What Mentees Bring: A Quantitative and Qualitative Examination of Mentees' Pre-existing Relationship Characteristics, Mentoring Relationship Quality, and Outcomes

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Mentoring is a popular intervention in the United States due to its many potential benefits for at-risk youth (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Some studies (e.g., Grossman & Tierney, 1998; Du Bois et al., 2011; Tolan, Schoney, Bass & Lovegrove, 2013; DeWitt et al., 2007) show positive outcomes of mentoring such as gains in academic, behavioral, and social skills. However, not all studies on the effectiveness of mentoring have found positive results. Some studies (e.g., DuBois, Holoway, Valentine, & Cooper, 2002; Bernstein, Dun Rappaport, Olsho, Junt, & Levin, 2009) have found that mentoring programs have had little to no effect on outcomes and sometimes, when programs are implemented poorly and relationships terminate early, can even have a negative impact (DuBois et al., 2011).

Given these mixed results of mentoring, it is beneficial to investigate what factors might impact the effectiveness of mentoring in order to better inform programs on how to best support relationships in promoting positive outcomes for mentored youth. Since the mentoring relationship has been shown to be central to the success of mentoring (Rhodes, 2002; DuBois et al., 2002; Rhodes et al., 2006; Bayer, Grossman & DuBois, 2015), examining factors that may impact the development of a strong mentoring relationship provides one potential avenue for explaining the mixed outcomes of mentoring. Mentee characteristics such as age, gender, and individual risk factors have been found to have an impact on mentoring relationship development (Du Bois et al., 2011; Rhodes, 2002, 2008). However, less is known about the way that a mentee's understanding and expectations of relationships, based, for example, on her attachment experiences with her mother and peers, impacts her ability and willingness to engage in a mentoring relationship. The purpose of this three-paper dissertation is to examine how mentees'

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relationship characteristics, which I define as the youth's feelings about and perceptions of their relationships with other people (i.e., parents and peers) impact mentoring relationship development and outcomes.

The first paper examines the association between mentees' attachments to their mothers and peers with mentoring relationship quality. Based on results of the first paper, the second paper focuses on gaining a qualitative understanding of the link between the mentees' levels of two dimensions of their maternal relationships (communication/trust and alienation) with mentoring relationship development by examining interviews of mentees who started the program with differing maternal relationship characteristics as well as interviews with their mentors. Finally, the third paper investigates the association between maternal relationship characteristics and academic and behavioral outcomes, with mentoring relationship quality as a mediator.

Mentoring as a Relationship-Based Intervention

The success of mentoring has been found to hinge on the quality of the relationship between mentees and mentors. According to the Rhodes' model of mentoring, mutuality, trust, and empathy are key factors important to the success of a mentoring relationship (2002). Within a trusting and connected relationship, mentees feel safe to express feelings and receive feedback from mentors, contributing to mentees' overall development and growth in a variety of domains (Rhodes, 2002). Strong mentoring relationships have been found to be associated with improvements in youths' other relationships, such as relationships with teachers and parents (Chan et al., 2011) as well as improvements in behavior (Sieving et al., 2016). Rhodes (2005) posits that the extent to which a mentoring relationship is trusting, empathetic, and connected will determine how much the mentoring impacts overall outcomes such as academic and

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behavioral improvements. On the other hand, mentoring relationships that end early have been shown to have a negative impact on youth (DuBois et al., 2011).

Mentee characteristics

Mentee characteristics such as age, gender, and individual risk factors, have been shown to have an impact on mentoring relationship development (Du Bois et al., 2011; Rhodes, 2002, 2008). Adolescent mentees in particular present unique challenges for relationship development. One study found that matches in which the mentee was between 13-16 years old were 65% more likely to terminate early than those with mentees who were between the ages of 10 and 12 (Grossman & Rhodes, 2002). Additionally, girls may present additional challenges within the mentoring context as they are commonly referred to mentoring programs for relational difficulties and tend to place more value on relationships than boys do (Rhodes, 2002). Further, behavioral and academic risk status is significantly associated with mentor reports of relationship quality (Karcher, Nakkula, & Harris, 2005). Given these prior findings, this dissertation will focus on early adolescent girls who have been identified by their schools as being at risk for social, emotional, behavioral, or academic reasons.

