Gender Differences in Emotion Regulation

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GENDER DIFFERENCES IN EMOTION REGULATION

by

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ABSTRACT

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Emotion regulation is conceptualized as the ability to identify and respond appropriately to emotions. Previous research on gender and emotional expression suggests that female children are socially conditioned to be more expressive, and thus may be more able to regulate emotion with their mothers in relation to their male peers. Participants include 144 mother-child pairs at child age points 14, 24, and 36 months and at Pre-Kindergarten entry who participated in a local Early Head Start Research and Evaluation project. Data consist of videotaped interactions of mothers and infants engaged in a 10 minute free play activity with three bags of toys. Interactions were coded using the Emotion Regulation Rating Scales (ERRS). Two subscales of this measure were used: Infant Regulation with Mother, and Mother Regulation with Infant. Data were analyzed using Pearson correlation. Results indicate a significant gender difference in Infant Regulation with Mother at 36 months. At this age point, girls were more regulated with their mothers than boys. Other age points were not significant. No significant gender differences in Maternal Regulation with Infant were found.
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INTRODUCTION

Current attention given to male and female stereotypes in media has lead to many questions concerning the socialization of male versus female children. Pipher’s *Reviving Ophelia* and Pollack’s *Real Boys: Rescuing Our Sons from the Myths of Boyhood* each address concerns that children are being socialized by gender to express emotions in an unhealthy manner. Pipher (1994) posits that due to societal influences, teenage girls struggle to effectively cope with emotions and often fall victim to depression, eating disorders, addictions, and suicide. Pollack (1999) asserts that boys are taught to adhere to the “Boys Code” which causes boys to withhold their true emotions. This socialization of male versus female emotional expression results in discouraging healthy relationships with parents, peers, and later with romantic partners.

As statistics in the United States continue to show an increase in unhealthy behaviors such as domestic violence and other crimes, the question must be asked if these issues can be connected with inappropriate expression of emotions. If so, understanding how and when children become socialized to adhere to rigid gender stereotypes may be helpful in preventing unhealthy emotional behavior.
LITERATURE REVIEW

Data addressing the importance of emotion regulation in families is prevalent in current psychological literature. Emotion regulation research has been conducted in relation to frustration in preschool children, parental warmth in relation to child emotion regulation, and emotional regulation and attachment quality (see Stansbury & Sigman 2000; Eisenburg, et. al. 2005; Diener, et. al. 2002; Cassidy 1994). Research in the area of emotion regulation continues to increase as scales are applied to a variety of developmental constructs. For instance, McDowell (2001) discusses parental influence as it relates to emotional and social competence. Also, a study by Tonyan (2005) examines the influence of emotion regulation as it relates specifically to distress.

Additionally, current research has been conducted to examine the differences in expression of emotion between males and females. Research supports the notion that females are more emotionally expressive than males. A study by Kring and Gordon (1999) demonstrated that in viewing emotionally intense films, females were more likely than males to express emotion. Another study by Sells and Martin (2001) indicated similar findings. After watching an emotionally provocative video, participants responded to a questionnaire. Women expressed more emotional experiences than men and were more likely to use emotional words in their descriptions. Also, a study conducted by Plant, Hyde, Keltner, and Devine (2000) indicated that women experience a broader range of emotions more often than men. The study also indicated that women are more prone to feel and be labeled as sad while men are more likely to feel and be
labeled as angry. Moreover, adults’ labels of the emotions of infants as sad or angry were dependent on whether the child was assumed to be a girl or a boy.

Though demonstrated gender differences in emotional expression are consistent, the point in the developmental process when this socialization of emotional expression begins is debatable. Some authors attribute socialization to influences outside the home, such as media and peer-influence. For instance, Davis (2003) suggests that gender stereotypes perpetuated by the media influence real-world behaviors. Jones (1991) likewise discusses gender stereotypes perpetuated in gender-specific advertisements. Harris, Hall and Exner (1976) discuss the presence of gender stereotyping in general media as well as in professional literature. A study by Benerjee and Lintern (2002) relates how gender stereotypes may be influenced by peers at young ages. Egan and Perry (2001) relate the various components that influence gender stereotyping including parents, peers, and one’s own need for conformity.

