an External Researcher Agreement or Reliance Agreement has been fully executed by USU and the appropriate Non-USU entity, regardless of the protocol approval status here at USU.

Prior to involving human subjects, properly executed informed consent must be obtained from each subject or from an authorized representative, and documentation of informed consent must be kept on file for at least three years after the project ends. Each subject must be furnished with a copy of the informed consent document for their personal records.

435.797.1821 | 1450 Old Main Hill | Logan, UT 84322 | MAIN 155 | irb@usu.edu | FWA#00003308

Research
UtahStateUniversity

Full Accreditation

Notification of Protocol Approval

Upon receipt of this memo, you may begin your research. If you have questions, please call the IRB office at (435) 797-1821 or email to irb@usu.edu. The IRB wishes you success with your research.

Figure E2

Letter of Certification of Spanish Translation for PAL Tutor Study Recruiting and

Consent Materials for Parents and Guardians

inlingua®

Salt Lake City, August 15th 2023

LETTER OF CERTIFICATION

We, **inlingua Utah,** certify, under penalty of perjury, that we have translated and proofread the English into Spanish translation requested by Sterling Morris of Utah State University, consisting of the following:

- 13561 Walker Parent IC Approved_SPA final
- Recruiting Message_SPA final

We certify that inlingua translated the English content into Spanish, and that the translation is a true and accurate reflection of the content of the original document.

Executed this 15th of August 2023, at Salt Lake City, Utah

08/15/23

Bailey Benjamin
TRANSLATIONS DEPARTMENT
inlingua Utah

Date

State of Utah

County of Salt Lake

Subscribed and sworn to before me on this ___15___ day of ___Aug___, 2023.

_____
Don Durham

DONALD DURHAM
Notary Public- State of Utah
Commission 711776
Exp. 4/30 2024
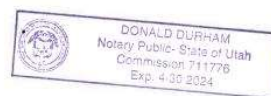
Appendix F. Recruitment for PAL Tutor Study

Figure F1

Recruiting Message for PAL Tutor Study in English

Hi Ashley,

I know how busy you are, so I drafted the below message as an option to help save you time. If the message is helpful, can you email it to advisors in all states **except for advisors in Utah**?

Registration for our focus groups is open. All Hope Squad members who are eligible and interested are welcome to participate.

--
Hello Advisors,

Below is an opportunity for Hope Squad to learn more about how Hope Squad students experience teaching our curriculum to their peers. To conduct the research, Utah State University researchers will host a series of two one-and-a-half-hour focus groups and gather additional data from a survey, a brief homework assignment, and a final 1-hour journey map interview. **Any member of your squad who has taught at least one lesson to Hope Squad peers is eligible to participate.** Students who register for and attend the three-part series of focus groups and interview and complete the study's homework assignment (a time commitment of about 4.5 hours) will receive $100 in gift cards to Amazon. Availability to participate is limited to a total of 16 participants. Registration will close once registration for each focus group fills up. Those who register after the study fills will be put on a waitlist and may be contacted by the research organizers if spots open up.

All details about the research, how your members' parents/guardians can consent to the study, and how hope squad members can register to participate are included below and [here](https://usu.box.com/s/kjzqke1b6vp5nrgn3ufaiuajz84xxwag) (https://usu.box.com/s/kjzqke1b6vp5nrgn3ufaiuajz84xxwag).

Can you please forward the below message and attachment to your Hope Squad members as a bcc, cc'ing their parents/guardians where possible? And can you remove my message to you before forwarding this to your members?

Thank you,

Ashley Taeckens, MSW
Director of Research
"While it takes a village to raise a child,
we believe it takes an entire community to save one."
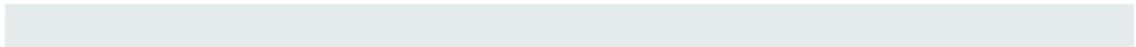
Hope Squad Research
Peer Teaching in Hope Squads

SHARE YOUR VOICE

HELP

HOPE SQUAD

RESEARCHING

TEACHING IN HOPE SQUADS

PAID PARTICIPATION

UP TO $100 IN GIFT CARDS

GUARDIAN CONSENT REQUIRED

You May Be Eligible to Participate In Research

A message to Hope Squad members

Hello Hope Squad Members,

I am Sterling Morris, a college student at Utah State University. I am researching how high school students like you experience teaching Hope Squad material to other high school students, how you relate to students you have taught, and how they have related to you.

Utah State University professor Andy Walker and I are inviting Hope Squad members who have taught a lesson from at least one Hope Squad phase to Hope Squad members to participate in a series of two one-and-a-half-hour focus groups on Zoom along with a final one-hour journey map interview based on the level of your teaching experience:

Beginning Teachers' Focus Group and Interview Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad Lessons to Hope Squad Members)

- **Session one: December 5, 2023**
  - 4:30 PM Pacific Standard Time (PST)
  - 5:30 PM Mountain Standard Time (MST)
  - 6:30 PM Central Standard Time (CST)
  - 7:30 PM Eastern Standard Time (EST)
- **Session two: December 19, 2023**

- 4:30 PM Pacific Standard Time (PST)
- 5:30 PM Mountain Standard Time (MST)
- 6:30 PM Central Standard Time (CST)
- 7:30 PM Eastern Standard Time (EST)

- **Session three: The week of December 18**
  - Multiple meeting times will be provided to participants to select from during the week of December 18.

Experienced Teachers' Focus Group and Interview Series (For Hope Squad Members Who Have Taught Three or More Hope Squad Lessons to Hope Squad Members)

- **Session one: December 6, 2023**
  - 4:30 PM Pacific Standard Time (PST)
  - 5:30 PM Mountain Standard Time (MST)
  - 6:30 PM Central Standard Time (CST)
  - 7:30 PM Eastern Standard Time (EST)
- **Session two: December 20, 2023**
  - 4:30 PM Pacific Standard Time (PST)
  - 5:30 PM Mountain Standard Time (MST)
  - 6:30 PM Central Standard Time (CST)
  - 7:30 PM Eastern Standard Time (EST)
- **Session three: The week of December 18**
  - Multiple meeting times will be provided to participants to select from during the week of December 18.

Eligible study participants must be high school students who are also Hope Squad members and have taught Hope Squad curriculum to other high school-aged Hope Squad members.

Each Hope Squad member who participates in session one for the full length of the focus group will receive a $30 gift card to Amazon. We will give each participant who joins and participate in session two an additional $30 Amazon gift card. We will give each participant an additional $30 Amazon gift card for joining our final session three Journey Map interview along with $10 Amazon gift card for completing and turning in a 10–15-minute homework assignment.

And if a participant needs to leave any session early, we'll be sure to prorate their

time to compensate them for their contributions.

Comments made during the focus group will be made anonymized in the study. Participating in the conversation is optional. Participating or not participating in the study will not harm your role in the Hope Squad program.

18-Year-Old and Older Participants

If you are interested in participating, qualify, and are currently <u>18 years old or older</u>, **[click here](https://usu.co1.qualtrics.com/jfe/form/SV_di2HzCsm41pZsCq) (https://usu.co1.qualtrics.com/jfe/form/SV_di2HzCsm41pZsCq) to review full details on the research, provide consent, and register.**

17-Year-Old and Younger Participants

If you are interested in participating and are currently <u>17 years old or younger</u>, we need your parent or guardian's approval before you can register for the series of focus group conversations that aligns with your level of experience as a teacher. In that case, **please share this message with your parent so we can gather their authorization.**

A message to Hope Squad members' parents and guardians

Dear parents and guardians of Hope Squad members,

I'm Sterling Morris, a student at Utah State University. I am joining Utah State University professor Dr. Andy Walker to research Hope Squads. Specifically, we want to investigate how Hope Squad members experience teaching Hope Squad material to other high school students in their Hope Squad and how they relate to the students they're teaching.

This research may help programs, including Hope Squads, know more about students' experiences from learning from peer students.

Eligible study participants must be high school students participating as a Hope Squad member and have been taught Hope Squad curriculum by other high school-aged Hope Squad members.

We ask study-eligible and interested high school students to join us for a series of two one-and-a-half-hour focus groups on Zoom along with a final one-hour interview based on the level of their teaching experience:

Available Focus Group Times

Beginning Teachers' Focus Group and Journey Map Interview Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)

- **Session one: December 5, 2023**
    - 4:30 PM Pacific Standard Time (PST)
    - 5:30 PM Mountain Standard Time (MST)
    - 6:30 PM Central Standard Time (CST)
    - 7:30 PM Eastern Standard Time (EST)
- **Session two: December 19, 2023**
    - 4:30 PM Pacific Standard Time (PST)
    - 5:30 PM Mountain Standard Time (MST)
    - 6:30 PM Central Standard Time (CST)
    - 7:30 PM Eastern Standard Time (EST)
- **Session three: The week of December 18**
    - Multiple meeting times will be provided to participants to select from during the week of December 18.

Experienced Teachers' Focus Group and Journey Map Interview Series (For Hope Squad Members Who Have Taught three or more Hope Squad lessons to Hope Squad Members)

- **Session one: December 6, 2023**
    - 4:30 PM Pacific Standard Time (PST)
    - 5:30 PM Mountain Standard Time (MST)
    - 6:30 PM Central Standard Time (CST)
    - 7:30 PM Eastern Standard Time (EST)
- **Session two: December 20, 2023**
    - 4:30 PM Pacific Standard Time (PST)
    - 5:30 PM Mountain Standard Time (MST)
    - 6:30 PM Central Standard Time (CST)
    - 7:30 PM Eastern Standard Time (EST)
- **Session three: The week of December 18**
    - Multiple meeting times will be provided to participants to select from during the week of December 18.

Each Hope Squad member who participates in session one for the full length of the

focus group will receive a $30 gift card to Amazon. We will give each participant who joins and participate in session two an additional $30 Amazon gift card. We will give each participant an additional $30 Amazon gift card for joining our final session three Journey Map interview along with $10 Amazon gift card for completing and turning in a 10–15-minute homework assignment.

And if a participant needs to leave any session early, we'll be sure to prorate their time to compensate them for their contributions.

Your child's comments made during the focus group will be made anonymous. Participating in any one of the scheduled conversations is optional. Participating or not participating in a focus group will not harm your child's role in the Hope Squad program.

If your child qualifies for and is interested in participating in our study, click here (https://usu.co1.qualtrics.com/jfe/form/SV_5dlDRDiz5lD4dQa**) to review full details on the research and provide consent.** With your permission, your child will have the opportunity to review the study's details and agree to participate.

We will provide Hope Squad members whose parent or guardian consents and who would like to participate with a link to register to participate at the end of this consent form (https://usu.co1.qualtrics.com/jfe/form/SV_5dlDRDiz5lD4dQa).

Click here to access files, including the focus group and journey map interview agendas, a copy of the consent and assent forms, an overview of demographic details collected, the research flyer, and the research proposal, which describes the study in detail.

Utah State University's Institutional Review Board approved this study, and its protocol number is 13561.

If you have questions about the research study itself, please contact the Principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or the Student Investigator, Sterling Morris, at (435) 760-4388 or A00662498@usu.edu. If you have questions about your rights or would like to speak with someone other than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

CONTACT INFORMATION

Sterling R. Morris
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A00662498@usu.edu

Andrew Walker, PhD
Department Head
Department of Instructional Technology and Learning Sciences
Utah State University
435-797-2614
andy.walker@usu.edu

Figure F2

Recruiting Message for PAL Tutor Study in Spanish

Mensaje para los padres y tutores de los miembros de Hope Squad

Estimados padres y tutores de los miembros de Hope Squad:

Soy Sterling Morris, estudiante en Utah State University. Junto con el catedrático de Utah State University, el Dr. Andy Walker, investigamos los Hope Squads.

Específicamente, queremos investigar cómo experimentan los miembros de Hope Squad la enseñanza del material de Hope Squad a otros estudiantes de secundaria en su Hope Squad y cómo se relacionan con los estudiantes a quienes les están enseñando.

Esta investigación puede ayudar a programas, incluso a los Hope Squads, a saber más sobre la experiencia de los alumnos al aprender de sus pares.

Los participantes elegibles para el estudio deben ser alumnos de la escuela secundaria que participen como miembros de Hope Squad, y hayan aprendido el plan de Hope Squad de otros miembros de Hope Squad en edad escolar.

Solicitamos a los estudiantes de la escuela secundaria que sean elegibles para el estudio y que estén interesados que se unan a una serie de dos grupos de debate de una hora y media a través de Zoom, como también a una entrevista final de una hora según el nivel de su experiencia de enseñanza:

Horarios disponibles para el grupo de discusión

Serie de grupo de debate de profesores principiantes y entrevista sobre su experiencia (para miembros de Hope Squad que hayan enseñado 1-2 lecciones de Hope Squad a miembros de Hope Squad)

- **Sesión uno: 5 de diciembre de 2023**
    - 4:30 PM Hora Estándar del Pacífico (PST)
    - 5:30 PM Hora Estándar de la Montaña (MST)
    - 6:30 PM Hora Estándar Central (CST)
    - 7:30 PM Hora Estándar del Este (EST)
- **Sesión dos: 19 de diciembre de 2023**
    - 4:30 PM Hora Estándar del Pacífico (PST)
    - 5:30 PM Hora Estándar de la Montaña (MST)
    - 6:30 PM Hora Estándar Central (CST)
    - 7:30 PM Hora Estándar del Este (EST)
- **Sesión tres: La semana del 18 de diciembre**
    - Se proporcionarán múltiples horarios de reuniones para que los participantes elijan durante la semana del 18 de diciembre.

Serie de grupo de debate de profesores experimentados y entrevista sobre su experiencia (para miembros de Hope Squad que hayan enseñado 3

lecciones de Hope Squad o más a miembros de Hope Squad)

- **Sesión uno: 6 de diciembre de 2023**
    - 4:30 PM Hora Estándar del Pacífico (PST)
    - 5:30 PM Hora Estándar de la Montaña (MST)
    - 6:30 PM Hora Estándar Central (CST)
    - 7:30 PM Hora Estándar del Este (EST)
- **Sesión dos: 20 de diciembre de 2023**
    - 4:30 PM Hora Estándar del Pacífico (PST)
    - 5:30 PM Hora Estándar de la Montaña (MST)
    - 6:30 PM Hora Estándar Central (CST)
    - 7:30 PM Hora Estándar del Este (EST)
- **Sesión tres: La semana del 18 de diciembre**
    - Se proporcionarán múltiples horarios de reuniones para que los participantes elijan durante la semana del 18 de diciembre.