Mentees' Attachment and Relationship Development

One area that has not been adequately explored is the impact that a mentee's relationship characteristics (i.e., attitudes and feelings about her relationships with her mother and peers) have on her ability and willingness to form a close mentoring relationship. Relationship characteristics are conceptually linked to, but not necessarily the same as, attachment. Youths' perceptions about these important relationships stem from their internal working models of relationships, which develop from early attachment experiences (Waters & Bretherton, 1985; Bowlby, 1988). These internal working models

influence future relationship development. Several studies (e.g., Meeus, Oosterwgel, Vollebergh, 2002; Stams et al., 2002) have found an association between maternal attachment and subsequent relationship and social development with peers and others, which could include the development of mentoring relationships. In fact, one study found that securely attached children benefitted more from strong mentoring relationships than insecurely attached children (Goldner & Scharf, 2014).

Peers are also particularly important during early adolescence (NASEM, 2019). Thus, we may expect that peer relationships could impact mentoring relationships during this developmental period. When applied to mentoring, social network theory suggests that what a mentee's peers think about her mentor could impact the mentee's engagement in the mentoring relationship (Keller & Blakeslee, 2014). This may be especially true for girls who have lower peer self-esteem, as they are likely more susceptible to the opinions and potential criticisms of their peers (Zimmerman, Copeland, Shope, Dielman, 1997). Taken together, this research indicates that the nature of a mentee's other relationships could impact how able and willing she is to form a close relationship with a new adult, such as a mentor.

In order to evaluate mentees' perceptions of and feelings about their maternal relationships at the start of the mentoring program, I used the Inventory of Peer and Parent Attachment throughout the dissertation. This measure is comprised of three sub-scales: Communication, Trust, and Alienation. While it provides information about a person's perceptions of and opinions and feelings about her maternal relationship, it has been criticized as not being a true measure of attachment (Allen et al., 2003). Previous studies using this measure typically combine the scales into a composite to capture a person's overall attachment level. However, in the process of originally validating the

measure, Armsden and Greensburg found that the Alienation scale sometimes operated differently than the other two scales (1987). Specifically, some patterns of scores were found to be "unclassifiable" since they did not follow the expected patterns (e.g., high levels of alienation combined with medium levels of trust and communication) (Armsden & Greensburg, 1987). These findings suggest that, despite the tendency to combine sub-scales into a composite score, the sub-scales may be capturing different elements of parental relationships. The differences between the subscales are captured in the types of questions they ask. For example, the Alienation scale includes statements such as "I feel angry with [my mother]", "I feel irritated with her for no reason" and "I feel alone or apart when I'm with her". Armsden and Greensburg described this scale as measuring withdrawal due to "dissatisfaction with [mother's] help" (1987). The other two subscales include statements such as "she accepts me as I am", "I trust her", and "she respects my feelings". These scales were originally described as evaluating parental understanding, trust, and respect as well as the extent and quality of communication. Thus, these scales represent different elements of parent-child relationships. Whereas researchers in general might assume that these elements would be positively correlated, and thus contribute to a composite attachment score, there is theoretical reason to question this assumption, especially for early adolescent girls. During early adolescence, youth negotiate the complicated task of asserting autonomy while maintaining connectedness (Allen & Land, 1999; NASEM, 2019). For girls, this process may complicate relationships with their mothers, especially since conflicts tend to increase during this stage at a more rapid pace for girls than for boys (Degoede et al., 2008; Smetana & Rote, 2019). Theoretically, it is possible that different maternal relationship challenges could either inhibit or promote a mentee's willingness and ability to engage in developing a strong mentoring relationship.

Thus, these subscales were examined separately throughout this dissertation. In the

process of this separate examination, we found that for our sample the Communication

and Trust subscales were highly correlated with each other. To address this, these two

subscales were combined to form the communication/trust subscale, while alienation

remained separate.

Guiding Questions

The goal of this three-paper dissertation was to gain a better understanding of the

ways in which mentees' relationship characteristics prior to the start of mentoring impact

their ability and willingness to develop a close and connected mentoring relationship. I

sought to identify which relationships (i.e., parents or peers) were the most associated

with mentoring relationship development, and how these characteristics were operating in

the relationship development process. In addition, I sought to examine how these

characteristics, through the mechanism of the mentoring relationship, impacted outcomes

of mentoring. These three manuscripts are guided by the following question:

How do early adolescent girls' prior relationships influence mentoring relationship

development?

