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Renee V. Galliher
Utah State University

Joshua G. Parmenter
University of Missouri

Lee Pradell
Utah State University

Theo Klimstra
Tufts University

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Development and Validation of the Identity Negotiation Experiences and Strategies Scale

Renee V. Galliher, PhD

Department of Psychology

Utah State University

Logan, UT, United States

Joshua G. Parmenter

Educational, School & Counseling Psychology

University of Missouri

Columbian, MO, United States

Lee Pradell

Department of Psychology

Utah State University

Logan, UT, United States

Theo Klimstra

Eliot-Pearson Department of Child Study & Human Development

Tufts University

Medford, MA, United States

Corresponding author: Renee V. Galliher, 2810 Old Main Hill, Utah State University, Logan, UT 84322; Renee.Galliher@usu.edu; (435)797-3391

Abstract

A rich theoretical and empirical literature captures experiences of identity conflict and tension at the nexus of identity domains that feel incompatible. The Identity Negotiation Experiences and Strategies (INES) scale was developed to provide a quantitative tool for capturing experiences of identity strain or conflict, and strategies for responding to or managing strain. Focus groups with college students from the United States, the Netherlands, and Finland were used to develop a pool of items capturing students' identity negotiation experiences. Subsequently, two college student samples from the United States and the Netherlands were used to refine the scale and assess psychometric properties. Four subscales - Strain, Compartmentalization, Vigilance, and Identity Negotiation Resources - demonstrated strong and significant correlations with other theoretically relevant identity processes, as well as with depression symptoms. Metric measurement invariance was demonstrated across the U.S. and Dutch samples. We explore links with existing theory and research and potential future uses for the INES.

Keywords: identity negotiation; identity conflict; identity constellations; identity measurement

Development and Validation of the Identity Negotiation Experiences and Strategies Scale

Identity development continues to be described as a principal developmental task of adolescence and young adulthood, with continuing identity related work occurring throughout adulthood. Identity formation is complex and involves the negotiation of many domains of identity (e.g., ethnoracial, cultural, sexual, gender, vocational). While theorists have long acknowledged that the navigation of multiple domains of identity is a central feature of identity formation, most scholars utilize qualitative methodologies to capture such phenomenon (e.g., Bowleg, 2013; Dahl & Galliher, 2012; Parmenter et al., 2022; Schachter, 2004). The existing empirical literature lacks a tool for quantitatively measuring identity negotiation processes. Meaningful quantitative tools allow researchers to answer important theoretical questions with larger samples, which address issues of generalizability. The present study used the reported experiences of a diverse group of young adults to develop and validate a measure of identity negotiation processes.

Foundational Identity Theories and Research

There exists a rich empirical literature stemming from Erikson's (1968) early identity development theory. Identity development occurs across domains, as individuals consider their representations of self in terms of ethnicity, gender, sexuality, religion, politics, occupation, and many other specific spheres. Erikson described "identity configurations" as the set of relations among varying components of identity that facilitate a sense of wholeness or integration as individuals consider the question "Who am I?". However, the large bulk of identity literature has failed to address the tasks associated with negotiating a configuration of identity components and has focused instead on single dimensions of identity at a time.

Intersectional theories of identity (Crenshaw, 1991) explicitly seek to understand humans holistically, incorporating all aspects of identity. Specifically, intersectional theories seek to clarify the experiences of people who hold multiple marginalized identities, understanding experiences of oppression, invisibility, and alienation in different contexts. For example, Crenshaw (1991) articulated the experiences of Black women, whose exposure to both racism and sexism, as well as gendered racism, renders their experience unique relative to White women and men of color. Ultimately, theories of intersectionality highlight the desire to be seen and to experience the self as an integrated whole, rather than through one aspect of the self at a time.

Galliher and colleagues (2017) drew on these theories to articulate a theoretical model of identity content that identified four levels of conceptualization. At the broadest level, identity theorists consider broad cultural and contextual factors, particularly the forces of discrimination and inequity, that shape identity content. At a more proximal level, relationship roles such as daughter, friend, or mentor become integrated into the identity constellation as identity labels. Identity roles intersect with specific domains of identity (the third level of the model) that have either been historically conceptualized as "personal identity," such as occupational identity or religious identity, or as "social identities" defined by group membership (e.g., ethnoracial or cultural identity). These three levels of identity content (context, roles, and domains) are articulated and expressed within everyday events and interactions – the fourth level of the model. The goal of model development was to provide a framework for research that can explicitly assess associations among different components of identity, understand contextual influences on the development of identity configurations, and explore identity negotiation strategies that individuals use to achieve a sense of coherence or integration among aspects of their identities.

Our measure development offers a tool researchers can use to further explore hypotheses framed within these previous theoretical foundations.

Identity Negotiation

Notably, all individuals define their identities within complex systems of power that privilege certain expressions or types of identity over others. In contemporary United States (U.S.) contexts, privilege is conferred on those who identify as White, male, educated, English speaking, affluent, able-bodied, heterosexual, Christian, and documented citizens of the U.S. While there are nuances to patterns of privilege and oppression, similar disparities in access to resources and experiences of discrimination exist in European contexts. Those who hold privileged identities have the advantage of being considered "normal" and do not have to negotiate contexts of marginalization to develop a positive and validated sense of self (Moradi, 2017). Many individuals hold combinations of marginalized and dominant identities that invoke experiences of both privilege and oppression (e.g., gay men, White women). Thus, the process of identity negotiation may involve integrating those disparate experiences into one's sense of self, and this negotiation evolves developmentally and contextually. For example, as an ethnic minority student begins to develop a professional identity in an academic context that may be perceived as incompatible with deeply held cultural values, they may feel stuck or ambivalent about integrating the new professional identity into the existing identity constellation. Individuals may also feel strain between identity domains and identity roles; for example, the transition to parenthood brings with it a new identity role (parent), and individuals may struggle to integrate that new identity role with existing gender or occupational identities.

A number of authors have identified identity integration, or the experience of harmony and compatibility across different aspects of identity, as an important indicator of psychosocial

health and well-being. For example, Manzi and colleagues (2024) used an adaptation of the Bicultural Identity Integration Scale (Benet-Martínez & Haritatos, 2005) to assess integration of gender and organizational (i.e., work) identification among women workers in Italy. As might be expected women who reported higher identification with both gender and occupational identity, as well as greater integration of the two identities demonstrated higher levels of well-being.