Los miembros de Hope Squad que participen en la sesión uno durante la totalidad del grupo de debate recibirán una tarjeta de regalo de Amazon de $30. A todos los participantes que se unan y participen de la sesión dos les daremos una tarjeta de regalo de Amazon adicional de $30. A todos los participantes les entregaremos una tarjeta de regalo de Amazon adicional de $30 por unirse a nuestra sesión final (sesión tres, la entrevista sobre su experiencia), junto con una tarjeta de regalo de Amazon de $10 por completar y entregar una tarea para el hogar de 10-15 minutos.

Y si un participante debe abandonar la sesión antes de su finalización, nos aseguraremos de prorratear su tiempo para compensarle sus contribuciones.

Los comentarios que haga su hijo en el grupo de debate serán anónimos. La participación en una de las conversaciones programadas es opcional. Participar o no en el grupo de debate no afectará el papel de su hijo en el programa Hope Squad.

Si su hijo califica y está interesado en participar en nuestro estudio, [haga clic aquí](https://usu.co1.qualtrics.com/jfe/form/SV_5dlDRDiz5lD4dQa) (https://usu.co1.qualtrics.com/jfe/form/SV_5dlDRDiz5lD4dQa) para conocer todos los detalles de la investigación y brindar su consentimiento. Con su autorización, su hijo tendrá la oportunidad de revisar los detalles del estudio y podrá acordar su participación.

A los miembros de Hope Squad cuyos padres o tutores los autoricen a participar y que deseen participar les entregaremos un enlace para registrarse al final de este formulario de consentimiento (https://usu.co1.qualtrics.com/jfe/form/SV_5dlDRDiz5lD4dQa).

Haga clic aquí (https://usu.box.com/s/kjzqke1b6vp5nrgn3ufaiuajz84xxwag) para acceder a los archivos, incluidas las agendas de entrevistas del grupo focal y del mapa de viaje, una copia de los formularios de consentimiento y asentimiento, una descripción general de los detalles demográficos recopilados, el folleto de investigación y la propuesta de investigación, que describe el estudio en detalle.

El Comité institucional de revisión de Utah State University aprobó este estudio y el número de protocolo es 13561.

Si tiene preguntas sobre el estudio de investigación, comuníquese con el investigador principal, Andy Walker, al (435) 797-2614 o por correo electrónico a andy.walker@usu.edu, o con el investigador estudiante, Sterling Morris, al (435) 760-4388 o A00662498@usu.edu. Si tiene preguntas sobre sus derechos o desea hablar con alguien que no forme parte del equipo de investigación por preguntas o consultas, comuníquese con el director del IRB al (435) 797-0567 o por correo electrónico a irb@usu.edu.

INFORMACIÓN DE CONTACTO

Sterling R. Morris

Investigador estudiante

Departamento de ciencias de aprendizaje y tecnología de instrucción

Utah State University

435-760-4388

A00662498@usu.edu

Andrew Walker, PhD

Jefe de departamento

Departamento de ciencias de aprendizaje y tecnología de instrucción

Utah State University

435-797-2614

andy.walker@usu.edu

Figure F3

Guardian Informed Consent Form for PAL Tutor Study

USU Research, Utah State University

Full Accreditation

Informed Consent

Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad

Introduction

Researchers are inviting high school students, including you, to participate in a research study overseen by Principal Investigator (PI) Andy Walker, Ph.D., an associate professor in the Instructional Technology and Learning Sciences department at Utah State University and student investigator and focus groups researcher, Sterling R. Morris, a graduate student in the Department of Instructional Technology and Learning Sciences at Utah State University. This research aims to understand Hope Squad members' experiences teaching their peers lessons from the Hope Squad curriculum. Your participation is entirely voluntary.

This form includes detailed information on the research to help you decide whether to participate. Please read it carefully and ask any questions you have before providing consent to participate.

Procedures

Your participation will involve registering for and attending two focus group sessions (one-and-a-half hours each) and one journey map interview on Zoom (one hour) scheduled about two weeks apart. You will join as many as approximately four to seven other focus group participants from various Hope Squad chapters throughout the United States. The researchers anticipate that five to eight high school Hope Squad members will participate in each focus group, and 10 to 16 will participate in the research project.

The researcher, Sterling Morris, will open each focus group session by welcoming participants and providing guidance on using participation features on Zoom, like raising one's hand to speak, muting and unmuting, and adding comments to the chat. The researcher will note that while the conversation will be recorded, footage for the discussion will not be published, and the names and schools of individuals making comments will not be published. The researcher will emphasize the importance of and ask for a verbal commitment to keeping statements made by other participants confidential.

The researcher will then guide the group through a series of questions to help inform the researchers about Hope Squad members' experiences teaching the Hope Squad curriculum to their peers during the conversation. Participants will be encouraged to raise their hands, unmute themselves, and respond to questions. Participants may also submit their responses through Zoom's in-meeting chat function.

If you consent to participate, the researchers will also ask you to draw and turn in a journey map illustrating your experience in Hope Squad, including preparations and teaching of Hope Squad lessons to Hope Squad members.

Additionally, you will be invited to participate in a journey map interview. You can choose between two options: a one-on-one journey map interview with the researcher or a group journey map interview with one to two other research participants and the researcher. During this journey map interview, the researcher will review your journey map and ask for details and insights related to the journey map you have created.

The total length of participation for you is expected to be at most four and a half hours.

You can view the full agenda of the focus groups and journey map interview in the *Exploring Per-Assisted Learning Tutor Experiences Information Packet* attached to the email inviting you to participate in this study. If you did not receive the information mentioned above Packet, please request it from Sterling Morris at A00662498@usu.edu.

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Alternative Procedures

Rather than consenting to participate in this research, you might prefer alternatives such as sharing feedback on your experiences teaching the Hope Squad curriculum to peers with your school's Hope Squad Advisor or by contacting Hope Squad's headquarters by mail, phone, or email:

Mail	Phone	Email
Hope Squad 5455 River Run Dr Provo, UT 84604	(801) 342-3447	support@hopesquad.com

Risks

While the risks of participating in two one-and-a-half-hour focus groups, drafting a journey map, and participating in a one-hour journey map interview might be no more likely or severe than those an individual might encounter in everyday activities, there are potential risks from participating, including the following risks:

- **Sensitive Topics:** Topics like suicide and self-harm might be discussed due to the nature and purpose of the Hope Squad Program. Although the researchers do not have questions about suicide as outlined in the focus group and journey map interview agendas, those conversations could have some associated risks.
- **Recognition of Participants:** Research participants may experience discomfort if they recognize an alternative participant and do not feel comfortable engaging in the conversation in the presence of someone they know.
- **Breach of Confidentiality:** A participant breaches confidentiality and shares information outside of the study.
- **Database Breach:** A database breach could open access to data gathered during the study.

Reducing the risk in the focus groups and journey map interview is paramount to ensure the safety and privacy of participants. The researchers will apply the following strategies to minimize the listed risks:

- **Sensitive Topics**: If potentially sensitive topics such as suicide and self-harm are discussed, the researchers will:
  - Resources: The researchers will provide participants with the following information on support resources from the National Suicide & Crisis Lifeline and the Trevor Project.
    - 988 Suicide and Crisis Lifeline: https://988lifeline.org/
      - Call or text 988 or text TALK to 741741
    - The Trevor Project for LGBTQ Youth: (866) 488-7386 or (866) 4-U-Trevor
  - Follow an agenda to stay clear from sensitive topics where possible: The researchers have developed an agenda that they will strive to follow that focuses on the study's purpose, which focuses on the participants' experiences tutoring other students. The researchers will also encourage participants to take breaks as needed.
  - Self-care check-in: Each session will include a self-care check-in in which researchers will pause research questions, encourage participants to take a break if needed, and reference available resources.

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- **Recognition of Participants**: The researchers will address the potential issue of discomfort from recognizing other participants by:
  - Anonymity: Researchers will anonymize research participants' responses in any settings where results are published.
- **Breach of Confidentiality**: To prevent participants from sharing sensitive information outside of the study:
  - Confidentiality agreement: The researchers will communicate to participants that what is shared in the focus group and journey map interview should remain confidential and ask for their verbal commitment to keep comments made by other participants confidential, including not repeating them or summarizing them after the focus group and journey map interview.
- **Database Breach**: To protect against data breaches, researchers will:
  - Use secure systems: The researchers will use a secure and encrypted database for storing and processing data.
  - Limited access: The researchers will be the sole individuals accessing the data collected.
  - Anonymize data: The researchers will ensure all data is anonymized or de-identified as soon as possible.

Benefits

The researchers cannot guarantee that you will directly benefit from this study. However, although you may not directly benefit from this study, it has been designed to understand how Hope Squad members experience teaching their peers the curriculum and relate to them. In addition, knowledge gathered from study participants will be shared with the Hope Squad organization, which may improve program operations for current and future Hope Squad advisors and members.

Confidentiality

The researchers will make every effort to ensure that the information you provide as part of this study remains confidential. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your individual responses to focus group questions and contributions to the study despite the researchers' efforts to anonymize findings. While the focus group and journey map interview's researcher, Mr. Morris, will ask all group members to keep the information they hear during the group conversation confidential, the researchers cannot guarantee that every participant will do so.

The researchers will collect your responses to focus group questions with a video recording of the two one-and-a-half-hour focus group discussions and one-hour journey map interview, including answers to questions submitted through the Zoom chat function. Consent information will be collected using Qualtrics. Contact information will be collected from Zoom's event registration tool. Online activities always carry a risk of a data breach. Still, the researchers will use systems and processes that minimize breach opportunities. The video files and comments submitted through Zoom's in-meeting chat, the demographic survey results, and images of the journey maps will be securely stored in a restricted-access folder on Box.com, an encrypted, cloud-based storage system. The researchers will then work to transcribe the conversation, replace the names of participants with pseudonyms, and delete video and chat files within one week of each focus group and journey map interview session. This consent form will be kept for three years after the study is complete and destroyed.

It is unlikely but possible that others (Utah State University or state or federal officials) may require the researchers to share the information you give them from the study to ensure that the research was conducted safely and appropriately. Therefore, the researchers will only share your information if law or policy requires the researchers to do so.

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If the researchers learn that you are being subjected to abuse or neglect or will engage in self-harm or intends to harm another, state laws require that the researchers report this behavior/intention to the authorities.

If the researchers learn that you are in imminent danger of suicide, they must act, including or up to the involuntary commitment.

Voluntary Participation & Withdrawal
Your consent to participation in this research is voluntary. If you agree to participate now and change your mind later, you may withdraw at any time by contacting the principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or student Investigator Sterling Morris by phone at (435) 760-4388 or by email at A00662498@usu.edu. If you inform the researchers that you choose to withdraw your consent or you decide to withdraw from the study after the researchers have already collected information about you and before the report is finalized, Sterling Morris will identify and delete responses submitted by them and not include your contributions in the final research report. If you decide not to participate, participation in the Hope Squad program will not be affected in any way.

The research team will need to terminate your participation in this study if you cannot agree to keep comments made during the focus group confidential. If a participant is disruptive, the researchers will ask them to discontinue it. If the participant's behavior continues, the researchers will ask them to leave the study. If a participant does not stay until the end of the hour when the focus group or journey map interview concludes, the researchers will withdraw the participant from the study. Should any participant refuse to leave, the researchers will politely but assertively remove the disruptive participant using Zoom's host management tools.

If a participant voluntarily withdraws or is terminated from the study early, the research team will prorate that participant's compensation, ensuring they were compensated proportionally for the time they invested in the study.

Compensation
For your full study participation, you will receive a total of $100 in Amazon gift cards, distributed in the following increments the same day you complete each research milestone:

- $30 for full participation in the first focus group.
- $30 for full participation in the second focus group.
- $10 for completing and turning in a journey map.
- $30 for full participation in the journey map interview

Full study participation is defined as attending the series of two scheduled focus groups, one journey map interview, responding to questions where possible, staying until the end of each focus group, and creating and submitting a journey map.

You will receive the Amazon gift cards via the email address you provided in completing the informed consent on Qualtrics in response to the prompt, "Please provide the email address you would like us to use to send you your Amazon gift card(s)."

Findings & Future Participation
Identifiers will be removed from your information. The researchers may include an image of your journey map in the publication(s) of this study's findings, anonymizing or removing identifiers that would link the design to you.

Instructional Technology & Learning Sciences | itls.usu.edu | 2830 Old Main Hill | Logan, UT 84322

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Once the research study is complete, the student investigator will email you the study findings, including aggregate results relating to your participation, using the email submitted to register for the focus groups and journey map interview.

IRB Review

The Institutional Review Board (IRB) for the protection of human research participants at Utah State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at (435) 797-2614 or andy.walker@usu.edu or the Student Investigator, Sterling Morris, at (435) 760-4388 or A00662498@usu.edu. In addition, if you have questions about your rights or would simply like to speak with someone *other* than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

Andrew E. Walker, Ph.D.
Principal Investigator
(435) 797-2614; andy.walker@usu.edu

Sterling R. Morris, MS
Student Investigator
(435) 760-4388; A00662498@usu.edu

Informed Consent

You agree to your participation in this study by signing below. You indicate that you understand the risks and benefits of your participation and know what you will be asked to do. You also agree that you have asked any questions you might have and are clear on how to stop your participation in the study if you choose to do so. Please be sure to retain a copy of this form for your records.

_____   _____   _____
Participant's Signature   Participant's Name, Printed   Date

Figure F4

Guardian Informed Consent Form for PAL Tutor Study in Spanish

Consentimiento informado

Análisis de las experiencias de los tutores de aprendizaje asistido por pares en Hope Squad

Introducción

Los investigadores invitan a los alumnos de la escuela secundaria, incluido su hijo, a participar en un estudio de investigación supervisado por el investigador principal (IP) Andy Walker, PhD, profesor adjunto en el Departamento de ciencias de aprendizaje y tecnología de instrucción de Utah State University, y el investigador estudiante e investigador del grupo de debate, Sterling R. Morris, estudiante de posgrado en el Departamento de ciencias de aprendizaje y tecnología de instrucción de Utah State University. El objetivo de esta investigación es comprender las experiencias de los miembros de Hope Squad al enseñarles a sus pares las lecciones del plan de estudios de Hope Squad. La participación del estudiante de la escuela secundaria es totalmente voluntaria.