However, the influences within the home have also been widely discussed. In the *Handbook of Parenting*, Leaper (2002) discusses multiple ways in which parents may influence the socialization of gender in their children. Brody (2000) suggests three possible ways that gender differentiation of emotional expression may occur in the home: (1) imitation, (2) parent-child interactions influenced by temperament, and (3) emotional differentiation between parent and child. Additionally, Brody asserts that all socialization is influenced by cultural values concerning gender roles. A study by Poulin-Dubois, et. al. (2002) demonstrated that children as young as 24 months were able to correctly identify household
activities associated with male and female gender stereotypes. If socialization does indeed occur within the home, examining emotion regulation in small children may be helpful to understanding how boys and girls learn to express emotion differently. Studies have been conducted to examine gender and parent/child communication about emotions, and also gender and emotional availability. A study by Adams, et. al. (1995) examines how parents and children use emotional language to discuss past events. Robinson, Little, and Birigen (1993) likewise discuss how toddlers communicate with their parents about emotion, noting possible gender differentiation. A study by Lovas (2005) specifically notes gender differences in emotional expression between mother/toddler and father/toddler pairs. However, empirical research regarding gender differences and emotion regulation specifically is largely unavailable.

Given literature concerning the relationship between gender and emotional expression, it is hypothesized that levels of emotion regulation will reflect the suggested socialization of girls as being more emotionally expressive than boys. This study examines the variables of emotion regulation by analyzing coded videotaped interactions between mother and child. The data were coded using the Emotion Regulation Rating Scales (Fogel, Koyer, & Johnson 2005) and examined for possible gender differences. Gender differences were used to test the hypothesis that females elicit more emotion than their male counterparts. Thus, it is hypothesized that female children will demonstrate a higher mean score on the Child Regulation with Mother sub-scale than male children. Additionally it is suggested that mothers will reciprocate greater responsiveness to female children.
Therefore, mothers of girls will demonstrate higher Maternal Regulation with Child scores than mothers of boys.
METHODS

Participants

Participants consist of 144 mother-child dyads from low-income, mainly Caucasian homes in the northern Utah area. All were participants in a local Early Head Start Research and Evaluation study, a longitudinal study addressing the effectiveness of the Early Head Start program (Roggman, et. al. 2004). This study analyzed observational data administered when children were 14 months, 24 months, and 36 months of age as well as at Pre-Kindergarten entry.

Procedure

Data were collected in family homes with trained data collectors administering assessments and observations. Though multiple assessments were originally administered (including parental interviews and child assessments) the data used for the purpose of this study include only video-taped observations of parent-child interaction. Observations include tasks designed to assess child distress, parent-child play, and maternal feedback and teaching. The parent-child free-play task is used for this study, which consists of child and parent playing with three bags of toys for ten minutes.

Measures

The mother-child play observations were coded using the Emotional Regulation Rating Scales (ERRS) developed by the University of Utah. The ERRS includes four dimensions: Infant Control versus Amplification of Emotions, Maternal Control versus Amplification of Emotions, Infant Regulation
with Mother, and Maternal Regulation with Infant (Fogel, Koyer, & Johnson 2005). Trained coders rated each ten minute parent-child interaction for these four areas. For each dimension a score of 1-7 was given after watching the interaction. Though all four areas were coded, only the Child Regulation with Mother and Maternal Regulation with Child scales were assessed for this particular study.

**Regulation versus Control.** Infant regulation was defined as the extent to which a child explores versus over-controls his or her own emotions. A high score consists of examples such as a broadening of a smile or laughter. A low score displays characteristics such as throwing or screaming. Mothers were scored for their own emotions on the same scale. An animated mother would receive a high score, while a quiet, withdrawn mother would receive a lower score.