Some authors have begun to explore the strategies that individuals use to make sense of potentially conflicting or incompatible aspects of identity. For example, Dehlin et al. (2015) explored the experiences of 1,493 individuals who identified as Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, or another personally meaningful label (LGBTQ+) and also affiliated with the Church of Jesus Christ of Latter-Day Saints (CJCLDS). Individuals experienced great strain as they sought to integrate the subjectively incompatible aspects of their identities and turned to a number of strategies for navigating the conflict. Most individuals felt compelled to reject or deny one or the other aspect of identity (either sexual identity or religious identity), although a large number also engaged in compartmentalization – the act of separating the aspects of identity and engaging with them one at a time in different contexts. In this sample, the experience of integration, living and embracing both aspects of identity simultaneously, was very rare (4% of the sample). Adler et al. (2021) confirmed the rarity of identity integration in people with acquired disabilities. Their qualitative study described adapters, wanderers, drifters, and resisters as four narrative strategies. Consistent with previous research, adapters, who processed and transformed their former identity to incorporate their acquired disability, had better psychological outcomes and maturity than others. Other scholars utilizing qualitative methodologies have identified identity negotiation processes to help manage multiple domains of identity as young adults work to separate or integrate such identities (e.g., Parmenter et al., 2022;

Schachter, 2004). Many young adults feel compelled to choose between aspects of identity, or struggle to maintain a connection among prior and current aspects of themselves. Such processes are deeply culturally embedded. For example, Sugimura and Mizokami (2012) used the term "individualistic collectivism" to articulate the challenges faced by Japanese youth as they navigate identity development in traditionally collectivistic cultural contexts, while orienting also toward more individualistic educational or employment contexts.

Clarke and Watson (2019) highlighted the importance of a strong theoretical foundation to justify the development of new measurement tools, as well as to articulate specific and theoretically defensible hypotheses related to construct validity. Previous scholars across a range of cultural contexts, using both quantitative and qualitative methodologies, have observed consistent links between identity navigation experiences and important psychosocial health outcomes (e.g., Fernandes et al., 2021; Gibson et al., 2021; Yu & Zhang, 2023). Across studies, the experience of identity conflict or difficulty navigating across domains of identity has been associated with less positive affect, more negative affect, lower capacity to thrive in work settings, and other important psychosocial indicators. Thus, identity navigation has clear implications for developmental and health outcomes, highlighting the importance of articulating and assessing the nuances of negotiation processes.

While identity negotiation experiences are theoretically distinct from other, more widely studied, identity development constructs, there are reasons to predict some overlap among important identity development experiences and processes. By far, the most widely assessed aspects of identity development have been the processes of commitment and exploration (e.g., Crocetti et al., 2008; Luyckx et al., 2008). By definition, commitment to identity is expected to be associated with less ambivalence and a greater sense of investment and certainty. Thus, we

hypothesized that lower levels of commitment would be associated with identity negotiation processes that are more fraught or distressing. In contrast, exploration has been theoretically framed as a necessary, but sometimes distressing identity development process, potentially marked by uncertainty and discomfort. Since exploration can be characterized as healthy or exciting and also as difficult or sometimes painful, we did not form specific hypotheses about the nature of associations between exploration and strained identity negotiation experiences. However, some of the strategies that individuals might use to navigate identity negotiation, such as seeking advice or support from others, are certainly theoretically linked to exploration.

Also, both conflicted or difficult identity navigation experiences and identity navigation strategies are hypothesized to demonstrate links to the identity styles presented by Berzonsky and colleagues (2013). Specifically, a normative identity style, focused on conformity to familial or cultural expectations, might be associated with lower levels of identity negotiation distress. An informational style, characterized by more active and autonomous identity development, might be associated with more proactive negotiation strategies, while the diffuse-avoidant style might be associated with less use of proactive negotiation strategies.

The Current Study

A valid and reliable measure of identity negotiation will benefit scholars invested in expanding the rich theoretical and empirical literature on identity negotiation. While the theoretical literature related to navigation of identity domains is very strong, the empirical literature is nascent and lacks methodological consistency. The development of quantitative measurement tools could assist in advancing identity scholarship and provide scholars a tool for testing theoretical models of identity navigation. We drew on the qualitative experiences of young adults engaging in identity negotiation to develop and validate a measure of identity

negotiation processes. While identity development emerges as a central task earlier in adolescence, we identified emerging adulthood, when youth are more actively making career, relationship, and ideological choices, as a prime developmental stage for the kinds of identity conflict and navigation experiences we sought to articulate. Further, we identified college students, who have entered a developmental context that likely offers new identity related opportunities, as an ideal population to begin measurement construction. We recognize that limiting our population in this manner leaves questions of generalizability to be answered in future research, but this target population is ideal for identifying features of identity negotiation.

We hypothesized that a measure of identity negotiation experiences would yield scales assessing experiences of conflict or strain, as well as scales that capture a range of adaptive and maladaptive strategies for navigating strain. Subsequently, we planned to test associations between the resulting components of identity negotiation and a range of theoretically relevant identity development and psychosocial outcomes (i.e., identity development styles and processes, identity distress, and depression). Based on the growing literature outlining the distressing correlates of identity conflict or tension (e.g., Authors, 2012; Rahim et al., 2021), we predicted that experiences of identity negotiation strain and some less adaptive forms of coping with strain would be associated with greater depression, as well as weaker identity commitments and less effective exploration. Additionally, we predicted that the identity negotiation constructs identified in measure development would uniquely predict psychological distress (i.e., depression) above and beyond the effects of other measures of identity development.

Phase I: Qualitative Exploration of Identity Negotiation Targets and Processes

Method

The first phase of data collection utilized focus groups, conducted in collaboration with identity scholars in several cultural contexts. Focus groups served to refine and clarify the ways that young adults (a key developmental stage for identity development) make sense of multiple aspects of identity, components of identity that are more likely to be experienced as conflicting, and the strategies they use to navigate the conflict.

Participants and Procedure

College students were recruited from college communities in the United States, Finland, and the Netherlands to participate in focus groups aimed at exploring identity negotiation processes. Institutional review boards for the protection of human participants approved the study at each of the participating universities. Three to four focus groups were held in each of four university settings: Utah State University in the U.S., the University of Jyväskylä in Finland, and the University of Groningen and the University of Tilburg in the Netherlands. The participating universities were selected to provide some cultural diversity regarding the identity negotiation processes, but also because of the expertise of colleagues at those institutions. Focus groups, facilitated in-person by the first author, were conducted in English and were recorded for transcription. In Finland and the Netherlands, participants were recruited from international psychology programs in which English was the language of instruction. Participants were instructed to select pseudonyms to use throughout the group discussion for confidentiality.