Este formulario incluye información detallada sobre la investigación, para ayudarlo a decidir si participará. Léalo con detenimiento y haga todas las preguntas que tenga antes de autorizar la participación del estudiante de la escuela secundaria.

Procedimientos

La participación del estudiante de la escuela secundaria incluirá registrarse y asistir a dos sesiones de grupos de debate (de una hora y media cada una) y una entrevista sobre su experiencia a través de Zoom (de una hora), programadas con un intervalo de aproximadamente dos semanas. Para cada sesión de grupo de debate, se unirá a otros cuatro a siete participantes en grupos de debate procedentes de diversas secciones de Hope Squad de los Estados Unidos. Los investigadores anticipan la participación de entre cinco y ocho miembros de Hope Squad de la escuela secundaria en cada grupo de debate, y que entre 10 y 16 participarán en el proyecto de investigación.

El investigador, Sterling Morris, iniciará cada sesión del grupo de debate dándole la bienvenida a los participantes y guiándolos sobre cómo utilizar funciones de Zoom como alzar la mano para hablar, silenciarse y activar el micrófono, y agregar comentarios en el chat. El investigador les indicará que, aunque la conversación será grabada, el video del debate no se publicará, como tampoco serán publicados los nombres y las escuelas de los participantes que hagan comentarios. El investigador hará hincapié en la importancia del compromiso oral para que las declaraciones realizadas por otros participantes sean confidenciales, y pedirá el compromiso oral de todos.

El investigador luego guiará al grupo a través de una serie de preguntas que ayudarán a informar a los investigadores sobre las experiencias de los miembros de Hope Squad al enseñar el plan de estudios de Hope Squad a sus pares durante la conversación. Se alentará a los participantes a que alcen la mano, activen el micrófono y respondan las preguntas. Los participantes también pueden enviar su respuestas a través de la función de chat de Zoom.

Si usted acepta que el estudiante de la escuela secundaria participe en esta investigación, el estudiante deberá trazar un "mapa de su experiencia" en Hope Squad, que incluya los preparativos y la enseñanza de las lecciones de Hope Squad a otros miembros de Hope Squad.

Además, invitaremos al estudiante a participar en una entrevista sobre su experiencia. Podrá elegir entre dos opciones: una entrevista individual con el investigador, o una entrevista grupal con uno o dos participantes de la investigación y el investigador. Durante esta entrevista sobre su experiencia, el investigador revisará el mapa de su hijo y solicitará información relacionada con el mapa de su experiencia creado.

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La duración total de la participación del estudiante de la escuela secundaria se estima que será de no más de cuatro horas y media.

Podrá ver la agenda completa de los grupos de debate y de la entrevista sobre su experiencia en el paquete informativo *Análisis de las experiencias de los tutores de aprendizaje asistido por pares* adjunto a este correo electrónico, para invitar al alumno a participar en este estudio. Si no recibió la información mencionada anteriormente, solicítela a Sterling Morris por correo electrónico a A00662498@usu.edu.

Procedimientos alternativos

En lugar de autorizar la participación del alumno de la escuela secundaria en esta investigación, tiene alternativas como alentar al estudiante a que comparta una opinión de su experiencia enseñando el plan de estudios de Hope Squad a sus compañeros con el asesor de Hope Squad de su escuela, o puede comunicarse con las oficinas centrales de Hope Squad por teléfono o correo electrónico:

Correo	Teléfono	Correo electrónico
Hope Squad 5455 River Run Dr Provo, UT 84604	(801) 342-3447	support@hopesquad.com

Riesgos

Aunque los riesgos por participar en dos grupos de debate de una hora y media, diagramar un "mapa de su experiencia" y participar en una entrevista sobre dicha experiencia no son más probables ni más graves que los que encontrará el alumno en las actividades de la vida cotidiana, existen ciertos riesgos, como:

- **Temas delicados:** Tal vez se hable sobre temas como el suicidio y la autolesión, debido a la naturaleza y el propósito del programa Hope Squad. Aunque los investigadores no tienen preguntas sobre el suicidio como se indica en la agenda de los grupos de debate y de las entrevistas sobre experiencias, existe el riesgo de que el tema surja en estas conversaciones.
- **Reconocimiento de participantes:** Los participantes de la investigación pueden sentir incomodidad si reconocen a otro participante y tal vez no se sientan cómodos entablando una conversación ante un conocido.
- **Violación de la confidencialidad:** Que un participante viole la confidencialidad y comparta información fuera del estudio.
- **Violación de la base de datos:** Una violación de la base de datos podría dar acceso a los datos recopilados durante el estudio.

Reducir el riesgo en los grupos de debate y la entrevista sobre experiencias es primordial para garantizar la seguridad y la privacidad de los participantes. Los investigadores aplicarán las siguientes estrategias para minimizar los riesgos enumerados:

- **Temas delicados**: Si se habla de temas posiblemente delicados como el suicidio y la autolesión, los investigadores:
  - Recursos: Los investigadores brindarán a los participantes la siguiente información sobre recursos de apoyo de la Línea de Prevención del Suicidio y Crisis, y The Trevor Project.
    - Línea 988 de Prevención del Suicidio y Crisis: https://988lifeline.org/
      - Llame o envíe un mensaje al 988, o envíe TALK al 741741

- The Trevor Project para jóvenes de la comunidad LGBTQ: (866) 488-7386 o (866) 4-U-Trevor
  - o Seguir la agenda para mantenerse alejado de los temas delicados en la medida de lo posible: Los investigadores han creado una agenda que se esforzarán por seguir y que se centra en el propósito del estudio: las experiencias de los participantes como tutores de otros estudiantes. Los investigadores también alientan a los participantes a que tomen recesos cuando sea necesario.
  - o Comprobación de cuidado personal: Todas las sesiones incluirán una comprobación de cuidado personal en las cuales los investigadores pausarán las preguntas del estudio, alentarán a los participantes a tomarse un descanso si lo necesitan y harán referencia a los recursos disponibles.
- **Reconocimiento de participantes**: Los investigadores abordarán el posible problema de la incomodidad de reconocer a otros participantes mediante:
  - o Anonimato: Los investigadores harán que las respuestas de los participantes en la investigación sean anónimas en cualquier entorno en el que se publiquen los resultados.
- **Violación de la confidencialidad**: Para evitar que los participantes compartan información delicada fuera del estudio:
  - o Acuerdo de confidencialidad: Los investigadores comunicarán a los participantes que lo que se comparta en el grupo de debate y en la entrevista sobre su experiencia debe seguir siendo confidencial y les pedirán su compromiso verbal de mantener la confidencialidad de los comentarios realizados por otros participantes (incluye no repetirlos ni resumirlos una vez finalizado el grupo de debate y la entrevista sobre experiencias).
- **Violación de la base de datos**: Para evitar la violación de la base de datos, los investigadores:
  - o Utilizarán sistemas seguros: Los investigadores utilizarán bases de datos seguras y cifradas para almacenar y procesar los datos.
  - o Limitarán el acceso: Los investigadores serán las únicas personas que tengan acceso a los datos recopilados.
  - o Mantendrán el anonimato de los datos: Los investigadores se asegurarán de que todos los datos se mantengan anónimos o no identificables lo antes posible.

Beneficios

Los investigadores no pueden garantizar que usted o el alumno de la escuela secundaria se beneficien directamente a partir de este estudio. Sin embargo, aunque el alumno de la escuela secundaria quizá no se beneficie directamente a partir de este estudio, este se ha diseñado para comprender cómo los miembros de Hope Squad experimentan enseñar a sus pares el plan de estudios y cómo se relacionan con ellos. Además, el conocimiento adquirido gracias a los participantes del estudio será compartido con la organización Hope Squad, y permitirá mejorar las operaciones del programa para asesores y miembros actuales y futuros de Hope Squad.

Confidencialidad

Los investigadores harán todo lo posible por asegurar que la información que usted y el estudiante de la escuela secundaria brinden como parte de este estudio sea confidencial. Ni su identidad ni la del estudiante de la secundaria serán reveladas en publicaciones, presentaciones o informes que deriven de este estudio de investigación. No obstante, es posible que algunos reconozcan las respuestas particulares de un alumno, a pesar de los esfuerzos del investigador por mantener el anonimato. Aunque el investigador del grupo de debate y de la entrevista sobre experiencias, el Sr. Morris, solicitará a todos los miembros del grupo que mantengan la confidencialidad de la información que escuchen durante la conversación grupal, los investigadores no pueden garantizar que todos los participantes lo hagan.

Los investigadores recopilarán las respuestas a las preguntas del grupo de debate del estudiante de la escuela secundaria con una grabación de video de las conversaciones de los dos grupos de debate de una hora y media y

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Protocolo n.º 13561
Fecha de aprobación del IRB: 9 de agosto de 2023
Aprobación de enmienda n.º 11: 10 de noviembre 2023
Vencimiento del documento de consentimiento: 31 de diciembre de 2023

de la entrevista sobre experiencias de una hora, junto con las respuestas a las preguntas presentadas a través de la función de chat de Zoom. La información de consentimiento se recopilará utilizando Qualtrics. La información de contacto se recopilará a partir de la herramienta de registro de eventos de Zoom. Las actividades en línea siempre conllevan un riesgo de violación de datos. De todas maneras, los investigadores utilizarán sistemas y procesos que minimicen las oportunidades de dichas violaciones. Los comentarios y archivos de video enviados a través del chat de Zoom durante la reunión, los resultados demográficos de la encuesta, las imágenes de los mapas de experiencias se almacenarán de manera segura en una carpeta con acceso restringido de Box.com, un sistema de almacenamiento cifrado en la nube. Los investigadores luego transcribirán la conversación, reemplazarán los nombres de los participantes por seudónimos, y eliminarán los archivos de chat y video dentro de la semana posterior a cada sesión del grupo de debate y entrevista sobre experiencias. Este formulario de consentimiento se guardará por tres años después de haber finalizado el estudio y se destruirá.

Es posible, aunque poco probable, que otros (funcionarios estatales o federales, o de Utah State University) exijan a los investigadores que compartan la información que usted y el alumno de la escuela secundaria nos brinda a partir del estudio, para asegurar que la investigación se haya llevado a cabo de forma segura y apropiada. Por lo tanto, los investigadores únicamente compartirán los datos suyos y del estudiante de la escuela secundaria si la ley o una política les exigen hacerlo.

Si los investigadores descubren que su hijo es víctima de abuso o negligencia, o que se lesiona a él mismo o intenta hacerle daño a los demás, la ley estatal exige que los investigadores informen este comportamiento o intención a las autoridades.

Si los investigadores descubren que un niño sufre peligro inminente de suicidio, están obligados a actuar (incluso a solicitar la hospitalización involuntaria).

Participación voluntaria y renuncia
Su consentimiento para la participación del estudiante de la escuela secundaria en esta investigación es voluntario. Si usted autoriza al estudiante de la escuela secundaria a participar ahora y luego cambia de parecer, puede retirar la autorización en cualquier momento, comunicándose con el investigador principal, Andy Walker, al (435) 797-2614 o por correo electrónico a andy.walker@usu.edu, o con el investigador estudiante Sterling Morris, por teléfono al (435) 760-4388 o por correo electrónico a A00662498@usu.edu. Si informa a los investigadores que desea retirar su consentimiento o el alumno de la escuela secundaria opta por excluirse del estudio una vez que hayan recopilado información sobre usted y el alumno de la escuela secundaria y antes de finalizar el informe, Sterling Morris identificará y eliminará las respuestas del estudiante y no incluirá sus respuestas en el informe final de la investigación. Si opta por no involucrarse, la participación en el programa Hope Squad no se verá afectada de ninguna manera.

El equipo de investigación deberá concluir la participación del alumno en este estudio de investigación si el alumno no está de acuerdo con mantener la confidencialidad de los comentarios realizados en el grupo de debate. Si un participante perturba el grupo, los investigadores le solicitarán que cese dicha conducta. Si el comportamiento del participante continúa, los investigadores le solicitarán que abandone el estudio. Si un participante no permanece hasta finalizar el grupo de debate o la entrevista sobre su experiencia, los investigadores retirarán al alumno del estudio. Si un participante se negara a abandonar el grupo, firmemente y con respeto los investigadores retirarán al participante perturbador utilizando las herramientas de administración para anfitriones de Zoom. Si los investigadores retiran a su hijo del estudio por alguna de las razones enumeradas anteriormente, se lo notificarán al número de teléfono que usted brinde.

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Si un participante renuncia de manera voluntaria o es retirado del estudio anticipadamente, el equipo de investigación prorrateará la compensación de ese participante, asegurándose de que fue compensado proporcionalmente por el tiempo que invirtió en el estudio.

Remuneración

Por la participación completa del estudiante de la escuela secundaria en este estudio, recibirá un total de $100 en tarjeta de regalo de Amazon, distribuida en los siguientes incrementos el mismo día en que completa cada hito de la investigación:

- $30 por su participación completa en el primer grupo de debate.
- $30 por su participación completa en el segundo grupo de debate.
- $10 por completar y entregar un mapa de su experiencia.
- $30 por su participación completa en la entrevista sobre su experiencia.

La participación completa en este estudio se define como asistir a una serie de dos grupos de debate programados, una entrevista sobre su experiencia, responder las preguntas siempre que sea posible, permanecer hasta que cada grupo de debate concluya, y crear y presentar un mapa de su experiencia.

Los participantes adolescentes recibirán las tarjetas de regalo de Amazon en la dirección de correo electrónico que brindaron al completar el consentimiento del menor en Qualtrics en respuesta a: "Brinda la dirección de correo electrónico que deseas que usemos para enviarte la(s) tarjeta(s) de regalo de Amazon".

Conclusiones y participación futura

Se eliminarán los datos que identifiquen al estudiante de la escuela secundaria. Los investigadores podrán incluir una imagen del mapa de experiencia del estudiante en las publicaciones de los hallazgos del estudio, manteniendo el anonimato o eliminado datos que identifiquen y puedan vincular el diseño con el estudiante.

Una vez completado el estudio de investigación, el investigador estudiante le enviará por correo electrónico los hallazgos del estudio, que incluyen los resultados colectivos relacionados con su participación, a la dirección de correo electrónico brindada al momento de la inscripción al grupo de debate y a la entrevista sobre experiencias.