Conceptual Model   Paper 3

Paper 2

| Pre-Existing relationship characteristics | ⇨ | Interactions between Mentees and Mentors | ⇨ | Mentoring Relationship Quality | ⇨ | Outcomes of mentoring |
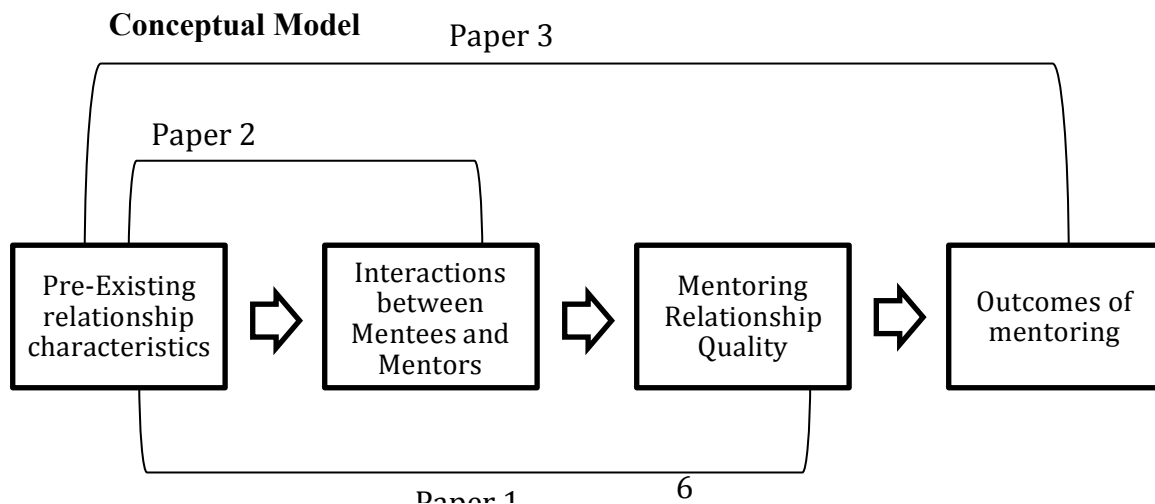
Paper 1

Paper one. The first exploratory study investigated the hypothesis that mentees who reported having more difficulty in their peer and parental relationships prior to the mentoring program would have lower quality mentoring relationships. An additional goal of this study was to explore potential barriers to successful mentoring relationship development. This information could help mentoring programs modify mentor trainings to address these barriers.

The sample consisted of 205 middle school girls who participated in the Young Women Leaders Program between 2007 and 2010. Pre-intervention data were collected through self-report questionnaires that included demographic information as well as assessments of participants' emotional, social, and academic characteristics. Specifically, girls' perceptions of their maternal relationships were measured using the Inventory of Peer and Parent Attachment (IPPA) and girls' feelings about their peer relationships were measured using the Peer Self-Esteem subscale of the Self-Esteem Questionnaire. The IPPA consists of three subscales. However, the communication and trust subscales were combined because they were highly correlated in our sample, resulting in two sub-scales for this measure: Communication/Trust and Alienation. Self-report questionnaires were also administered to the study participants immediately after the conclusion of the program in the spring, one of which asked mentees to rate the quality of their mentoring relationship.

Linear regression analysis revealed that mentees with lower levels of maternal communication/trust tended to report lower quality mentoring relationships. On the other hand, mentees who reported higher levels of maternal alienation tended to have higher