A total of 72 participants contributed across 13 focus group meetings. Age ranged from 18 to 32 ($M = 21.27$, $SD = 3.21$). Twenty-two (30.6%) participants identified as men, 48 (66.7%) identified as women, and one identified as gender queer/fluid/non-binary. Fifty-five (76.4%) participants identified as heterosexual, three identified as gay/lesbian, ten identified as bisexual, pansexual, or queer, and one identified as asexual. Three participants did not provide a sexual

identity label. Most participants identified as White/European (n = 61, 84.7%); four identified as Asian, one as Black, three as Latina/o, and five as Middle Eastern. Because participants in Europe were recruited from international programs, participants reported 27 different countries of origin. Thirty-seven (51.4%) participants identified as agnostic or atheist, 18 (25%) reported a Christian religion, three (4.2%) identified as Muslim, and 14 (19.4%) provided no response or indicated "other" or "none."

Twenty-three participants engaged across three groups in the University of Tilburg. Fourteen participants engaged across four focus groups at the University of Jyväskylä. Twenty-four participants engaged across three focus groups at the University of Groningen. Finally, 11 participants engaged across three focus groups at Utah State University. At each university, students were recruited from bachelor's programs in psychology and were compensated with course credit.

Data Collection

Participants completed a demographic information questionnaire to provide a summary of the identity labels represented in the focus groups. In addition, a semi-structured interview guide was used to organize the discussion. The focus groups began with a basic definition of identity and an introduction to the concept of identity constellations. Focus group questions then guided participants to explore the aspects of identity that they found most salient as they considered their self-definitions. Participants were asked to discuss the ways aspects of identity fit together or worked together in their daily lives. Finally, if participants identified points of conflict or areas where they struggled with coordinating aspects of their identity, they were asked to explore the strategies they used to navigate that conflict. Focus group questions were deliberately broad,

open, and general, so that participants could frame the conversation around their own experiences and respond to the ongoing flow of conversation.

Data Analysis and Results

The first and second authors carefully reviewed the focus group transcripts independently with the circumscribed goal of identifying common sentiments shared across groups and selecting quotes from the conversations that represented the common sentiments and could be framed as items in subsequent measure development. The second author generated an initial list of potential items that were direct quotes or slightly rephrased quotes (to enhance clarity or simplicity). Next, the first and second authors met to collaboratively review the selected quotes and form the final list of 93 initial items that captured participant experiences.

Focus group participants described experiences of harmony and conflict when navigating their identities. While some aspects of their identities seamlessly configured together, many participants discussed on-going difficulty negotiating various components of identity. Participants commonly experienced moments of internal strain and worry that their identities would not fit together; they communicated strategies for negotiating their identities, such as prioritizing one domain of identity over the other, being selective of who they could express their identities around, and adjusting their identity expression to fit into different contexts. Participants also shared using various resources to negotiate domains of identity, such as talking to others and self-reflection. Initial themes mapped very closely on to existing literature examining identity conflict and negotiation (e.g., Dehlin et al., 2015), and included 1) avoidance, lying, or hiding/concealing, 2) Prioritizing/sacrificing one aspect of identity over another/ compartmentalizing aspects of identity, 3) Self-acceptance/self-compassion, 4) Seeking

support/guidance, 5) Looking inward/self-reflection, 6) Identity change and loss, and 7)

Difficulty with identity conflict and striving for identity integration.

Phase II: **Initial Development of a Quantitative Measure of Identity Negotiation**

Method

Participants

College students (n = 301; age M = 20.25, SD = 3.93) were recruited from the Utah State

University psychology research pool, using the SONA systems participant recruitment platform

for recruiting and compensating students with course credit. Boateng and colleagues (2018)

noted the contentious nature of the literature outlining recommendations for sample size for scale

development. While some authors recommend ratios (e.g., 10:1) of participants to items, most

authors reviewed by Boateng and colleagues indicated that a sample size of 300 is sufficient for

factor analysis. Eighty-nine (29.6%) students identified as men, 208 (69.1%) identified as

women, and one student reported a gender queer/fluid/nonbinary identity. The vast majority of

students (n = 269, 89.4%) identified as White/European American. Two hundred seventy-five

(91.3%) of participants identified as heterosexual, 5 (1.7%) as gay or lesbian, 16 (5.3%) as

pansexual, bisexual, or another individually meaningful sexual identity label, and 5 (1.7%) did

not provide a response.

Measures

Identity Negotiation Items. The 93 items developed in Phase I were rated on a scale

ranging from 1 (*very slightly or not at all*) to 5 (*extremely*). The following instructions were

provided to students:

> The term "identity" refers to a person's beliefs and ideas about who they are, who they'd
> like to be, and what their roles are in important relationships and communities. We all
> have different aspects or components of our identities. For example, we might have a
> sense of who we are as a student or professional. We have beliefs about who we are with

regard to culture, religion, or politics. We have important relationship roles that are incorporated into our identity, such as parent, sibling, or friend. Some aspects of our identity may fit well together, while others may feel as if they are in conflict. There may be points of tension among different aspects of our identity (e.g., student vs. friend), or we may feel that some aspects of our identity are not acceptable or desirable. Please take a few moments to consider the aspects of your identity that are the most important to you or the most relevant in your life right now. Then consider whether there are any points of tension, conflict, or disconnect among your identity aspects. Rate your agreement with the following statements with these instructions in mind."

Depression. The Centers for Epidemiology Studies – Depression scale (CES-D; Radloff, 1977) consisted of 20 items assessing symptoms of depression (e.g., "I had trouble keeping my mind on what I was doing."). Participants received the following instructions: "Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way during the past week." Items were measured on a 4-point scale ranging from 0 (*Never*) to 3 (*5-7 days*). Scores are calculated by reverse scoring positively worded items (e.g., "I was happy") and calculating an average, with higher scores representing greater depression. The CES-D yielded an alpha of .91 for this sample.

Identity Development Process Measures. Participants completed two theoretically relevant measures of identity development process. The Identity Style Inventory-Version 5 (ISI-5; Berzonsky et al., 2013) assesses a respondent's typical style of engaging with identity relevant information. The scale yields three 9-item subscales: informational (self-reflective, information seeking, proactive), normative (adherence to standards and expectations of significant others or reference groups), and diffuse-avoidant (procrastinating, avoidant, and reactive). All 27 items were rated on a 1 (*not at all like me*) to 5 (*very much like me*) scale and scores were computed by averaging scores for each subscale. The three subscales yielded alphas of .73 (normative), .77 (informational), and .79 (diffuse avoidant) in this sample.