Revisión del IRB

El Comité institucional de revisión (Institutional Review Board, IRB) para la protección de los participantes humanos en los estudios de Utah State University ha revisado y aprobado este estudio. Si tiene preguntas sobre el estudio de investigación, comuníquese con el investigador principal al (435) 797-2614 o por correo electrónico a andy.walker@usu.edu , o con el investigador estudiante, Sterling Morris, al (435) 760-4388 o A00662498@usu.edu. Si tiene preguntas sobre sus derechos o simplemente desea hablar con alguien que no forme parte del equipo de investigación por preguntas o consultas, comuníquese con el director del IRB al (435) 797-0567 o por correo electrónico a irb@usu.edu.

Andrew E. Walker, Ph.D.
Investigador principal
(435) 797-2614; andy.walker@usu.edu

Sterling R. Morris, MS
Investigador estudiante
(435) 760-4388; A00662498@usu.edu

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Consentimiento informado

Acepta la participación de su hijo en este estudio al firmar a continuación. Afirma que comprende los riesgos y los beneficios de la participación de su hijo, y que sabe qué se le solicitará que haga a su hijo. También afirma que ha hecho todas las preguntas que tenía, y que sabe claramente cómo cancelar la participación de su hijo en este estudio si opta por hacerlo. Asegúrese de guardar una copia de este formulario para su registro.

_____   _____   _____
Firma del padre/tutor   Nombre en imprenta del padre/tutor   Fecha

_____   _____
Correo electrónico del padre/tutor   Nombre en imprenta del niño

Figure F5

Youth Assent Form for PAL Tutor Study

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Youth Assent

Hello,

I am Sterling Morris, a college student at Utah State University. I am joining a professor at Utah State University, Andy Walker, in researching how high school students like you have taught Hope Squad material to other Hope Squad members, how you relate to students you have taught, and how they have related to you.

Research studies like this help us understand more about effective ways to teach new things, like the material you helped teach your peers in Hope Squads. If you would like to be a part of this research study, you will have the opportunity to participate in two one-an-a-half-hour conversations on Zoom, scheduled about two weeks apart from each other, with about four to seven other high school students who have also taught Hope Squads' phases. You will also be asked to complete a drawing illustrating your experience in Hope Squad, including teaching Hope Squad members parts of its curriculum, and finally, asked to join me and possibly one to two other participants in a one-hour journey map interview to review your drawing.

Our first focus group on Zoom will start with me welcoming you and other students to the call, talking about the purpose of the study, reviewing meeting rules, and the importance of keeping comments made by you and other participants private. Then, I'll share details about how I will keep comments anonymous, that participating in the conversation is optional, and that you can leave it anytime for any reason. We will need to ask any student, including you, to leave the call if they cannot agree to keep comments made during the focus group confidential or if they are repeatedly disruptive. And we will need to withdraw any participants who do not stay until the end of the hour when the focus group conversation ends. Should any participant refuse to leave, we will politely but assertively remove the disruptive participant using Zoom's host management tools.

After introducing yourself in the Zoom chat, I will ask the participants about their experience teaching Hope Squad members. Then, I will encourage you and others to respond by coming off mute and sharing your thoughts or adding them to the chat.

I will record a video of our focus groups, journey map interview, and comments submitted in the chat and securely and privately store the files in a secure online storage site for about a week while I type out your words into a document, remove your name, and replace it with a nickname, then delete the video file, all to protect your privacy. I may also include your journey map in the report I share with the public on this study. If I do, I will make sure I remove your name and any identifying details from your journey map to protect your privacy.

I will additionally ask you to take about 10 to 15 minutes in the coming weeks to create a *journey map* drawing to illustrate your experiences as a Hope Squad member, including your experiences in preparing to teach, then teaching your classmates parts of the Hope Squad lessons.

The first focus group conversation will last about an hour and a half or less. At the end of our time together, I'll take the role and send a $30 Amazon gift card to each participant who stayed the entire time.

I will spend the next three weeks reviewing what I learned during conversations. After that, we will meet again. I will welcome you and other participants to the group, share reminders about privacy and confidentiality, and ask you follow-up questions related to the subject and comments made. The second focus group conversation will also last about an hour and a half or less. We'll discuss your experiences teaching Hope Squad members in further detail. At

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the end of our time together, I'll take attendance and send a $30 Amazon gift card to each participant who stayed the entire time.

Our final meeting would be in a one-hour journey map interview in which we can meet one-on-one or in a group with one to two other participants and review the journey map you submitted. Following our journey map interview, I will send you a $30 Amazon gift card for participating in the journey map interview and an additional $10 for submitting your Journey Map.

Dr. Walker and I will spend about two months reviewing things we learned during conversations, including the ones in which you would participate. Then, Dr. Walker and I plan to send a report of lessons I learned to the Hope Squad organization, your guardians, and you.

When the researchers gather participant information like we will do in the focus groups and journey map interviews and lead and record online focus groups, some negative things could happen. For example, participants in the focus group could not keep our conversations confidential – despite the request to do so. In addition, a database breach could access information researchers capture and store. We will do everything possible to prevent those things from happening, but there is still a chance, so we want you to know first.

If we see or hear signs that participants, including you, are experiencing abuse or neglect, the law requires that we report those to your state's Division of Child and Family Services. If we learn that you are in imminent danger of suicide, we must act, including up to the involuntary commitment to your local mental health authority for mental health evaluation and care.

By agreeing to participate in the study and joining other Hope Squad members and me for two one-and-a-half-hour conversations over Zoom, creating and sharing a journey map illustrating your experiences, and joining me in a one-hour journey map interview, you may benefit from improvements to the Hope Squad program due to research from this study. In addition, future Hope Squad members may also benefit from the effects of this research on the Hope Squad program.

We will share what we learn from this study with you and all participants. We won't tell anyone your name or that you were in the study. For your efforts in our research, we will give you a $30 Amazon gift card for completing the first focus group, $30 for completing the second focus group, $10 for completing and submitting a journey map, and $30 for completing the journey map interview.

If this sounds like something you want to do, we will ask you to say that you understand that we talked about the "Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad" study and that you want to participate. You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that's okay, too. To leave the conversation after it begins, simply leave a comment in the Zoom Chat that you need to go, then close the Zoom call. No one will be upset if you don't want to participate in this study or change your mind during the conversation.

You can ask any questions you have, now or later. Your parents know about this research study and have said you can participate if you want.

If you want to be in this study, please sign your name and write the date.

_____   _____
Name   Date

Figure F6

Draft of Informed Consent Form for 18-Year-Old and Older PAL Tutor Study

Participants

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Informed Consent

Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad

Introduction

Researchers are inviting high school students, including you, to participate in a research study overseen by Principal Investigator (PI) Andy Walker, Ph.D., an associate professor in the Instructional Technology and Learning Sciences department at Utah State University and student investigator and focus groups researcher, Sterling R. Morris, a graduate student in the Department of Instructional Technology and Learning Sciences at Utah State University. This research aims to understand Hope Squad members' experiences teaching their peers lessons from the Hope Squad curriculum. Your participation is entirely voluntary.

This form includes detailed information on the research to help you decide whether to participate. Please read it carefully and ask any questions you have before providing consent to participate.

Procedures

Your participation will involve registering for and attending two focus group sessions (one-and-a-half hours each) and one journey map interview on Zoom (one hour) scheduled about two weeks apart. You will join as many as approximately four to seven other focus group participants from various Hope Squad chapters throughout the United States. The researchers anticipate that five to eight high school Hope Squad members will participate in each focus group, and 10 to 16 will participate in the research project.

The researcher, Sterling Morris, will open each focus group session by welcoming participants and providing guidance on using participation features on Zoom, like raising one's hand to speak, muting and unmuting, and adding comments to the chat. The researcher will note that while the conversation will be recorded, footage for the discussion will not be published, and the names and schools of individuals making comments will not be published. The researcher will emphasize the importance of and ask for a verbal commitment to keeping statements made by other participants confidential.

The researcher will then guide the group through a series of questions to help inform the researchers about Hope Squad members' experiences teaching the Hope Squad curriculum to their peers during the conversation. Participants will be encouraged to raise their hands, unmute themselves, and respond to questions. Participants may also submit their responses through Zoom's in-meeting chat function.

If you consent to participate, the researchers will also ask you to draw and turn in a journey map illustrating your experience in Hope Squad, including preparations and teaching of Hope Squad lessons to Hope Squad members.

Additionally, you will be invited to participate in a journey map interview. You can choose between two options: a one-on-one journey map interview with the researcher or a group journey map interview with one to two other research participants and the researcher. During this journey map interview, the researcher will review your journey map and ask for details and insights related to the journey map you have created.

The total length of participation for you is expected to be at most four and a half hours.

You can view the full agenda of the focus groups and journey map interview in the *Exploring Per-Assisted Learning Tutor Experiences Information Packet* attached to the email inviting you to participate in this study. If you did not receive the information mentioned above Packet, please request it from Sterling Morris at A00662498@usu.edu.

Alternative Procedures

Rather than consenting to participate in this research, you might prefer alternatives such as sharing feedback on your experiences teaching the Hope Squad curriculum to peers with your school's Hope Squad Advisor or by contacting Hope Squad's headquarters by mail, phone, or email:

Mail	Phone	Email
Hope Squad 5455 River Run Dr Provo, UT 84604	(801) 342-3447	support@hopesquad.com

Risks

While the risks of participating in two one-and-a-half-hour focus groups, drafting a journey map, and participating in a one-hour journey map interview might be no more likely or severe than those an individual might encounter in everyday activities, there are potential risks from participating, including the following risks:

- **Sensitive Topics:** Topics like suicide and self-harm might be discussed due to the nature and purpose of the Hope Squad Program. Although the researchers do not have questions about suicide as outlined in the focus group and journey map interview agendas, those conversations could have some associated risks.
- **Recognition of Participants:** Research participants may experience discomfort if they recognize an alternative participant and do not feel comfortable engaging in the conversation in the presence of someone they know.
- **Breach of Confidentiality:** A participant breaches confidentiality and shares information outside of the study.
- **Database Breach:** A database breach could open access to data gathered during the study.

Reducing the risk in the focus groups and journey map interview is paramount to ensure the safety and privacy of participants. The researchers will apply the following strategies to minimize the listed risks:

- **Sensitive Topics**: If potentially sensitive topics such as suicide and self-harm are discussed, the researchers will:
  - Resources: The researchers will provide participants with the following information on support resources from the National Suicide & Crisis Lifeline and the Trevor Project.
    - 988 Suicide and Crisis Lifeline: https://988lifeline.org/
      - Call or text 988 or text TALK to 741741
    - The Trevor Project for LGBTQ Youth: (866) 488-7386 or (866) 4-U-Trevor
  - Follow an agenda to stay clear from sensitive topics where possible: The researchers have developed an agenda that they will strive to follow that focuses on the study's purpose, which focuses on the participants' experiences tutoring other students. The researchers will also encourage participants to take breaks as needed.
  - Self-care check-in: Each session will include a self-care check-in in which researchers will pause research questions, encourage participants to take a break if needed, and reference available resources.

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- **Recognition of Participants**: The researchers will address the potential issue of discomfort from recognizing other participants by:
  - Anonymity: Researchers will anonymize research participants' responses in any settings where results are published.
- **Breach of Confidentiality**: To prevent participants from sharing sensitive information outside of the study:
  - Confidentiality agreement: The researchers will communicate to participants that what is shared in the focus group and journey map interview should remain confidential and ask for their verbal commitment to keep comments made by other participants confidential, including not repeating them or summarizing them after the focus group and journey map interview.
- **Database Breach**: To protect against data breaches, researchers will:
  - Use secure systems: The researchers will use a secure and encrypted database for storing and processing data.
  - Limited access: The researchers will be the sole individuals accessing the data collected.
  - Anonymize data: The researchers will ensure all data is anonymized or de-identified as soon as possible.

Benefits

The researchers cannot guarantee that you will directly benefit from this study. However, although you may not directly benefit from this study, it has been designed to understand how Hope Squad members experience teaching their peers the curriculum and relate to them. In addition, knowledge gathered from study participants will be shared with the Hope Squad organization, which may improve program operations for current and future Hope Squad advisors and members.

Confidentiality

The researchers will make every effort to ensure that the information you provide as part of this study remains confidential. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study. However, it may be possible for someone to recognize your individual responses to focus group questions and contributions to the study despite the researchers' efforts to anonymize findings. While the focus group and journey map interview's researcher, Mr. Morris, will ask all group members to keep the information they hear during the group conversation confidential, the researchers cannot guarantee that every participant will do so.

The researchers will collect your responses to focus group questions with a video recording of the two one-and-a-half-hour focus group discussions and one-hour journey map interview, including answers to questions submitted through the Zoom chat function. Consent information will be collected using Qualtrics. Contact information will be collected from Zoom's event registration tool. Online activities always carry a risk of a data breach. Still, the researchers will use systems and processes that minimize breach opportunities. The video files and comments submitted through Zoom's in-meeting chat, the demographic survey results, and images of the journey maps will be securely stored in a restricted-access folder on Box.com, an encrypted, cloud-based storage system. The researchers will then work to transcribe the conversation, replace the names of participants with pseudonyms, and delete video and chat files within one week of each focus group and journey map interview session. This consent form will be kept for three years after the study is complete and destroyed.

It is unlikely but possible that others (Utah State University or state or federal officials) may require the researchers to share the information you give them from the study to ensure that the research was conducted safely and appropriately. Therefore, the researchers will only share your information if law or policy requires the researchers to do so.

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If the researchers learn that you are being subjected to abuse or neglect or will engage in self-harm or intends to harm another, state laws require that the researchers report this behavior/intention to the authorities.

If the researchers learn that you are in imminent danger of suicide, they must act, including or up to the involuntary commitment.

Voluntary Participation & Withdrawal

Your consent to participation in this research is voluntary. If you agree to participate now and change your mind later, you may withdraw at any time by contacting the principal Investigator, Andy Walker, at (435) 797-2614 or andy.walker@usu.edu or student Investigator Sterling Morris by phone at (435) 760-4388 or by email at A00662498@usu.edu. If you inform the researchers that you choose to withdraw your consent or you decide to withdraw from the study after the researchers have already collected information about you and before the report is finalized, Sterling Morris will identify and delete responses submitted by them and not include your contributions in the final research report. If you decide not to participate, participation in the Hope Squad program will not be affected in any way.