**Child Regulation with Mother.** Infant regulation was conceptualized as the degree to which a child requests emotional assistance from his or her mother. A high score would consist of such examples as looking at the mother and asking a question, asking for help, and talking about emotions. A low score would consist of examples of ignoring the mother or expressing out-of-control emotions such as engaging in a temper-tantrum.

**Maternal Regulation with Child.** Maternal regulation was defined as the extent to which a mother is able to assist her child in identifying and building emotions. A high score might consist of talking about emotions and correctly reading the child’s expressions. A low score might contain ignoring the child or enforcing a play agenda inconsistent with the child’s interests. For full definitions, see Appendix B.
Reliability was initially established by each coding team member obtaining a Kappa of .80 or higher for a series of previously coded videos, allowing for a one point difference in scores. After inter-rater reliability was initially established, 25% of data were coded by a master coder for reliability. Additionally, weekly coding team meetings were held in order to resolve questions and to aid in the prevention of coding drifting. Allowing for a one point difference in scores, reliability was maintained at 90% agreement and a Kappa of .80.
RESULTS

This study used a correlational design. The coded data were analyzed using SPSS (statistics program for social sciences) Pearson correlation. Most age points produced non-significant results for Child Regulation with Mother. However, level of Infant Regulation with Mother at 36 months was significantly higher for females than males, $r = -.18, p = .04$. Additionally, Child Regulation with Mother was significant at the .10 level for the 14 month age point, ($r = -.14, p = .09$). However, the finding is not considered statistically significant. Non-significant results were found at all age points for Maternal Regulation with Infant. For full SPSS results, see Appendix A.
DISCUSSION

The results of the study are admittedly ambiguous. It was hypothesized that the data would show a consistent trend; however as the 36 month age point was the only group indicating a significant result analysis creates additional questions but also hypothesizes possible explanations.

One possible suggestion is that perhaps female children are more prone to identifying with their female parents particularly at the 36 month age point. Indeed, a study by Benenson, et. al. indicated that female children demonstrated more emotional closeness than their male counterparts at the ages of four and five years (1998). However, this explanation does not account for the non-significant results for the Pre-Kindergarten age point demonstrated in this study.

Another suggestion is that though the coding measure is effective for examining emotional regulation, the measure may not be an effective measure for examining gender differences. If so, there may be an actual relationship between gender and emotion regulation. The author proposes that the study be replicated with additional measures to assess such as possibility.

An additional possibility is that though there may be differences in emotion between males and females, these differences may be more culturally exaggerated than is actually accurate. This is suggested by Brody’s assertion that stereotypes concerning gender differences fail to address qualities such as cultural differences, individual differences, and situational factors (2000). If so, perhaps
emotion regulation in young children is not related to gender and the significant result of this study at the 36 month age point is due to a confounding factor.

Also notable for discussion are the non-significant results of the Maternal Regulation with Child measure. This finding suggests that mothers are consistent in regulating emotions between boys and girls, which may contradict previous studies indicating parenting differences for male and female children (see Sturge-Apple, et. al 2004). However, additional studies have suggested that consistent evidence of differential parental treatment between boys and girls has yet to be established (see Pinkerton 1997).

Despite vague conclusions, the study suggests overall the necessity of further examination in the area of emotion regulation. The author specifically suggests further studies examining the specific relationship between emotion regulation and gender in order to produce more concrete results.
REFERENCES


Diener, M., Mengelsdorf, S., McHale, J. & Frosch, C. (2002). “Infants' behavioral strategies for emotion regulation with fathers and mothers: Associations
with emotional expressions and attachment quality.” *Infancy, 3*(2), 153-174.