The Dimensions of Identity Development Scale (DIDS; Luyckx et al., 2008) uses five subscales to capture a more subtle array of exploration and commitment experiences during the identity development process: initial commitment making (α = .93), identification with commitment (α = .89), exploration in breadth (α = .81), exploration in depth (α = .72), and ruminative exploration (α = .85). The DIDS consists of 25 items measured on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Subscale scores were computed by averaging the five items for each respective subscale, with higher scores representing higher engagement in the various identity development processes.

Identity Distress. Participants completed the 10-item Identity Distress Survey (IDS; Berman et al., 2004). The IDS assesses the degree to which respondents have been upset or distressed in a range of identity domains (e.g., career, relationships, religion), as well as the intensity of their distress about the issues. The first nine items are measured from 1 (*Not at all)* to 5 (*Very Severely)* and averaged into one score, with higher scores reflecting greater identity distress. The 10th item (not included in the scale score) asks how long the distress has endured. The alpha for the current sample was .81.

Procedure

This study was reviewed and approved by the Institutional Review Board at Utah State University. Utah State University students accessed the survey through the SONA research participation site and were compensated for participation in the form of class credit. Because the SONA system links to Qualtrics to track student participation without requiring researchers to have access to students' identifying information, participation was anonymous. Students were given information about the nature of the study, requirements for participation, compensation, and time commitment on their SONA account. They followed a link from SONA to Qualtrics.

They were first presented with the letter of information and were forwarded to the survey if they clicked on a radial button indicating their informed consent.

Results

Analytic Strategy

Review of the Phase II data for missing responses indicated that almost all items had zero missing responses, and no items were missing more than two responses. Missing data was handled using full information maximum likelihood, which is an approach that utilizes all available information to generate maximum likelihood estimates; Enders, 2001). Descriptive and correlational analyses were used to identify items that had limited variability or extremely high (r = .8 or higher) correlations with other items to trim the item pool for exploratory factor analyses (EFA). After this initial trimming of items, we determined the factor structure using scree plots and parallel analyses in R (R Core Team, 2019) using the package *psych* (Revelle & Revelle, 2015). We conducted EFA using maximum likelihood estimation and a promax rotation. Oblique rotations, like promax, are useful methods when factors are assumed to be correlated with one another (Howard, 2016; Sass & Schmitt, 2010). Cronbach's alpha and McDonald's omega were calculated to determine the internal consistency of the subscales derived from factor analyses. Correlational analyses were used to assess associations of the scales derived from the identity negotiation measure with theoretically relevant aspects of psychosocial functioning and identity development processes.

Item Reduction and Exploratory Factor Analysis

Prior to EFA, we reduced the original 93 items by removing items that (a) demonstrated high redundancy in content, (b) had structure factor loadings less than .40 in absolute magnitude, (c) had inter-item correlations of .80 or higher, (d) had low communalities (less than .40), or (e)

were judged by the research team to have confusing phrasing or wording (Worthington & Whittaker, 2006). The initial item reduction strategies yielded 48 items to be examined in the EFA. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .94 (above the recommended .60 minimum; Howard, 2016) and Bartlett's test of sphericity was significant, χ^2 (1128) = 8,190.31, p < .001, suggesting that the data were suitable for EFA. Scree plot and parallel analyses suggested that a four-factor model was favorable over alternative models, so we fixed the number of factors to four and proceeded with an iterative EFA item reduction procedure.

We removed items if they had structure factors loadings less than |.40|. After eliminating items with low structure factor loadings, we examined the pattern factor loadings as they "examine the relationship between variables and each factor that accounts for the factor inter-correlation" (p. 698; Kahn 2006). Items were removed one at a time if they had (a) primary standardized patterns coefficients < |.40|, standardized coefficient cross-loadings > |.25|, or if the standardized pattern coefficient cross-loading difference was > .20 (Howard, 2016; Worthington & Whittaker, 2006). Additional items were removed if they had conceptual overlap with other factors or if item content seemed inconsistent with its current factor. For example, the item "I often don't fulfill some aspects of my identity because I prioritize other aspects" originally loaded onto the factor characterized by identity strain and distress but also conceptually overlapped with items in the factor characterized by identity compartmentalization, prioritization, and adaptation. Such items with inconsistent, overlapping, or redundant content were removed to further refine the measure. We continued individually removing items until all items met our item retention criteria, resulting in 24 items. The KMO was .93 and Bartlett's test

of sphericity was significant, χ^2 (276) = 3396.80, p <.001, which suggests a relationship among the remaining 24 items making the data still suitable for EFA.

The final EFA yielded four theoretically consistent factors which were named Strain (Factor I), Vigilance (Factor II), Compartmentalization (Factor III), and Identity Negotiation Resources (Factor IV). The rotated four factors had eigenvalues of 4.00 (Strain), 3.35 (Vigilance), 2.31 (Compartmentalization), and 1.65 (Resources). The rotated four-factor solution explained 47.1% of the variance: 16.7%, 14.0%, 9.6%, and 6.9% respectively. Table 1 provides EFA pattern and structure factor loadings for the final 24 items. Scale scores were calculated as the average of all items in the scale. Table 2 demonstrates means and standard deviations, and reliability estimates for the four Identity Negotiation Experiences and Strategies subscales, along with bivariate correlations showing associations among the subscales. Average scores for the Strain scale were below the midpoint of the scale, while average scores for Identity Negotiation Resources were above the midpoint. Vigilance and Compartmentalization were roughly normally distributed around the midpoint of the scale. All scales demonstrated good to excellent internal consistency, except the Identity Negotiation Resources scale (suggesting that the resources included in that scale may not fully align).

Relationships with Identity Processes and Depression

Table 3 shows bivariate correlations between Identity Negotiation Experiences and Strategies (INES) subscales and other theoretically relevant mental health and identity development measures. Strain, Vigilance, and Compartmentalization were all strongly, significantly correlated with greater depression and measures of identity development difficulty (i.e., distress, diffusion, rumination), and were significantly negatively correlated with identity commitment (small to moderate effect sizes). The Identity Negotiation Resources scale was

positively correlated with Informational identity style and with exploration, demonstrating the active and engaged nature of the negotiation resources. The Identity Negotiation Resources scale showed a small, significant correlation with identity distress.