The research team will need to terminate your participation in this study if you cannot agree to keep comments made during the focus group confidential. If a participant is disruptive, the researchers will ask them to discontinue it. If the participant's behavior continues, the researchers will ask them to leave the study. If a participant does not stay until the end of the hour when the focus group or journey map interview concludes, the researchers will withdraw the participant from the study. Should any participant refuse to leave, the researchers will politely but assertively remove the disruptive participant using Zoom's host management tools.

If a participant voluntarily withdraws or is terminated from the study early, the research team will prorate that participant's compensation, ensuring they were compensated proportionally for the time they invested in the study.

Compensation

For your full study participation, you will receive a total of $100 in Amazon gift cards, distributed in the following increments the same day you complete each research milestone:

- $30 for full participation in the first focus group.
- $30 for full participation in the second focus group.
- $10 for completing and turning in a journey map.
- $30 for full participation in the journey map interview

Full study participation is defined as attending the series of two scheduled focus groups, one journey map interview, responding to questions where possible, staying until the end of each focus group, and creating and submitting a journey map.

You will receive the Amazon gift cards via the email address you provided in completing the informed consent on Qualtrics in response to the prompt, "Please provide the email address you would like us to use to send you your Amazon gift card(s)."

Findings & Future Participation

Identifiers will be removed from your information. The researchers may include an image of your journey map in the publication(s) of this study's findings, anonymizing or removing identifiers that would link the design to you.

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Once the research study is complete, the student investigator will email you the study findings, including aggregate results relating to your participation, using the email submitted to register for the focus groups and journey map interview.

IRB Review

The Institutional Review Board (IRB) for the protection of human research participants at Utah State University has reviewed and approved this study. If you have questions about the research study itself, please contact the Principal Investigator at (435) 797-2614 or andy.walker@usu.edu or the Student Investigator, Sterling Morris, at (435) 760-4388 or A00662498@usu.edu. In addition, if you have questions about your rights or would simply like to speak with someone *other* than the research team about questions or concerns, please contact the IRB Director at (435) 797-0567 or irb@usu.edu.

Andrew E. Walker, Ph.D.
Principal Investigator
(435) 797-2614; andy.walker@usu.edu

Sterling R. Morris, MS
Student Investigator
(435) 760-4388; A00662498@usu.edu

Informed Consent

You agree to your participation in this study by signing below. You indicate that you understand the risks and benefits of your participation and know what you will be asked to do. You also agree that you have asked any questions you might have and are clear on how to stop your participation in the study if you choose to do so. Please be sure to retain a copy of this form for your records.

_____   _____   _____
Participant's Signature   Participant's Name, Printed   Date

Appendix G. Conducting Research for Peer Tutor Study

Figure G1

Demographic Survey for PAL Tutor Study

○ Gender questioning

○ Māhū, or muxe, or two spirit

○ Man

○ Nonbinary

○ Woman

○ prefer not to answer

Do you identify as transgender?

○ Yes

○ No

○ I prefer not to answer

What sex were you assigned at birth?

○ Female

○ Intersex

○ Male

○ I prefer not to answer

Ethnicity reflects the cultural traditions, values, and practices that are shared by people across generations. When you consider your personal and familial cultural values, traditions, and practices, what labels best describe your ethnicity? (mark ALL that apply)

☐ Arab, Middle Eastern, or North African—For example, Algerian, Egyptian, Iraqi, Jordanian, Sudanese, Syrian, Yemeni. Please specify:

[ ]

☐ Asian or Asian American—For example, Asian Indian, Chinese, Filipino, Japanese, Korean, Nepalese, Vietnamese. Please specify:

[ ]

☐ Black or African American—For example, Ethiopian, Haitian, Jamaican, Nigerian, Somalian. Please specify:

[ ]

☐ Hispanic or Latino—For example, Colombian, Cuban, Dominican, Mexican or Mexican American, Puerto Rican, Salvadoran. Please specify:

[ ]

☐ Native American or Alaska Native—For example, Arapaho, Blackfeet Tribe, Mayan, Native Village of Barrow Inupiat Traditional Government, Navajo Nation, Nome Eskimo Community. Please specify:

[ ]

☐ Native Hawaiian or Other Pacific Islander—For example, Chamorro, Fijian, Marshallese, Native Hawaiian, Samoan, Tongan. Please specify:

[ ]

☐ White or European American—For example, English, French, German, Irish, Italian, Polish

☐ Some other race, ethnicity, or origin. Please specify:

☐ I prefer not to answer

When thinking about physical attributes usually ascribed to race, which of the following general labels describe how you would describe yourself racially: (mark ALL that apply)

☐ Asian

☐ Black

☐ Indigenous, Aboriginal, or First Nations

☐ Latino or Hispanic

☐ Middle Eastern

☐ White

☐ Other, please specify:

☐ I prefer not to answer

How well do you use English?

- ○ Not well at all
- ○ Well
- ○ Fair
- ○ Poorly
- ○ Very poorly
- ○ Prefer not to answer

What language(s) do you use fluently or with near fluency? (mark **ALL** that apply)

- ☐ Arabic
- ☐ Bengali
- ☐ Cantonese
- ☐ English
- ☐ French
- ☐ German
- ☐ Haitian Creole

- [ ] Hindi/Hindustani
- [ ] Japanese
- [ ] Javanese
- [ ] Korean
- [ ] Malay/Indonesian
- [ ] Mandarin
- [ ] Polish
- [ ] Portuguese
- [ ] Punjabi
- [ ] Russian
- [ ] Signed Language
- [ ] Spanish
- [ ] Tagalog
- [ ] Telugu
- [ ] Vietnamese
- [ ] Other, please specify

[   ]

- [ ] I prefer not to answer

Which of these would you consider to be your primary language(s)? (mark **ALL** that apply)

- ☐ Arabic
- ☐ Bengali
- ☐ Cantonese
- ☐ English
- ☐ French
- ☐ German
- ☐ Haitian Creole
- ☐ Hindi/Hindustani
- ☐ Japanese
- ☐ Javanese
- ☐ Korean
- ☐ Malay/Indonesian
- ☐ Mandarin
- ☐ Polish
- ☐ Portuguese
- ☐ Punjabi

- ☐ Russian

- ☐ Signed Language

- ☐ Spanish

- ☐ Tagalog

- ☐ Telugu

- ☐ Vietnamese

- ☐ Other, please specify

  [   ]

- ☐ I prefer not to answer

Where do you live?

- ☐ In the United States or a United States Territory (mark all that apply):

- ☐ Midwest—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, North Dakota, South Dakota, Wisconsin

- ☐ Northeast—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont

- ☐ South—Arkansas, Alabama, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia

☐ West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

☐ United States territory—American Samoa, Baker Island, Guam, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Islands, Navassa Island, Northern Mariana Islands, Palmyra Atoll, Puerto Rico, Virgin Islands, Wake Island

☐ None of the above, please specify:

☐ Outside of the United States or United States Territories, please specify:

☐ I prefer not to answer

How many Hope Squad lessons have you taught Hope Squad members?

○ 1–2

○ 3 or more

○ I prefer not to answer

→

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We thank you for your time spent taking this survey.
Your response has been recorded.

Figure G2

Focus Group Agendas for PAL Tutor Study

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Session One Focus Group Agenda

Activity	Time	Language
Welcome	5–10 minutes	**Welcome:** Welcome to tonight's conversation. Thank you for volunteering to participate. **Introduction:** I am Sterling Morris. I am a Ph.D. student researcher at Utah State University. And I'm studying how Hope Squad members who have taught peers Hope Squad materials experience teaching. **Purpose:** USU professor Andy Walker and I are researching how high school students like you teach Hope Squad material to your peers, how you relate to students you have taught, and how they have related to you. This call aims to help us gather information to understand just that. This is our first session of a two-part focus group. **Participation not required:** Participation in this conversation is entirely voluntary. Participating in this research, not participating, or leaving early will not affect your standing in the Hope Squad program in any way. If you need to go for any reason, you can click/tap "leave meeting." No one will be upset if you choose to leave the conversation. If you end up needing to leave early, we will calculate your time invested in the study and prorate a gift card for the time you spent with us. **Meeting rules:** • To keep our conversation flowing smoothly tonight, please raise your hand by clicking/tapping "reactions+" and the "raise hand" button. We'll practice that function in just a moment. • When you are not commenting, please place yourself on mute. You'll know you are on mute if you see a red diagonal line going through your mic icon in Zoom. • I want to feel comfortable coming off mute to make comments. I will also invite you to share your thoughts in our chat by clicking the speech bubble that says "chat."

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Privacy: I want you to feel safe and welcome to share your experiences and thoughts during tonight's conversation. To ensure we keep our space safe and confidential, I want you to each show your consent to keeping all comments made by other participants confidential, which means not repeating them or summarizing them after our conversation. Additionally, no identifying information or comments, or chat submissions you make about the Hope Squad program and its instruction will be shared with your advisor, school, or the Hope Squad program officials. To show your consent, please use the "raise hand" function to raise your hand.

Data: A video of our conversation and comments submitted through chat will be recorded. No images from our recording will be published in our research, and any comments you make will be anonymized, meaning I will not use your official name or school in any reports of this research. In addition, we will transcribe our conversation within 72 hours, removing your names and deleting the video and audio files to protect your privacy.

You are the experts: I will be asking you about your experiences, specifically around preparing for, teaching, and reflecting on teaching your peers Hope Squad material. There are no wrong answers, and I trust your expertise. And I view you as co-researchers with lived experiences that are true to you. So please don't hesitate to share your experiences with us tonight and when we meet for a final time in about three weeks if you can attend.

Thank you: To thank you for your participation and contributions tonight, I will send you a $30 gift card to Amazon right after our conversation ends.

Disclaimer	2–3 minutes	**Potentially challenging topic:** Because we are discussing our experiences participating in the Hope Squad program this evening, issues related to suicide may arise. Therefore, if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red leave conversation text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation, or leaving it early, will have no adverse effect on your standing with the Hope Squad Program. I will calculate the time you spent on the call and prorate it to give you partial compensation for the $30 gift card.

Take a break if needed: If you need to take a break during our conversation and turn off your camera, please feel free to do so. Don't hesitate to send |

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me a direct message via chat if you are struggling with the content and need support.

Help is available: As always, support is available if you or someone you know is experiencing a mental health emergency. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week.

In addition, I am adding link to these and other resources in our chat.

[Post the following resource links in the chat]

- 988 Suicide & Crisis Lifeline: https://988lifeline.org/
  - Call or text 988 or text TALK to 741741
- The Trevor Project for LGBTQ Youth: (886) 488-7386 or (866) 4-U-Trevor

Focus group questions	20–25 minutes	**Questions from participants:** Do you have any questions before we begin? **Introductions:** Can you share your name, favorite subject, and how many years you've been involved with Hope Squad? - Can you tell me the story of how you came to join your Hope Squad? - Can you tell me why you chose to join your Hope Squad? - From a teaching perspective, what do you hope to achieve when you teach Hope Squad members parts of the curriculum? - Can you tell me a story about an experience you've had preparing for and leading teaching Hope Squad material to Hope Squad members? - Tell me some stories about taking on the tutor role. What were the topics? - Have you ever had experiences applying what you learned? - How has your experience teaching your peers affected your understanding of what being a Hope Squad member means? - What was going through your mind as you got ready to teach a lesson? - Can you describe the emotions or thoughts you experienced while you were teaching? - After wrapping up your lesson, how did it make you feel, and what stood out to you about the experience?

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Self-care check-in	2–3 minutes	**Checking in:** I want to pause for a minute and thank you for sharing your experiences during tonight's conversation. Remember that if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red "leave conversation" text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation or leaving will have no adverse effect on your standing with the Hope Squad program. **Take a break if needed:** If you need to take a break during our conversation and turn off your camera, please feel free to do so. Don't hesitate to send me a direct message via chat if you are struggling with the content and need support. **Help is available:** As always, support is available if you or someone you know is experiencing a mental health emergency. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week.

Focus group questions continued	20–25 minutes	• In what ways did your peers show interest or openness to your point of view?
		• How did you perceive your peers' understanding of the information you taught them?
		   o Can you elaborate on the reasons behind your observation?
		• How has the atmosphere felt while teaching Hope Squad lessons to Hope Squad members?
		• What challenges and victories do you see regarding the Hope Squad training?
		• What challenges have you had with teaching Hope Squad lessons to other Hope Squad members?
		• What parts of teaching peers have you liked the most?
		   o Why did you like those parts of teaching?
		• What are some things Hope Squad members can do to improve how they teach Hope Squad content?

Journey map assignment	10 minutes	**Journey map:** Let's talk homework. We would like to learn a bit more about your experiences preparing for, teaching, and reflecting on teaching your Hope Squad peers. One tool that could help us understand more about your

experiences is a journey map. Here's an example of what one map looks like: (Screen image of journey map). You can see it's illustrating someone's experience. Here's another example of a journey map (screen image of the second journey map example).

Instructions: Between now and when we meet for our Journey Map interview, can you plan to take 10–15 minutes to think about and draw out your experiences as a Hope Squad member who has taught other Hope Squad members parts of the curriculum. Think about how would you describe your process to prepare, teach, and then reflect on those teaching experiences after they have occurred? Please take special care to illustrate how those moments made you feel, change as a person and teacher, and affect your confidence in your ability to teach others the Hope Squad curriculum. I will email you the instructions.

How to submit: Feel free to take a picture and send me the image of your journey map anytime between now and when we meet again. You will then email me the image at the email address I provide in the instructions. When we meet for our interview, you'll have the option to schedule a group interview with 2-3 participants and me, in which we'll share journey maps and discuss them in a small group setting, or, if you prefer, I'll provide some individual interview time slots as well.

Compensation: To thank you for your time creating a Journey Map, I will send you $40 amazon gift card, which includes $10 for submitting a completed journey map and $30 participating in the journey map interview.

Questions: What questions do you have about creating your journey map?

Conclude	5 minutes	**Wrapping it up:** We will now wrap up our focus group conversation. I will review the notes and details from our discussion next week and prepare some follow-up questions for you when we meet in three weeks. Our meeting three weeks from now will feel like this focus group, and we'll continue our conversations about your experiences acting as peer teachers. And we'll review your journey maps as part of our conversations. If you have any questions or would like to withdraw your comments from the study, you can please contact Principal Investigator Andy Walker at (435) 797-2614 or andy.walker@usu.edu or me by phone at (435) 760-4388 or by email at A00662498@usu.edu.