Table 1.
Correlations between Gender\(^1\) and ERRS Subscales.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Months – Infant Regulation with Mother</td>
<td>-.141(^*)</td>
</tr>
<tr>
<td>14 Months – Maternal Regulation with Infant</td>
<td>-.082</td>
</tr>
<tr>
<td>24 Months – Infant Regulation with Mother</td>
<td>-.070</td>
</tr>
<tr>
<td>24 Months – Maternal Regulation with Infant</td>
<td>-.011</td>
</tr>
<tr>
<td>36 Months – Infant Regulation with Mother</td>
<td>-.182(^*)</td>
</tr>
<tr>
<td>36 Months – Maternal Regulation with Infant</td>
<td>-.033</td>
</tr>
<tr>
<td>Pre-Kindergarten – Infant Regulation with Mother</td>
<td>.062</td>
</tr>
<tr>
<td>Pre-Kindergarten – Maternal Regulation with Infant</td>
<td>-.014</td>
</tr>
</tbody>
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\(+ p < .10. \quad \ast p < .05.\)

\(^1\)Male = 1 and Female = 0.
APPENDIX B

SELF-REGULATION CODING SYSTEM
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SCALES:
I. Controlling vs. Exploring Emotions
II. Child regulation with mother
III. Maternal regulation with child

I. EXPLORATION VS. CONTROL

Code separately for the child and mother vis-à-vis their own emotions.
Although we view all self-regulation as dyadic, in this scale we are mainly
focusing on the child or the mother.

How much is the emotion expanded or amplified versus subdued,
suppressed, or getting out of hand? For example, expansion of an emotion
could look like broadening of a smile, laughing out loud, or intensifying
an angry expression (without losing control). Expressions of anger or
frustration would get a low score if accompanied by undercontrolled
actions such as throwing, hitting, or screaming. Also score low if a child
seems stuck in an emotional state, unable to move out of it (for instance, a
fixated gaze on a camera, seemingly entranced).

It can be difficult to decide when angry/frustrated/upset emotions are
explored versus undercontrolled. The important criterion here is whether
the child has an intention and openness to continue to communicate with
the mother. For example, if a child gets increasingly angry but continues
to communicate to the mother (“Mom, listen! Mo-om!”) and shows that
she is prepared to modulate her emotional state depending on the mother’s
response, this would be exploration (higher score). In this case, there is
some awareness of the emotions and of the presence of the mother — and
there are various options for dealing with the emotions. However, if the
child would stop noticing the mother, going into her won world, this
would be seen as undercontrol (lower score). In this case, the child can
only go one way and gets stuck in the emotion.

1. Overcontrol, avoidance, withdrawal or undercontrol, anger
2.
3.
4. Becomes appropriately engaged in own emotions of self but does not
amplify or elaborate
5.
6. Emotional expansiveness, seeks to amplify and enhance emotions

II. CHILD REGULATION WITH MOTHER

How does the child reference the mother to regulate his/her emotions? A high score would consist of clearly referencing the mom when an emotion comes up (e.g., a child starts to smile, then turns to the mom, and then broadens her smile; a child gets frustrated with the puzzle and asks the mom “can you help me?”). In a similar example, when the child would become frustrated with the puzzle and simply walk away, or ignore mom’s attempts to help, this would receive a low score.

1. Gaze avoidance, ignoring mom, frustration, anger
2.
3.
4. Not requesting interaction, but not rejecting it
5.
6.
7. Mutual regulation, seeks comfort and/or requests amplification

III. MATERNAL REGULATION WITH CHILD

How does the mother co-regulate the child’s emotions? Is she monitoring the child’s emotions? Attuning to them? Amplifying and expanding upon them? Or is she not paying attention to the child’s emotions at all?

1. Does not acknowledge infant’s emotions, withdraws, ignores child
2.
3.
4. Allows child to have a full range of emotions including peaks of sadness, anger, and happiness
5.
6.
7. Amplifies, expands, builds on child’s emotions