Phase III: Confirmation of Factor Structure

Method

Participants

A sample of 286 undergraduate psychology students were recruited from the international English-language bachelor program at the University of Tilburg. Students in the international program receive all instruction in English and are offered multiple opportunities to participate in research studies to fulfill a portion of program requirements. In this sample, 90 (31.5%) of participants identified as men, 185 (64.7%) identified as women, 5 (1.7%) identified as non-binary or gender diverse, and 6 (2.1%) did not provide a gender identity label. Two-hundred twenty-six (79%) identified as heterosexual, 3 (1%) identified as gay/lesbian, 3 (1%) identified as asexual, 50 (17.5%) identified as bisexual, pansexual, queer, or questioning, and 4 (1.5%) did not provide a sexual identity label. Students reported 35 different countries of origin across Europe, Asia, North and South America, and Africa, although over 50% of the sample identified as either Dutch or German. Regarding religion, 168 (59.9%) of participants identified as agnostic or atheist, 65 (22.7%) identified as Christian, and the remainder identified as Buddhist (n = 4), Muslim (n = 9), or another religion/no response (n = 40).

Measures

Identity Negotiation Items. Based on the initial item reduction procedures, a reduced pool of 48 identity negotiation items were administered.

Depression and Identity Processes. Participants completed the same measures used in Phase II. Cronbach's alphas for Phase III were as follows: CESD = .915; ISI informational = .735; ISI normative = .680; ISI diffuse-avoidant = .787; DIDS commitment making = .918; DIDS exploration in breadth = .802; DIDS ruminative exploration = .866; DIDS identification with commitment = .859; DIDS exploration in depth = .640, IDS = .822.

Procedures

This project was reviewed and approved by the Institutional Review Board at the University of Tilburg. Students in the international bachelor program are enrolled in an online research participation clearing house, which presents all research participation offers in the department. Offerings list the time commitment, mode of participation (e.g., online vs. in-person), and credit compensation. Students must complete a pre-set number of credits each semester and choose from the menu of options. Selecting this project led students to a link to the Qualtrics survey, which presented the informed consent document prior to sending students to the survey items.

Analytic Strategy

Review of the Phase III data for missing responses indicated that almost all items had zero missing responses, and no items were missing more than three responses. Missing data was again handled using full information maximum likelihood. Phase III Confirmatory Factor Analyses were conducted through the R package *lavaan*, including an analysis of measurement invariance across the two samples (Rosseel, 2012).

Results

Confirmatory Factor Analysis (CFA)

We conducted a CFA to corroborate the factor structure in the Phase III sample from the University of Tilburg. We determined model fit by assessing the comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square of approximation (RMSEA), and standardized root-mean-square residual (SRMR). Acceptable model fit is demonstrated by CFI and TLI greater than .90 and RMSEA and SRMR below .08 (Weston & Gore, 2006). We explored both a one-factor model and a four-factor model. For the one-factor model, the chi-square test, $X^2[252] =$ 914.51, p < .001, and other model fit indices (CFI = .76, TLI = .73, RMSEA = .10 [90% confidence interval .089 - .103], SRMR = .08) demonstrated poor fit. We then examined the four-factor model, which demonstrated acceptable model fit (CFI = .95, TLI = .94, RMSEA = .045 [90% confidence interval .036 - .053], SRMR = .05). All items loaded onto their respective factor with structural factor loadings ranging from .40 to .96. Table 2 presents descriptive statistics, bivariate correlations, and alphas for the Phase III sample, juxtaposed against the descriptive findings for Phase II.

Measurement Invariance

We explored measurement invariance using both Phase II and Phase III samples ($N =$ 587) to examine if the measure operated similarly across different national contexts (i.e., Utah, U.S. and Tilburg, NL). While we recognize that the two national contexts both represent Western individualistic cultural settings, invariance analyses do provide an initial assessment of the broader applicability of the measure. Testing measurement invariance entailed examining configural (i.e., groups hold same factor structure), metric (i.e., groups hold similar factor loadings), and scalar invariance (i.e., groups have the same thresholds/intercepts; Putnick & Bornstein, 2016) following guidelines by Chen (2007). Chen's (2007) guidelines document that a change in 1) CFI of greater than or equal to -.010, and 2) either a RMSEA change of greater than

or equal to 0.015 *or* a SRMR change of greater than or equal to .030 was suggestive of noninvariance between groups. The configural, metric, and scalar models demonstrated good model fit per our previously stated fit indices (Weston & Gore, 2006; see Table 4). While changes in both RMSEA and SRMR were acceptable for all models, change in CFI was above the suggested .010 cut-off between configural-scalar and metric-scalar. Measurement invariance testing suggested that 1) the factor structure of the INES is well suited for both those in Utah, U.S. and Tilburg, NL contexts, and 2) that people in each national context may be interpreting the items similarly (i.e., groups had similar factor loadings; Putnick & Bornstein, 2016). However, measurement invariance testing also demonstrated scalar noninvariance, suggesting that not all items behaved in the same way across the two samples. Putnick and Bornstein (2016) suggested that scalar noninvariance may lead to misinterpretation of mean differences across groups.

Relationships with Identity Processes and Depression

Table 3 shows bivariate correlations between Identity Negotiation Experiences and Strategies (INES) subscales and other theoretically relevant mental health and identity development measures for the Phase III sample, aligned next to those for Phase II. Similar to Phase II, Strain, Vigilance, and Compartmentalization were all related to greater depression and identity development difficulty (i.e., distress, diffusion, rumination), and to less identity commitment (small to moderate effect sizes). The pattern of bivariate correlations was markedly similar across the two samples. As in Phase II, the Identity Negotiation Resources scale was positively correlated with Informational identity style and with exploration. The Identity Negotiation Resources scale demonstrated a small but significant correlation with commitment in the Phase III sample. In general, all four subscales of the INES demonstrated theoretically

meaningful and consistent relationships with other key identity development and psychosocial variables.

Incremental Utility of INES in Explaining Depressive Symptoms

To assess the utility of identity negotiation variables in understanding depressive symptoms, above and beyond the contribution of existing identity development measures, we conducted a series of hierarchical multiple regression models, separately for Phase II and Phase III samples. Three separate regression models were conducted for each sample (see Table 5 for full results). For each regression model, all subscales for one of the other identity measures (i.e., ISI, DIDS, or IDS) were entered into the first step. In the second step, the four subscales of the INES were entered. Collinearity diagnostics indicated no multicollinearity issues (i.e., tolerance > .25 and VIF around 1 or 2 for every regression). For each of the six regression models, the first step of the model using one of the other commonly used measures of identity development accounted for a significant portion of the variance in depression symptoms. Adding the INES scales into the second step accounted for additional, unique, significant variance in each model. Specifically, Strain and Vigilance were consistently related to higher levels of depression, and utilization of Resources was associated with lower depression scores in all six models. The bivariate association between Compartmentalization and depression scores was reduced to nonsignificant when all variables were entered into the model together.