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I will now take the role for today's $30 Amazon gift cards to thank you for participating tonight. Thank you! Those gift cards will be sent to you this evening.

Thank you for attending. I value your engagement and feedback!

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Session Two Focus Group Agenda

Activity	Time	Language
Welcome	5–10 minutes	**Welcome:** Welcome back and welcome to tonight's conversation. Thank you for volunteering to participate. I hope you had a few safe, happy weeks since we last met. I will review information about our study that many of you may have heard before reviewing our journey maps and questions. **Introduction:** If any of you are joining for the first time, I am Sterling Morris. I am a Ph.D. student researcher at Utah State University. And I'm studying how Hope Squad members who have taught peers Hope Squad materials experience teaching. Many of you joined me for a conversation three weeks ago in which we discussed your experiences teaching peers Hope Squad material. **Purpose:** USU professor Andy Walker and I are researching how high school students like you teach Hope Squad material to your peers, how you relate to students you have taught, and how they have related to you. This call aims to help us gather information to understand just that. This is our second session of a two-part focus group. **Participation not required:** Participation in this conversation is entirely voluntary. Participating in this research, not participating, or leaving early will not affect your standing in the Hope Squad program in any way. If you need to go for any reason, you can click/tap "leave meeting." No one will be upset if you choose to leave the conversation. **Meeting rules:** • To keep our conversation flowing smoothly tonight, please raise your hand by clicking/tapping "reactions+" and the "raise hand" button. We'll practice that function in just a moment. • When you are not commenting, please place yourself on mute. You'll know you are on mute if you see a red diagonal line going through your mic icon in Zoom. • I want to feel comfortable coming off mute to make comments. I will also invite you to share your thoughts in our chat by clicking the speech bubble that says "chat."

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Privacy: I want you to feel safe and welcome to share your experiences and thoughts during tonight's conversation. To ensure we keep our space safe and confidential, I want you to each show your consent to keeping all comments made by other participants confidential, which means not repeating them or summarizing them after our conversation. Additionally, no identifying information or comments, or chat submissions you make about the Hope Squad program and its instruction will be shared with your advisor, school, or the Hope Squad program officials. To show your consent, please use the "raise hand" function to raise your hand.

Data: A video of our conversation and comments submitted through chat will be recorded. No images from our recording will be published in our research, and any comments you make will be anonymized, meaning I will not use your official name or school in any reports of this research. In addition, we will transcribe our conversation within 72 hours, removing your names and deleting the video and audio files to protect your privacy.

You are the experts: I will be asking you about your experiences, specifically around preparing for, teaching, and reflecting on teaching your peers Hope Squad material. There are no wrong answers, and I trust your expertise. And I view you as co-researchers with lived experiences that are true to you. So please don't hesitate to share your experiences with us tonight and when we meet for a final time in about three weeks if you can attend.

Thank you: To thank you for your participation and contributions tonight, I will send you a $30 gift card to Amazon right after our conversation ends.

Disclaimer	2–3 minutes	**Potentially challenging topic:** Because we are discussing our experiences participating in the Hope Squad program this evening, issues related to suicide may arise. Therefore, if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red leave conversation text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation, or leaving it early, will have no adverse effect on your standing with the Hope Squad Program.
		Take a break if needed: If you need to take a break during our conversation and turn off your camera, please feel free to do so. Don't hesitate to send me a direct message via chat if you are struggling with the content and need support.

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		your participation in our conversation or leaving will have no adverse effect on your standing with the Hope Squad program.

As always, if you or someone you know is experiencing a mental health emergency, help is available. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week. |
| *Focus group follow-up questions* | 20–25 minutes | • How would you describe your peers' level of concern for your well-being?
• How would your peers listen for feedback?
• What lessons have been the most helpful for you as a Hope Squad member?
• Ask session one questions we didn't have time to ask, if there any. |
| *Conclude* | 5 minutes | **Wrapping it up:** We will now wrap up our focus group conversation.

I will spend the fall reviewing today's conversations. I'll work with researcher Andy Walker to publish a final report sometime in 2024, which we will send to you and the Hope Squad.

If you have any questions or would like to withdraw your comments from the study, you can please contact Principal Investigator Andy Walker at (435) 797-2614 or andy.walker@usu.edu or me by phone at (435) 760-4388 or by email at A00662498@usu.edu.

I will now take the role for today's $30 Amazon gift cards to thank you for participating tonight. Thank you! Those gift cards will be sent to you this evening.

Our final session of this study will be our journey map interviews. Thanks to those of you have who submitted your journey maps. I'll be sending out links for a handful of different interview time options for your convenience. I'm hoping you can find a time that works for your schedule and register for it. And if you haven't already, please complete your journey map and submit it before we meet for our final interview.

Thank you for attending and for your participation in this study. I value your engagement and feedback! |

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Help is available: As always, support is available if you or someone you know is experiencing a mental health emergency. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week.

[Post the following resource links in the chat]

- 988 Suicide & Crisis Lifeline: https://988lifeline.org/
  - Call or text 988 or text TALK to 741741

The Trevor Project for LGBTQ Youth: (886) 488-7386 or (866) 4-U-Trevor

Focus group questions	20–25 minutes	**Questions from participants:** Do you have any questions before we begin? **Introductions:** Let's start with brief introductions so new attendees can get to know the entire group. Can you share your name, what you want to do for a career when you complete your formal education, and how many years you've been involved with Hope Squad?

Focus group follow-up questions	20–30 minutes	- Follow-up questions related to session one conversations
		- How knowledgeable were you about the information you taught?
		- How did you prepare to teach a lesson?
		  - What resources did you use?
		  - What training did you get?
		- How would you approach explaining concepts in the lessons to ensure clarity and comprehension?
		  - Can you provide examples or insights into your thought process?
		- How did you perceive your peers' level of engagement in the lessons you taught?

Self-care check-in	2–3 minutes	I want to pause for a minute and thank you for sharing your experiences during tonight's conversation. Remember that if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red "leave conversation" text at the bottom of the screen. I won't be upset with you for leaving, and

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Session Three Journey Map Interview Agenda

Activity	Time	Language
Welcome	5–10 minutes	**Welcome:** Welcome back and welcome to tonight's conversation. Thank you for volunteering to participate. I hope you had a few safe, happy weeks since we last met. I will review information about our study that many of you may have heard before reviewing our journey maps and questions. **Purpose:** As a reminder, USU professor Andy Walker and I are researching how high school students like you teach Hope Squad material to your peers, how you relate to students you have taught, and how they have related to you. This call aims to help us gather information to understand just that. This is our second session of a two-part focus group. **Participation not required:** Participation in this conversation is entirely voluntary. Participating in this research, not participating, or leaving early will not affect your standing in the Hope Squad program in any way. If you need to go for any reason, you can click/tap "leave meeting." No one will be upset if you choose to leave the conversation. **Privacy:** I want you to feel safe and welcome to share your experiences and thoughts during tonight's conversation. To ensure we keep our space safe and confidential, I want you to each show your consent to keeping all comments made by other participants confidential, which means not repeating them or summarizing them after our conversation. Additionally, no identifying information or comments, or chat submissions you make about the Hope Squad program and its instruction will be shared with your advisor, school, or the Hope Squad program officials. To show your consent, please use the "raise hand" function to raise your hand. **Data:** A video of our conversation and comments submitted through chat will be recorded. No images from our recording will be published in our research, and any comments you make will be anonymized, meaning I will not use your official name or school in any reports of this research. In addition, we will transcribe our conversation within 72 hours, removing your names and deleting the video and audio files to protect your privacy. **You are the expert(s):** I will be asking you about your experiences, specifically around preparing for, teaching, and reflecting on teaching your peers Hope Squad material. There are no wrong answers, and I trust your expertise. And I view you as co-researchers with lived experiences that are

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		true to you. So please don't hesitate to share your experiences with us tonight and when we meet for a final time in about three weeks if you can attend. **Thank you:** To thank you for your participation and contributions tonight, I will send you a $40 amazon gift card, which includes $10 for submitting a completed journey map and $30 participating in the journey map interview following our interview.

Disclaimer	2–3 minutes	**Potentially challenging topic:** Because we are discussing our experiences participating in the Hope Squad program this evening, issues related to suicide may arise. Therefore, if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red leave conversation text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation, or leaving it early, will have no adverse effect on your standing with the Hope Squad Program.
		
		Take a break if needed: If you need to take a break during our conversation and turn off your camera, please feel free to do so. Don't hesitate to send me a direct message via chat if you are struggling with the content and need support.
		
		Help is available: As always, support is available if you or someone you know is experiencing a mental health emergency. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week.
		
		[Post the following resource links in the chat]
		
		    • 988 Suicide & Crisis Lifeline: https://988lifeline.org/
		        ◦ Call or text 988 or text TALK to 741741
		
		The Trevor Project for LGBTQ Youth: (886) 488-7386 or (866) 4-U-Trevor

Journey Map Interview Questions	15–20 minutes	**Journey map review and questions:** Participants will be asked to screen their journey map or share it with the group as a focal point for conversation.

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		• Can you walk me through your journey map, starting from the beginning through where it ended?
		• I see [specific notation/milestone] marked here. Can you tell me more about what happened at this point?
		• Were there any turning points or significant moments in your Hope Squad teaching experience that stand out on this map?
		• You've indicated [specific emotion] here. What was happening at that time that made you feel this way?
		• Did you make any revisions to this journey map based on your feedback or after reflecting on your experience? Can you walk me through those changes?
		• Did any feedback from peers or mentors influence your depiction of any events on the map?
		• Were there moments in your journey where you felt particularly challenged or fulfilled? Can you point those out and share more?
		• You've indicated [specific emotion] here. How did this emotion evolve or change as you moved forward or looked back on your journey?
Self-care check-in	2–3 minutes	• I want to pause for a minute and thank you for sharing your experiences during tonight's conversation. Remember that if at any time during our conversation, you feel uncomfortable for any reason, please feel free to leave the conversation by clicking or tapping the red "leave conversation" text at the bottom of the screen. I won't be upset with you for leaving, and your participation in our conversation or leaving will have no adverse effect on your standing with the Hope Squad program.
		• As always, if you or someone you know is experiencing a mental health emergency, help is available. Please contact your physician, go to your local emergency room, or call the suicide prevention hotline in your country. For the United States, please call or text 988 to reach a trained counselor with the 988 Suicide and Crisis Lifeline. Support is free, confidential, and available in English and Spanish, 24 hours a day, seven days a week.
Journey Map Interview Questions	15–20 minutes	• Looking at this midpoint of your map, how did it influence events that followed? And in what ways did it hinge upon the events that came before?
		• How did your interactions with other Hope Squad members influence the stages or events on your journey map?

		• How does [early event/milestone] on your map set the stage for [later event/milestone]? What connections do you see between them?
		• Looking at your journey map, what would you say were your biggest takeaways or lessons learned from your PAL tutoring experience?
		• If you were to advise a new Hope Squad member planning to teach a lesson, which parts of your journey would you highlight or caution them about based on your map?
		• How did the process of creating this journey map help you reflect on your Hope Squad tutoring experience?
		• Were there any challenges or insights you encountered while making this map?
		• How can the Hope Squad program develop the Hope Squad member experience for future members?
Conclude	5 minutes	**Wrapping it up:** We will now wrap up our focus group conversation.
		I will spend the fall reviewing today's conversations along with our first session, your journey map. I'll work with researcher Andy Walker to publish a final report sometime in 2024, which we will send to you and the Hope Squad.
		Remember that we will keep your comments and journey maps anonymous to protect your privacy.
		Our meeting three weeks from now will feel like this focus group, and we'll continue our conversations about your experiences acting as peer teachers. And we'll review your journey maps as part of our conversations.
		If you have any questions or would like to withdraw your comments from the study, you can please contact Principal Investigator Andy Walker at (435) 797-2614 or andy.walker@usu.edu or me by phone at (435) 760-4388 or by email at A00662498@usu.edu.
		I will now take the role for today's $40 Amazon gift cards to thank you for participating tonight: $10 for your journey map and $30 for your participation in today's interview. Those gift cards will be sent to you this evening.
		• Thank you for attending and for your participation in this study. I value your engagement and feedback!

Appendix H. Series of IRB-Approved Communications with Research Participants

in PAL Tutor Study

Figure H1

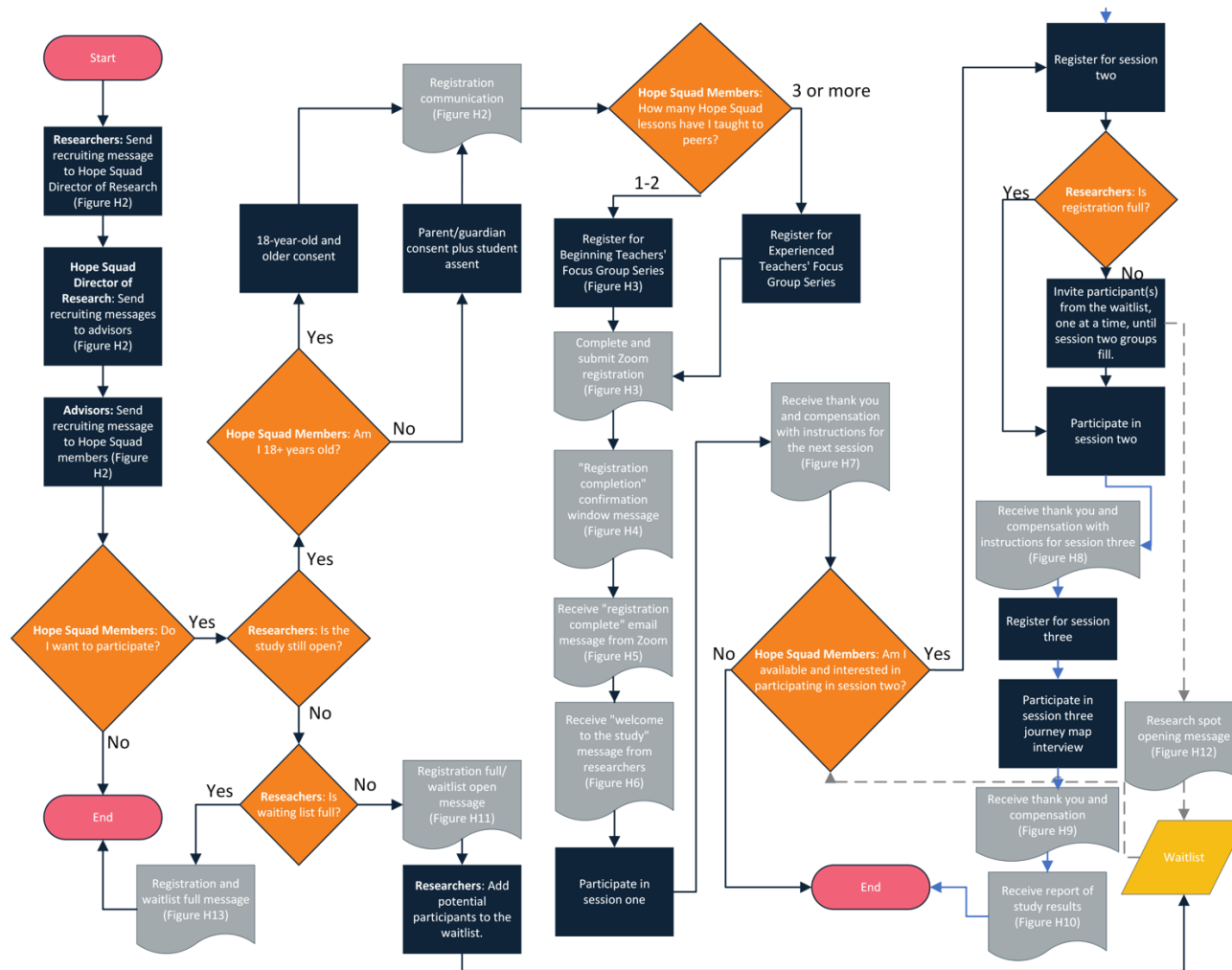*Flow Chart on Recruiting, Coordination, and Closing Study Communication*

Figure H2

Registration Research Participants See After Providing Consent (and Assent) Message

Thank you for submitting your consent to participate in the "Exploring Peer-Assisted Learning Tutor Experiences" study.