quality mentoring relationships. Peer self-esteem was not significantly associated with mentoring relationship quality. Results partially confirmed the hypothesis that difficulties in pre-mentoring relationships would be associated with lower quality mentoring relationships. These results also suggest that there are differences in types of maternal relationship difficulties and how they operate in terms of mentoring relationship development for girls in YWLP. Additionally, these results lend support to the idea that the subscales of the IPPA are measuring different elements of the maternal relationship for early adolescent girls. Girls who are experiencing challenges captured by the significantly associated items of the alienation subscale (I feel angry with her, I feel alone or apart when I'm with her, and she seems irritated with me for no reason) may be more open to or in need of a mentor's help. In contrast, girls who are experiencing communication and trust issues in their maternal relationship such as feeling as though they cannot trust their mothers, their mothers do not care for them, or wishing they had a different parent, may feel more wary of a new relationship or offer of help from a mentor. Thus, for early adolescent girls, communication/trust may represent foundational attachment issues whereas alienation may signify relational difficulties that are linked to the developmental tasks of early adolescence, in particular individuating from their mothers. Findings from this study could be utilized to inform mentor training regarding relationship development with girls who are experiencing a variety of challenges of adolescence, specifically individuation from their mothers. This paper entitled, "What mentees bring: Relationship characteristics pre-mentoring and mentoring relationship satisfaction" was accepted for publication in September 2019 to the *Journal of Early Adolescence*.

Paper two. Results from the first study showed that lower levels of maternal communication/trust are associated with lower quality mentoring relationships, while higher levels of maternal alienation are associated with higher quality mentoring relationships. These results suggest that communication and trust may be indicative of foundational attachment issues, while alienation may be linked to the developmental tasks of adolescence. The second study examined interviews of mentees with and without maternal communication/trust and alienation difficulties, as well as interviews with their mentors, in order to better understand how these two types of relational difficulties were operating in terms of mentoring relationship development. An additional goal of this study was to provide mentoring programs with a more detailed and specific understanding of how to modify mentor training so that mentors can develop strong mentoring relationships with girls with maternal relationship challenges. This is especially salient for adolescent girls as they are often referred to mentoring programs due to difficulties in their maternal relationships (Rhodes, 2002).

The sample consisted of 37 mentors and mentees (19 mentees and 18 mentors) who had participated in the Young Women Leaders Program (YWLP) between 2007 and 2010. The mentees with the five highest and lowest scores on the communication/trust and alienation subscales of the Inventory of Peer and Parent Attachment (IPPA) were selected for analysis. One mentee was in both the low communication/trust group as well as the more alienated groups and one mentee did not have a corresponding mentor interview. Interviews had been conducted at the end of the mentoring year. Coding was conducted using thematic analysis (Braun & Clark, 2006) by trained researchers and was checked for reliability and consistency. Qualitative analysis revealed that mentees with lower communication and trust with their mothers emphasized the importance of initial

impressions and trust in the mentoring relationships. Additionally, mentors of girls with lower communication and trust tended to have difficulty developing relationships with their mentees' families. For mentees who reported more alienation from their mothers, mentors giving advice and communicating with them about their relationships with their mothers contributed to positive relationship development. Additionally, mentors of girls in this group spent more time developing relationships with their mentees' families and tended to view differences between themselves and their mentees as positive rather than as a barrier to relationship development. Findings can contribute to mentor training as they can help mentors better understand the specific elements that may contribute to successful relationship development with mentees experiencing a variety of relationship difficulties with their mothers.

      Paper Three. Mentoring programs frequently target youth at-risk both behaviorally and academically, but have not always been successful in improving these outcomes. Examining factors that might impact the overall effectiveness and benefits of mentoring can help programs be better prepared to address these factors through mentor training and support. We have found that early adolescent girls' difficulties with maternal communication and trust are associated with lower quality mentoring relationships, while their difficulties with maternal alienation are associated with better quality mentoring relationships (Williamson, Lawrence, Lyons, & Deutsch, 2019). Previous studies have found that stronger, longer, and closer mentoring relationships have a positive impact on academic and behavioral growth for mentored youth (Rhodes, 2002; DuBois et al., 2002; Rhodes et al., 2006; Bayer, Grossman & DuBois, 2015). Maternal relationship characteristics (i.e., maternal communication/trust and alienation) are conceptually linked to attachment, which has also been found to be associated with behavioral and academic

outcomes. For example, one study found that secure attachment in childhood was predictive of GPA and attention and participation in middle school (Jacobson & Hoffman, 1997). However, not as much is known about how and through what mechanism these maternal relationship characteristics impact academic and behavioral outcomes for mentored youth. Given that mentoring is a relationally-based intervention, we hypothesized that maternal relationship characteristics (maternal communication/trust and alienation) impact academic and behavioral outcomes of mentoring through the mechanism of the mentoring relationship quality. The third paper tested this hypothesis and addressed the following questions: (1) Amongst early adolescent girls referred to a mentoring program, is there an association between maternal relationship characteristics (communication/trust and alienation) and academic and behavioral outcomes? (2) If so, does the quality of the mentoring relationship mediate this association?