Discussion

The goal of this study was to develop a quantitative measure of identity negotiation experiences that would provide scholars a mechanism for testing theoretical models of identity navigation. Given the current status of the field, the measure we developed in this series of

studies has the potential to inspire future work in this area. In addition, since the identity negotiation tasks are theoretically the most challenging for those who are navigating experiences of marginalization and inequity associated with one or more aspects of their identity, this work stands to contribute to the body of research aimed at addressing disparities and promoting positive psychosocial outcomes for marginalized people.

Challenging Identity Negotiation Experiences

The Strain subscale of the INES scale captures a range of difficult identity related emotions, including feeling ambivalent, stuck, torn, and weary with navigating different aspects of identity. Such experiences are well represented in the literature exploring the identity development experiences of individuals who hold marginalized identities that make them likely to experience alienation and discrimination. In particular, a number of scholars have articulated the challenging identity navigation experiences of LGBTQ+ individuals at the intersections of sexual identity with other forms of identity, such as religion (e.g., Dehlin et al., 2015) or ethnoracial identity (e.g., Parmenter et al., 2022). Neither of the samples used for preliminary evaluation of the INES were recruited to represent any particular marginalized population. Rather, they were broadly representative of college students in different cultural contexts. We think it is important to note that strained identity negotiation experiences are widely reported. Students in the focus groups discussed a range of identity roles (student, daughter, friend, etc.), idiosyncratic identity domains (e.g., athlete, vegan/vegetarian), and ideological positions (e.g., religion, politics) that were experienced as incompatible or in tension. We are excited at the prospect of additional research that can use the INES to explore identity negotiation at the nexus of any number of identity domains.

We note that the INES primarily captures challenging and difficult identity negotiation experiences, and we believe it is important to acknowledge that navigation across domains of identity does not necessarily need to be difficult. Grace Wong and colleagues (2022) sought to articulate the positive identity experiences of those who sit at the intersection of LGBTQ+ identity, minoritized ethnoracial identity, and spiritual/religious identity. Participants eloquently described everyday moments of peace, pride, connection, and comfort in their intersecting identities. Importantly, participants did not necessarily feel that a sense of harmony or coherence was required for them to thrive in their positive identity. Similarly, Schachter (2004) also found a group of people in his study of modern orthodox Jewish participants who reported "thrill of dissonance" (p. 177) and were not motivated to integrate the components of their identities in a coherent manner. Quantitative strategies for assessing positive identity navigation should also be a measure development priority.

Identity Negotiation Strategies

Two of the scales that captured specific strategies for coping with identity tension or conflict have been articulated in previous theoretical models (e.g., Galliher et al, 2017), observed in past research, and typically been considered to be somewhat problematic outcomes of identity development strain. Compartmentalization involves separating aspects of identity and expressing or acknowledging each form of identity only in its own context. Dehlin and colleagues (2015) reported that 37% of their large sample of LGBTQ+ members and former members of the Church of Jesus Christ of Latter-Day Saints compartmentalized their religious and sexual identities. Schacter (2004) used the term "confederacy of identifications" (p. 117) to capture a similar experience of holding different identities, separately and each in its own space. Burton and Vu (2021) explored compartmentalization strategies among Quaker participants who

experienced dissonance between their spiritual values and their work expectations and roles. When participants felt that their Quaker beliefs (e.g., peace, simplicity, honesty) were unsupported in their work contexts (which value profit and competition), some compartmentalized by setting aside or neglecting their spiritual values while in their workspaces, although the consequences were often severe in terms of guilt and professional dissatisfaction.

Similarly, the Vigilance subscale captures identity negotiation processes that have been previously observed in qualitative work. Wariness about disclosing non-visible aspects of identity or unwillingness to discuss aspects of identity that may be subject to discrimination or criticism are well documented in populations and individuals with marginalized status. In some studies, participants feared that disclosure of certain aspects of their identities would put them at risk socially and legally (e.g., disclosing an identity as a drug dealer or sex worker; Smirnova, 2016; Wolfe et al., 2018). Also, the ubiquity of discrimination in contemporary society makes disclosure of a sexual or gender minority identity (Holman et al., 2022) or a minoritized religious identity (Charoensap-Kelly et al., 2020) a very risky decision in many employment settings. Again though, our samples were not drawn specifically from marginalized populations and demonstrate the pervasive use of vigilance among young adults. As examples, some students in the focus groups reported hiding or minimizing liberal political identities or deciding not to bring up their identity as a vegan/vegetarian around their older or more conservative relatives.

Identity Negotiation Resources

Participants also endorsed a range of personal and relational strategies for managing identity strain that link to literature on identity development processes more broadly. Intrapersonal activities, such as self-reflection and compromise, and interpersonal activities, such as seeking help from family and friends, are theoretically central to the identity exploration

process (Marcia, 1994). Sugimura and colleagues (2022) studied the manifestation of exploration processes in real-time peer interactions in a sample of Japanese college students. Students used self-disclosure, support, collaboration, and disagreement as interpersonal strategies for mutual engagement in identity exploration with peers. Both Grace Wong and colleagues (2022) and Duran and Jones (2020) used an intersectional lens to explore the intrapersonal and interpersonal resources that LGBTQ+ People of Color used to interrogate and resist against systems of oppression that constrained positive identity development, finding that seeking support from others and engaging in intentional self-reflection were both salient identity negotiation strategies. Several scholars have developed intervention programs and curricula aimed at supporting identity exploration and resolution for young people related to a range of identity domains, including ethnoracial identity (Umaña-Taylor & Douglass, 2017), mathematics teacher identity (Heffernan & Newton, 2019), and broad adult identity (Berman et al., 2008). Strategies include formalizing a support network for identity development, enhancing self-efficacy through self-reflection and values exploration, and activities that build skill and enhance sense of belonging – all strategies that resonate with the items on the Identity Negotiation Resources scale.

We do note that the alpha for the Identity Negotiation Resources subscale was .68 in each of the measure development samples. This relatively low number partly reflects the relatively low number of items in the subscale, as simply adding items tends to increase the alpha (e.g., Sijtsma, 2009). However, the pattern coefficients were also a bit lower for this subscale compared to other subscales, suggesting that the Resources scale captures a wider range of strategies compared to the other scales. Specifically, several intrapersonal and interpersonal strategies are included. Hence, this scale may need further refinement in future work.