Please register for the focus group below that aligns with your level of experience teaching Hope Squad members. After registering, you will receive a confirmation email containing information about joining the meeting.

Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)

- **Session one: December 5, 2023 (Click here to register)**
    - **4:30** PM Pacific Standard Time (PST)
    - **5:30** PM Mountain Standard Time (MST)
    - **6:30** PM Central Standard Time (CST)
    - **7:30** PM Eastern Standard Time (EST)

Experienced Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 3 or more Hope Squad lessons to Hope Squad Members)

- **Session one: December 6, 2023 (Click here to register)**
    - **4:30** PM Pacific Standard Time (PST)
    - **5:30** PM Mountain Standard Time (MST)
    - **6:30** PM Central Standard Time (CST)
    - **7:30** PM Eastern Standard Time (EST)

We look forward to learning from you shortly.

Should you join a conversation and feel uncomfortable for any reason, whether related to matters of privacy or otherwise, you are welcome to leave with no negative impact on your involvement in your Hope Squad. While you are welcome to join with your camera on, you do not need to have your camera on to participate in the conversation. We ask that you only use your first name and any preferred pronouns in your Zoom profile.

Thank you for your interest in participating in this study!

Figure H3

Registration Window to Register for Session One Focus Groups Message

Session one: Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)

Date & Time   Dec 5, 2023 04:30 PM in Pacific Time (US and Canada)

Meeting Registration

First Name*   **Last Name***

First Name   Last Name

Email Address*

join@company.com

Information you provide when registering will be shared with the account owner and host and can be used and shared by them in accordance with their Terms and Privacy Policy.

Register

Figure H4

Registration Completion Confirmation Window Message

You have successfully registered

Please check the confirmation email sent to sterlingrmorr**@gmail.com

Topic	**Session one: Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)**
Date & Time	Selected Sessions: Dec 5, 2023 04:30 PM

Figure H5

Registration Completion Email from Zoom Message

Figure H6

Welcome Email from Researchers Before Session One Message

Hello <mark>[insert the first name of assented/consented and registered study participant]</mark>,

We saw your submitted registration for our "Peer Teaching in Hope Squads" study.

Welcome to the study! We want to thank you so much for your interest and registration. We are looking forward to learning from you soon.

Below is the Zoom link for our registered session:

Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)

- Session one: [<mark>Insert date when study approved</mark>]

Can you take 3 to 5 minutes between now and session one to respond to this survey? Your and other participants' responses will be anonymous and help our research team better understand our focus group participants.

Best regards,

_____

Sterling R. Morris, M.S.
Pronouns: He/Him/His
Ph.D. Student
Instructional Technology & Learning Sciences
Emma Eccles Jones College of Education and Human Services
435-760-4388
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EMMA ECCLES JONES
COLLEGE *of* EDUCATION
and HUMAN SERVICES
UtahStateUniversity

Note. Parents/guardians were cc'd on this message to study participants who were minors. The Experienced Teachers' Focus group was identical to the message above except for the group's name in the message and the meeting date, time, and link.

Figure H7

Thank You for Participating in Session One, Compensation for Session One, Details on Session Two, and Homework Assignment Message

Hello [insert the first name of assented/consented and registered study participant],

Thank you for sharing insights on your experience teaching your peers in Hope Squads this evening. As promised, I have included your $30 Amazon Gift Card below.

Your gift card claim code is [Insert unique gift card code]. To redeem your gift card, scan the claim code in the attached PDF using the Amazon App or visit amazon.com/redeem.

I've included details and a link to our next focus group session, in which we will discuss some follow-up questions below. Please register for it with the link below.

Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members)

- Session two: [<mark>Insert date when study approved</mark>]

And following our next focus group, I hope to meet with you one final time in an interview setting. Can you take 10 to 15 minutes to complete your journey map (instructions attached) and send it to me at A00662498@usu.edu in the next couple of weeks?

You will receive an additional $30 gift card if you join and complete session two. I will send your gift card out the evening after we complete session two.

I will also give you an additional $10 gift card for submitting your journey Map and $30 for participating in a journey map interview when the time comes to meet and discuss your map.

Best regards,

_____

Sterling R. Morris, M.S.
Pronouns: He/Him/His
Ph.D. Student
Instructional Technology & Learning Sciences
Emma Eccles Jones College of Education and Human Services
435-760-4388
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EMMA ECCLES JONES
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and HUMAN SERVICES
UtahStateUniversity

Note. Parents/guardians were cc'd on this message to study participants who were minors. The Experienced Teachers' Focus group was identical to the message above except for the group's name in the message and the meeting date, time, and link.

Figure H8

Thank You for Participating in Session Two, Compensation for Session Two Message,

and Details on Session Three

Hello <mark>[insert the first name of assented/consented and registered study participant]</mark>,

Thank you for sharing insights on your experience teaching your peers in Hope Squads this evening. As promised, I have included your $30 Amazon Gift Card below.

Your gift card claim code is <mark>[Insert unique gift card code]</mark>. To redeem your gift card, scan the claim code in the attached PDF using the Amazon App or visit amazon.com/redeem.

I have included details and a link to our final interaction, an interview where we will review and discuss your journey map. I have provided the option to meet with 1-2 other individuals for this section, or if you would prefer to meet one-on-one, that option is also available. You can register for one of the interview meeting times that works with your schedule and meets your preferences below:

Beginning Teachers' Focus Group Series (For Hope Squad Members Who Have Taught 1-2 Hope Squad lessons to Hope Squad Members) Journey Map Interview

- Group interview option one: [Insert date when study approved]
- Group interview option two: [Insert date when study approved]
- Individual interview option one: [Insert date when study approved]
- Individual interview option two: [Insert date when study approved]
- Individual interview option three: [Insert date when study approved]
- Individual interview option four: [Insert date when study approved]
- Individual interview option five: [Insert date when study approved]

If you haven't already, can you take 10 to 15 minutes between now and when you signed up to complete your journey map (instructions attached) and send it to me at A00662498@usu.edu?

You will receive an additional $10 gift card for submitting your journey Map and $30 for participating in a journey map interview when the time comes to meet and discuss your map.

Best regards,

_____

Sterling R. Morris, M.S.
Pronouns: He/Him/His
Ph.D. Student
Instructional Technology & Learning Sciences
Emma Eccles Jones College of Education and Human Services
435-760-4388
itls.usu.edu | Email me

EMMA ECCLES JONES
COLLEGE *of* EDUCATION
and HUMAN SERVICES
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Note. Parents/guardians were cc'd on this message to study participants who were minors. The Experienced Teachers' Focus group was identical to the message above except for the group's name in the message and the meeting date, time, and link.

Figure H9

Thank You for Participating in Session Three. Compensation for Session Three Message

Hello [insert the first name of assented/consented and registered study participant],

Thank you for sharing insights on your experience teaching your peers in Hope Squads this evening and throughout the study!

Over the next several months, I will review what you and others shared and finalize the research study. When I finalize the findings, I will send them your way.

As promised, I have included your $40 Amazon gift card below for submitting your journey map and participating in tonight's conversation.

Your gift card claim code is [Insert unique gift card code]. To redeem your gift card, scan the claim code in the attached PDF using the Amazon App or visit amazon.com/redeem.

Thank you again for sharing your insights!

Best regards,

_____

Sterling R. Morris, M.S.
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Note. Parents/guardians were cc'd on this message to study participants who were minors. The Experienced Teachers' Focus group was identical to the message above except for the group's name in the message and the meeting date, time, and link.

Figure H10

Sharing Study Results with Participants' Message

Hello [insert the first name of assented/consented and registered study participant],

Last fall, you joined several other Hope Squad members in sharing your experience teaching peers in Hope Squad. Thank you. We have finalized reviewing your insights and compiled what we learned in the attached report.

Thank you again for sharing your insights!

Best regards,

_____

Sterling R. Morris, M.S.
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and HUMAN SERVICES
UtahStateUniversity

Note. Parents/guardians will be cc'd on this message to study participants who are minors.

Figure H11

Registration for The Study is Full Qualtrics Message for the First 10 Registrants after

Capacity
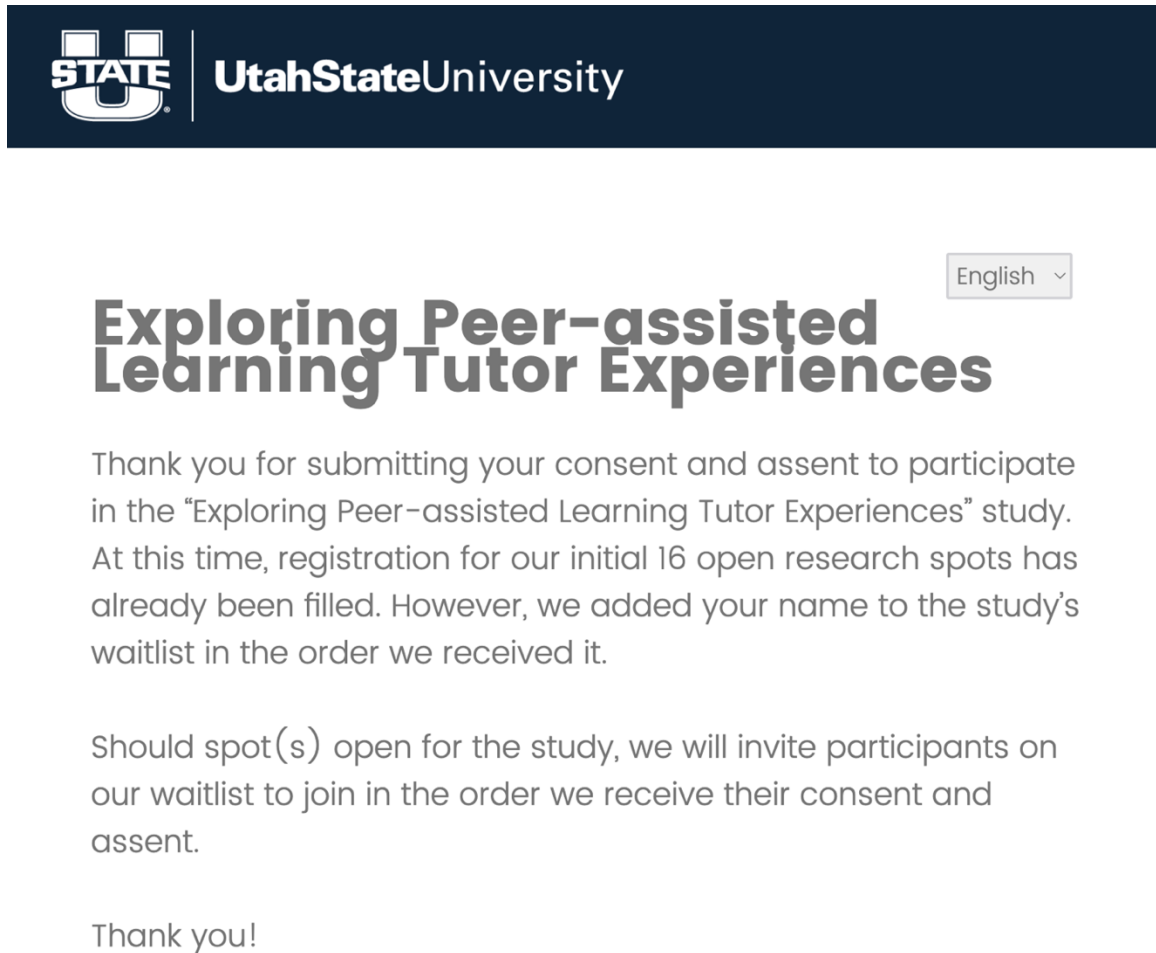
Note. I planned to notify Hope Squad when the study and waitlist were full. Once the

study was full, I planned to swap out the Qualtrics consent/assent form to point

respondents to this message rather than the original registration message to build up a 10-

person waitlist to draw from should an initial participant be unable to attend the first or

second session (see Figure H12).

Figure H12

Open Spot for the Study Email Message

Hello <mark>[insert first name of potential participant]</mark>,

We saw your interest in participating in our Exploring Peer-Assisted Learning Tutor Experience Study.

A spot opened on our study, and our next focus group below is scheduled on Zoom at the following date and time:

<mark>[Insert date, time, and focus group link].</mark> If you are still interested in and available to participate in this research, please register for the session by [<mark>insert due date to register concerning focus group date</mark>].

We are excited to learn from you.

Thank you!