Links to Other Relevant Identity and Psychosocial Health Outcomes

We observed significant associations between the INES scales and other theoretically relevant identity measures in both Phase II and Phase III samples. Strain, Vigilance, and Compartmentalization were similarly related to less mature or more distressed identity development (distress, diffusion, rumination), as well as to lower levels of commitment. In contrast, Identity Negotiation Resources demonstrated strong associations only with more active and purposeful identity processes, such as the Informational Identity Style (characterized as the most proactive and autonomous form of identity style; Berzonsky et al., 2013) and exploration (both in-breadth and in-depth). However, recall that the Identity Negotiation Resources scale showed positive, moderately sized associations with the other three scales of the INES in the U.S. sample, indicating that all three strategies (accessing Resources, Compartmentalization, and Vigilance) may be used in concert when one experiences identity strain. Or alternatively, those who experience lower levels of strain do not need to access any of the strategies. We did follow our primary analyses with a set of partial correlations among Accessing Resources, Compartmentalization, and Vigilance, while controlling for Strain, and we did see that the size of the intercorrelations was reduced when controlling for Strain.

Together though, these results suggest that vigilance and compartmentalization strategies may ultimately undermine positive identity outcomes, while accessing intrapersonal and interpersonal identity development resources more proactively may facilitate identity development outcomes. This conclusion is bolstered by the fact that the Strain, Vigilance, and Compartmentalization scales were all very strongly associated with more depression, and the effects of Strain and Vigilance were retained even when other relevant identity development variables were included in regression models. Additionally, accessing Resources was associated

with lower depression scores in the more complex regression models (although not in the bivariate correlations).

We note that tests of measurement invariance for the Phase II (western U.S.) sample and the Phase III (mostly European) sample indicated metric measurement invariance, and that the patterns of bivariate correlation with other identity development variables, as well as the results of regression models, were markedly similar across the two samples. Both the U.S. and western Europe have been characterized as independent cultural contexts that share cultural features that promote similar identity development trajectories. While we are enthusiastic about the initial evidence of cross-cultural utility for the INES, we recognize the need to evaluate the usefulness of this measure in other cultures and in different languages.

Limitations and Conclusion

We note limitations that inform future measure development refinement. First, the focus groups were all conducted in English, and most of the participants in the European contexts spoke English as a second language. Since recruitment occurred in English language international programs, it is reasonable to assume that all participants possessed strong English skills. However, their ability to convey complex identity related thoughts in English likely varied across participants. Second, initial item development accomplished through a thorough review of focus group transcripts yielded a very large number of potential items, all of which were administered in the Phase II data collection. Ultimately, through examination of high intercorrelations among many items and a critical examination of item content, we reduced our item pool prior to EFA. This initial item reduction would have been better completed prior to data collection, via mechanisms such as expert review. Third, as noted previously, the lower reliability for the Resources scale suggests room for improvement. For example, with the

addition of new items, it may be possible to tease apart the intrapersonal (self-reflection, values clarification) resources from the interpersonal (turning to family/friends, seeking advice) forms of resource utilization in two separate scales. In addition, although we used different samples of college students from different cultural contexts in the development of items and refinement of the scale, we look forward to seeing our measure used across a wider range of samples including non-college going adults, younger adolescents, and participants from other cultural contexts. Specifically, our college samples were predominantly women, and as students in psychology, they may have been more interested and more knowledgeable about identity development processes.

Initial measurement invariance analyses suggested that the factor structure and factor loadings were equivalent across two national contexts; however, both samples were predominantly composed of majority/dominant culture young adults in college settings. Future work with this measure should assess measurement invariance across other populations of interest, such as gender or ethnoracial groups, that might be theorized to engage in identity navigation differently. Given that identity processes differ considerably between cultural contexts (for example, see Adams & van de Vijver, 2021), it is highly likely that different and additional identity negotiation strategies may be required if the cultural context is very different from the ones in which we studied our measure. In addition, while the wording of the INES items provides flexibility for the study of various populations and allows participants to focus on whatever domains of identity are important to them, participants may subjectively interpret items differently based on various identities they hold.

Overall, we are enthusiastic about the initial development of the INES and its potential usefulness moving forward. Across the four subscales, the measure captures myriad challenging

experiences associated with the negotiation of different domains or aspects of identity, as well as a range of reactive and proactive strategies for navigating strain. We believe these processes are relevant for scholars studying identity throughout adolescence and adulthood.

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Table 1. *Exploratory Factor Analysis Standardized Pattern and Structure Factor Loadings and Descriptive Statistics for Final 24 Item Identity Negotiation Experiences and Strategies Subscales (N = 301)*

Item	Strain (8 items)	Vigilance (6 items)	Compartmentalization (5 items)	Resources (5 items)	*M*(SD)
	Pattern Coefficients (Structure Coefficients)				
I often wonder if the different parts of myself will ever fit together.	.74(.79)				2.33(1.25)
Negotiating the different aspects of my identity causes problems in my life.	.72(.76)				2.05(1.07)
It makes me unhappy that the different parts of my identity do not work well together.	.72(.75)				2.41(1.23)
I often feel torn because of my identity.	.70(.77)				2.19(1.23)
Negotiating the different aspects of my identity gets in the way of my success.	.70(.58)				2.18(1.05)
I often feel stuck when trying to negotiate aspects of my identity.	.67(.77)				2.48(1.21)
Avoiding identity conflicts takes an emotional toll on me.	.64(.71)				2.45(1.28)
It is exhausting to separate the aspects of my identity.	.59(.69)				2.22(1.17)
I am selective with who I talk about my identity with.		.90(.77)			3.40(1.24)
I don't feel like I can express aspects of my identity with others.		.70(.77)			2.85(1.25)
I don't talk about my identity because I don't know how people will react.		.67(.74)			2.63(1.37)
I only share certain aspects of myself to my friends.		.63(.67)			3.07(1.28)
I do not talk about certain aspects of myself around my family.		.62(.70)			2.89(1.47)
I don't feel safe expressing aspects of my identity in certain places.		.50(.60)			3.02(1.32)
I often adapt my identity depending on how people think I should be.			.78(.79)		2.57(1.24)
I try to change aspects of my identity so they are accepted by others.			.72(.77)		2.50(1.16)
I need to adjust my identity to blend into different groups or situations.			.61(.78)		2.65(1.24)
I feel like a different person in different situations.			.56(.63)		3.26(1.28)
I prioritize aspects of my identity based on who I am around.			.52(.61)		3.25(1.11)
Self-reflection helps me make sense of my identity.				.81(.76)	3.78(1.06)
I often look inward when trying to negotiate different aspects of my identity.				.52(.58)	3.26(1.16)
I appreciate getting feedback or advice from friends to help with identity struggles.				.42(.43)	3.18(1.20)
Trying to see things from other people's perspectives helps with managing my identity.				.44(.48)	3.48(1.14)
Finding the middle ground between the various aspects of my identity is helpful.				.41(.45)	3.51(.92)

Table 2. *Means, Standard Deviations, and Bivariate Correlations among Identity Negotiation Experiences and Strategies Subscales in Phase II and Phase III Samples*

Subscale	Strain	Vigilance	Compart-mentalization	Resources
Phase II Mean (SD)	2.29 (.91)	2.97 (1.01)	2.84 (.94)	3.45 (.73)
Phase II Cronbach's Alpha and McDonald's Omega	$\alpha = .90$, $\omega = .90$	$\alpha = .85$, $\omega = .85$	$\alpha = .84$, $\omega = .84$	$\alpha = .67$, $\omega = .67$
Phase III Mean (SD)	2.20 (.90)	2.78 (.87)	2.69 (.86)	3.41 (.75)
Phase III Cronbach's Alpha and McDonald's Omega	$\alpha = .90$, $\omega = .90$	$\alpha = .80$, $\omega = .80$	$\alpha = .83$, $\omega = .83$	$\alpha = .67$, $\omega = .67$
Strain	1	.66*	.68*	.33*
Vigilance	.61*	1	.66*	.27*
Compart-mentalization	.58*	.60*	1	.28*
Resources	.18*	-.01	.08	1

Note: * = $p < .01$

Correlations for Phase II sample are above the diagonal; Correlations for Phase III sample are below the diagonal.

Table 3. *Bivariate Correlations between INES Subscales and Other Identity Relevant Constructs*

Phase II Sample	Strain	Vigilance	Compartmentalization	Resources
Depression	.476**	.461**	.400**	.022
Identity Distress	.510**	.416**	.424**	.126*
ISI Diffuse	.490**	.400**	.489**	.091
ISI Informational	.039	.013	.100	.446**
ISI Normative	.013	-.096	.040	.089
DIDS Commitment	-.246**	-.225**	-.228**	.039
DIDS Exploration Breadth	.154**	.161**	.120*	.222**
DIDS Rumination	.384**	.326**	.338**	.090
DIDS Identification with Commitment	-.324**	-.309**	-.307**	.113
DIDS Exploration Depth	.072	.005	.037	.199**
Phase III Sample	Strain	Vigilance	Compartmentalization	Resources
Depression	.578**	.469**	.332**	-.035
Identity Distress	.503**	.487**	.349**	.105
ISI Diffuse	.443**	.408**	.419**	-.105
ISI Informational	-.015	-.034	-.020	.405**
ISI Normative	.196**	.152*	.181**	-.107
DIDS Commitment	-.345**	-.301**	-.219**	.125*
DIDS Exploration Breadth	.109	.100	.091	.165**
DIDS Rumination	.455**	.326**	.282**	-.006
DIDS Identification with Commitment	-.378**	-.338**	-.291**	.187*
DIDS Exploration Depth	.071	.031	.155**	.224**

Note: * = $p < .05$; ** = $p < .01$
ISI = Identity Style Inventory
DIDS = Dimensions of Identity Scale

Table 4. Fit Indices for Measurement Invariance for Final INES Four Factor Model ($N = 587$)

Models	RMSEA [90% CI]	CFI	TLI	SRMR	X^2	df
Configural	.053 [.047, .058]	.933	.925	.058	893.27	492
Metric	.053 [.048, .058]	.930	.924	.066	934.69	512
Scalar	.057 [.052, .062]	.916	.913	.068	1038.16	532
Measurement Invariance Model Comparison	RMSEA		CFI	SRMR	X^2	df
Configural-metric	0.00		.003	.008	41.42	20
Metric-scalar	0.004		.014	.002	103.47	20
Scalar-configural	0.004		.017	.01	144.89	40

RMSEA = root mean square error of approximation; CI = confidence interval for RMSEA; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual.

Table 5. *Summary of Regression Analyses Assessing Incremental Utility of INES Scores in Predicting Depression*

Model	F or F change	df	p	R^2 or R^2 change	Beta	t	p
Phase II Sample							
Step 1 DIDS	15.24	5, 290	<.001	.208			
Commitment					.019	0.20	.840
Exploration - breadth					-.084	-1.36	.174
Rumination					.328	3.88	<.001
ID with commitment					-.205	-2.24	.026
Exploration - depth					-.026	-o.40	.688
Step 2 INES	17.88	9, 286	<.001	.158			
Strain					.261	3.63	<.001
Vigilance					.231	3.39	<.001
Compartmentalization					.030	0.43	.671
Resources					-.118	-2.22	.027
Step 1 ISI	31.11	3, 293	<.001	.242			
Normative					-.110	-2.16	.032
Diffuse-Avoidant					.477	9.37	<.001
Informational					-.042	-0.83	.408
Step 2 INES	14.43	7, 289	<.001	.126			
Strain					.244	3.38	<.001
Vigilance					.232	3.37	<.001
Compartmentalization					.004	0.06	.950
Resources					-.132	-2.33	.021
Step 1 IDS	192.55	1, 297	<.001	.393	.627	13.87	<.001
Step 2 INES	9.65	5, 293	<.001	.071			
Strain					.138	2.056	.041
Vigilance					.202	3.26	.001
Compartmentalization					.006	0.09	.927
Resources					-.143	-3.12	.002
Phase III Sample							
Step 1 DIDS	12.38	5, 276	<.001	.183			
Commitment					.163	1.86	.064
Exploration - breadth					.001	0.02	.981
Rumination					.301	3.85	<.001
ID with commitment					-.294	-3.54	<.001
Exploration - depth					.080	1.29	.199
Step 2 INES	25.69	9, 272	<.001	.224			
Strain					.485	7.01	<.001
Vigilance					.181	2.77	.006
Compartmentalization					-.102	-1.65	.105
Resources					-.129	-2.53	.012
Step 1 ISI	11.94	3, 278	<.001	.114			
Normative					.030	0.51	.614
Diffuse-Avoidant					.329	5.54	<.001
Informational					.157	2.69	.008
Step 2 INES	32.41	7, 274	<.001	.285			
Strain					.543	8.11	<.001
Vigilance					.164	2.51	.013
Compartmentalization					-.076	-1.20	.231
Resources					-.201	-3.74	<.001
Step 1 IDS	118.34	1, 281	<.001	.296	.544	10.88	<.001
Step 2 INES	18.90	5, 277	<.001	.151			
Strain					.427	6.67	<.001
Vigilance					.087	1.36	.174
Compartmentalization					-.069	-1.17	.242
Resources					-.142	-3.08	.002