_____

Sterling R. Morris, M.S.
Pronouns: He/Him/His
Ph.D. Student
Instructional Technology & Learning Sciences
Emma Eccles Jones College of Education and Human Services
435-760-4388
itls.usu.edu I Email me

Note. Parents/guardians would have been cc'd on this message to study participants who are minors, were I to need to send it.

Figure H13

Registration for The Study is Full Qualtrics Message After Study, and the Waitlist is Full

Note. I planned to notify Hope Squad when the study and waitlist were filled. Once the

study and waitlist were filled, I planned to close the Qualtrics Survey to additional

responses using the above message.

CURRICULUM VITAE

STERLING R. MORRIS

Department of Instructional Technology & Learning Sciences
Emma Eccles Jones College of Education and Human Services
Utah State University

A00662498@usu.edu   2830 Old Main Hill
(435) 760-4388   Logan UT 84322-0001
sterlingrmorris.com

EDUCATION

Ph.D. Utah State University   2024
Instructional Technology & Learning Sciences
Multiple paper dissertation consisting of the following papers:
- "Peer-assisted learning for gatekeeper training: A literature review."
- "Peer-assisted learning in a high school suicide prevention intervention: An exploratory qualitative study."
- "Exploring peer-assisted learning tutor experiences in Hope Squad."

Committee: Drs. Andrew E. Walker (Advisor), Jody Clarke-Midura, Deborah A. Fields, Michael E. Levin, and Colby Tofel-Grehl

M.S. Utah State University   2012
Management Information Systems

B.S. Utah State University   2010
Economics

B.S. Utah State University   2010
International Business

RESEARCH INTERESTS

- Affinity spaces
- Cognitive congruence
- Peer-assisted learning
- Social congruence
- Social learning theory
- Suicide prevention education

PUBLICATIONS

Journal Articles

Peer-Reviewed

Nadelson, L. S., Sias, C. M., Matyi, J., **Morris, S. R.**, Cain, R., Cromwell, M., … Xie, T. (2016) A world of information at their fingertips: College students' motivations and practices in their self-determined information seeking. *International Journal of Higher Education, 5*(1), 220–231. https://doi.org/ghgcmt

In Progress

Morris, S. R. (2024a). *Exploring Peer-Assisted Learning Tutor Experiences in Hope Squad* [Unpublished manuscript]. Department of Instructional Technology and Learning Sciences, Utah State University.

Morris, S. R. (2024b). *Peer-assisted learning for gatekeeper training: A literature review* [Unpublished manuscript]. Department of Instructional Technology and Learning Sciences, Utah State University.

Morris, S. R. (2024c). *Peer-assisted learning in a high school suicide prevention intervention: An exploratory qualitative study* [Unpublished manuscript]. Department of Instructional Technology and Learning Sciences, Utah State University.

Theses and Reports

In Progress

Morris, S. R. Dissertation: Exploring peer-assisted learning in a high-school-based suicide prevention intervention.

PRESENTATIONS

Refereed Presentations

Morris, S. R. (2024, April 11–14). *Peer-assisted learning in a school suicide prevention intervention* [Poster Presentation]. 2024 American Educational

Research Association Annual Meeting, Philadelphia, Pennsylvania. https://bit.ly/46TPZdn

Morris, S. R. (2022, October 7). *Peer-assisted learning in a school suicide prevention intervention* [Poster Presentation]. UVU Conference on Suicide Prevention, Orem, Utah. https://bit.ly/3up4WTA

Morris, S. R., & Child, C. (2011, January). *Promoting writing through social media* [Poster Presentation]. 2011 Rocky Mountain Peer Tutoring Conference. Salt Lake City, Utah. https://bit.ly/3YSvWI3

Professional Presentations

Morris, S. R. (2015, May). *Using social media to reach target audiences*. Cache Arts Summit

Morris, S. R. (2012, January). *Alumni Panel on social media and public relations*. 2012 Mountain West Regional PR Conference

Invited Conference Panels

Morris, S. R. (2012, January). *How to become a digital leader making you a resource to your student body* [Presenter]. 2012 Utah Leadership Academy.

EXPERIENCE

Research Experience

Dissertation, Utah State University, Logan, Utah   2024
Advisor: Dr. Andrew E. Walker
- Conducted systematic literature review
- Led qualitative studies and reported on findings

Intermountain Health, Salt Lake City, Utah   2024–Present
Regional Internal Communications Director
- Oversees the gathering and distribution of communications to Intermountain's caregivers who live in Utah and Idaho.

Intermountain Health, Salt Lake City, Utah   2021–24
Communications Manager
- Gathered, wrote, and refined communication on annual community health impact informed by Intermountain Health's *Community Health Needs Assessment* and *Community Health Implementation Plan* documents.

PoliticIt, Logan, Utah   2011–14
Co-Founder
- Gathered and reviewed potential indicators of political candidates' campaign performance.
- Assimilated, wrote, and distributed findings on political candidates' projected campaign performance.

Jon M. Huntsman School of Business, Logan, Utah   2011–12
Graduate Assistant
- Investigated and evaluated social media performance metrics shared among business schools.
- Implemented findings supporting business school communications and engagement with students, alums, and friends.

Teaching Experience

Utah State University, Logan, Utah   2017
Adjunct Instructor, Department of Instructional Technology & Learning Sciences
ITLS 5205: Computer Applications for Instruction and Training
- Reviewed, updated, and taught the entire course, additionally offering to meet with students in the lab to review assignments and guide them on learning challenges in using the various applications, including Adobe Premier, Photoshop, InDesign, Camtasia, Audacity, Qualtrics, Canvas, and others. Managed and updated the project-centered curriculum on the university's learning management system, Canvas.

Udemy, San Francisco, California.   2014–16
Instructor
- Researched, planned, developed, promoted, taught, and supported two courses designed to help students refine their online presence in preparation for job searches and beyond.

Utah State University, Logan, Utah   2014–15
Instructional Designer, Jon M. Huntsman School of Business
Huntsman School Road Map to Graduation
- Collaborated with team to produce a seven-part series of videos to illustrate opportunities for students to engage in their undergraduate education within the business school.

Utah State University, Logan, Utah   2011
Instructional Designer, Jon M. Huntsman School of Business

A Look at Customer Service

- Worked in partnership with a team to lead an instructional design performance improvement project where we developed a training and monitoring human performance improvement project for a client at the Delta Center venue in Salt Lake City, Utah.

ACADEMIC AND PROFESSIONAL APPOINTMENTS

Regional Communications Director   2024–Present
Canyons Region
Intermountain Health
Salt Lake City, Utah
Directs internal communications channels to educate and inform Intermountain Health's caregivers in Idaho, Central, and Northern Utah. Provide strategic support and guidance to the Canyons Region President and Canyons Region Executive Team on key communications efforts with caregivers and the community Intermountain serves.

Communications Manager   2018–24
Community Health
Intermountain Health
Salt Lake City, Utah
Directed a team supporting Intermountain Health's communications strategy and efforts around its Community Health initiatives, including improving mental health and well-being, including membership on Intermountain's Suicide Prevention Executive Steering Committee. Supported additional community health initiatives, including improving chronic and avoidable outcomes and addressing and investing in the social determinants of health.

Communications Manager   2015–18
Intermountain Logan Regional Hospital
Intermountain Health
Logan, Utah
Directed a team of communication specialists in producing internal and external communications for the hospital.

Communications Specialist   2013–15
Intermountain Logan Regional Hospital
Intermountain Health
Logan, Utah
Produced internal and external communications, including instructional

materials for the hospital and community.

Co-Founder 2012–14
PoliticIt
Logan, Utah
Organized, produced, led, directed communications efforts, and executed a
national tour to train users on campaign software.

Graduate Fellow 2011–12
Jon M. Huntsman School of Business
Utah State University
Logan, Utah
Researched best practices and organized, produced, led, and directed
social media marketing efforts for the school.

Writing Fellow 2009–10
Utah State University
Logan, Utah
Coordinated with and supported peer students in editing, reviewing, and
helping them in successfully writing and completing assignments. The
Writing Fellows (WF) program comprises high-achieving students
nominated to the program by their professors because of their excellent
writing skills.

Supplemental Instructor 2007–08
USU 1330 – Civilization: Creative Arts (BCA)
Supplemental Instruction program
Office of Academic Belonging & Learning Excellence
Utah State University
Logan, Utah
Supplemental Instruction (SI) is a peer academic support program for
students registered for breadth education courses. This is a service that the
student has already paid for through their tuition and fees. As a
supplemental instructor, I coordinated with the course professor, Dr.
Michael Ballam, on the curriculum and provided supplemental instruction
sessions for students to review course content and help students prepare
for exams.

HONORS AND AWARDS

Graduate Student Research Award 2023
The Emma Eccles Jones College of Education and Human Services at Utah
State University provided this non-competitive award supporting the
recruitment funding for the *Exploring Peer-Assisted Learning Tutor*

Experiences in Hope Squad study. The Department of Instructional Technology and Learning Sciences provided matching funds.
Award: $1,718

Service Award   2021
System Incident Command – Liaison Section
Intermountain Health
Recognition was received for remarkable commitment, dedication, and teamwork in fighting the COVID-19 pandemic.

LiVe Well Hero Leader Award   2019
Intermountain Health
LiVe Well Heroes are caregivers who demonstrate their commitment to living well through their choices and actions. Their examples positively influence and inspire others around them. LiVe Well Heroes move us closer to fulfilling Intermountain's mission: helping people live the healthiest lives possible. Caregivers are nominated by their peers.

Tuition Scholarship   2015
Instructional Technology & Learning Sciences Department
Emma Eccles Jones College of Education and Human Services
Utah State University
Awarded $500

Huntsman School Graduate Assistant of the Year   2012

Graduate Assistantship   2011–12
Data Analytics & Information Systems Department
Jon M. Huntsman School of Business
Utah State University
Awarded $19,080

Hansen Scholarship   2007–11
Jon M. Huntsman School of Business
Utah State University
Awarded $4,350

Writing Fellow   2009–10
Utah State University
Awarded $500

Huntsman Scholarship   2008–10
Jon M. Huntsman School of Business
Utah State University
This honors program scholarship (which funded tuition and two fully funded international learning experiences) was awarded to the top 4% of

students enrolled in the Jon M. Huntsman School of Business based on academic performance, leadership qualities, and service engagement. Awarded $10,500

Koch Scholarship   2009
Jon M. Huntsman School of Business
Utah State University
Awarded $1,000

Hugh O'Brian Youth Leadership Scholarship   2000–01
This scholarship funded participation in a program designed to help high school sophomores recognize and apply their leadership talents to become effective, ethical leaders in their homes, schools, and communities.

TECHNICAL SKILLS

Content management systems: **Squarespace, WordPress®**

Computer applications for instruction and training: **Adobe Creative Cloud, including Captivate Media Encoder, Illustrator, InDesign, Photoshop, and Premier Pro. Camtasia, wikis.**

Data collection and analysis: **Excel, NVivo, Qualtrics, SPSS, SQL Server Analysis Services, SQL Server Integration Services, Zoom.**

Data pre-processing: **SQL Server Management Studio.**

Data visualization: **Tableau.**

Learning management systems: **Canvas.**

Programming: **ASP.NET, CSS, HTML, Visual Basic, Visual Studio.**

Project management platforms: **Airtable, Trello, Workfront.**

Research processes and methods: **Coding, statistics visualization, literature review, focus groups.**

Web conferencing: **Adobe Connect, Teams, WebEx, Zoom.**

Other: **APA 7, Microsoft 365, Zotero.**

PROFESSIONAL TRAINING

Question, Persuade, Refer (QPR) 2023
QPR Institute, Spokane, Washington

Group 1: Social, Behavioral, and Educational Researchers 2021
CITI Program
Issued March 2021. Expires March 2024.
Credential ID 41247897

Question, Persuade, Refer (QPR) 2019
QPR Institute, Spokane, Washington

College Teaching Seminar 2017
Utah State University, Logan, Utah

Healthcare Leadership for Mass Casualty Incidents 2017
U.S. Department of Homeland Security
Credential ID 2033-00057531-0001190783-0407-3

CITI Certification – Responsible Conduct of Research 2015
University of Miami, Miami, Florida
Credential ID 15881037

Intermountain Health Continuous Improvement Leadership Certificate 2014
Intermountain Health, Logan, Utah

PROFESSIONAL DEVELOPMENT ACTIVITIES

- 2024 American Educational Research Association Annual Meeting, April 11–14, 2024.
- eLearning Consortium of Colorado Annual Virtual Conference, April 5–7, 2023.
- Mental Health Marketing Conference, Nashville, Tennessee, November 15–17, 2022.
- AECT International Convention, Las Vegas, Nevada, October 24–28, 2022.
- Healthcare Anchor Network Conference, Salt Lake City, Utah, November 20–22, 2019.
- Suicide Prevention Summit, Layton, Utah, July 19, 2019.
- Healthcare Anchor Network Conference, Cleveland, Ohio, June 3–5, 2019.
- Healthier Rural West Summit, Salt Lake City, Utah, March 19–21, 2019
- Attended ATD International Conference & Exposition, Orlando, Florida, May 17–20, 2015.
- Fifth Annual Social Media Summit at Mayo Clinic, Rochester, Minnesota, October 16–17, 2013.

PROFESSIONAL AFFILIATIONS

- American College of Healthcare Executives (ACHE)
- American Educational Research Association (AERA)
- Association for Educational Communications & Technology (AECT)
- Association for Talent Development (ATD)
- Health Anchor Network (HAN)
- International Learning Sciences Student Association (ILSSA)
- International Society for Performance Improvement (ISPI)
- Public Relations Student Society of America (PRSSA)
- Utah Public Information Officer Association

SERVICE

Service to the University

Graduate Student Evaluator   2014–Present
Supported the Faculty Search Committee with feedback from a student
perspective.

Service to the Community

Bridgerland Literacy   2015–19
Member of the Board of Directors, Logan, Utah

Cache Suicide Prevention Coalition   2015–19
Member, Logan, Utah

Cache Suicide Prevention Coalition   2015–19
Executive Committee Member, Logan, Utah

Common Ground Outdoor Adventure   2014–15
Shoot for the Stars Event
Planning Committee Member, Logan, Utah

Service to the Field

Reviewer   2023
Association for Educational Communications & Technology
International Convention

LANGUAGES

English: Native proficiency

Norwegian: High proficiency in speaking, reading, and writing

Swedish: Moderate proficiency in speaking, limited reading and writing proficiency

Danish: Limited proficiency in speaking, moderate reading and writing proficiency