The sample consisted of 205 girls who participated in YWLP between 2007 and 2010. Maternal attachment was evaluated using mentees' responses on the Inventory of Peer and Parent Attachment (IPPA), which consists of three sub-scales. As with the first study, the communication and trust sub-scales were combined since these scales were highly correlated for our sample. Average grades of the four core subjects (math, science, social studies, and English) at the end of the mentoring year (7th grade) were used to assess academic outcomes. YWLP targets relational and social skills such as resolving conflicts, communicating effectively, and reducing gossiping and bullying (Lawrence et al., 2009). Thus, behavioral outcomes were chosen that capture those behavioral domains addressed in YWLP. To evaluate behavioral outcomes, two measures were used: the Conflict Resolution and Asserting Influence scale (Buhrmester, Furman, Wittenberg, & Reiss, 1988) and the Aggressor subscale of the Bullying scale (Adapted from Mynard &

Joseph, 2000). Finally, mentoring relationship quality was evaluated using the Rhodes'

measure of Mentoring Relationship Satisfaction (Rhodes, Reddy, Roffman, & Grossman,

2005). Results of three separate mediation models (one for each outcome) revealed

several significant direct effects between maternal relationship characteristics, mentoring

relationship quality, and academic and behavioral outcomes. Specifically, higher levels of

maternal communication and trust were associated with better quality mentoring

relationships. Higher levels of alienation were also associated with higher quality

mentoring relationships. Higher quality mentoring relationships were associated with less

bullying behavior and better conflict resolution. Higher levels of maternal

communication/ trust were associated with better grades and conflict resolution skills.

Higher levels of maternal alienation were associated with more bullying behavior. In

addition, the overall mediated pathways between maternal relationship characteristics

(i.e., communication/trust and alienation) and behavioral outcomes (i.e., bullying

behavior and conflict resolution) were statistically significant, indicating that maternal

relationship characteristics impact behavioral outcomes through the mechanism of

mentoring relationship quality for mentored early adolescent girls. The mediation

pathway between relationship characteristics and grades was not significant. Results

suggest that maternal relationship characteristics impact the effectiveness of mentoring.

Results also provide additional support for the connection between strong maternal

attachment and positive behavioral outcomes. Of note, higher levels of maternal

alienation are associated with better quality mentoring relationships, but negative

behavioral outcomes (fewer conflict resolution skills and more bullying behavior). This

suggests that whereas a less connected maternal relationship may have a negative impact

on social and behavioral skills for early adolescent girls, this does not impede mentees

from developing a strong mentoring relationship. This could be due to eagerness for help and support from a mentor when girls are feeling alienated from their mothers. Findings can inform mentoring programs regarding the importance of supporting the development of high quality mentoring relationships, particularly for girls struggling with maternal relationship difficulties. The lack of a significant mediation effect for academic outcomes highlights that while the mentoring relationship is a key factor in the intervention, it is not the only mechanism of change through which mentors can have a positive impact on youth.

Implications

There are many potential benefits of mentoring, but prior research has shown mixed outcomes of different mentoring programs. Central to the success of mentoring as an intervention for youth is the mentoring relationship (Rhodes, 2002). This dissertation aims to better understand the factors that may influence the development of a strong mentoring relationship, and by extension the outcomes of mentoring. The first paper established a connection between maternal relationship characteristics and mentoring relationship quality, and revealed a difference between types of maternal relationship issues. The second paper expanded upon these results and provided specific details regarding how these two types of relationship challenges operate in regards to mentoring relationship development. The third paper addressed how and through what mechanism maternal relationship characteristics impact outcomes of mentoring. Taken together, these studies have some important implications for the field of mentoring.

First, for girls referred to mentoring due to difficulties in their maternal relationships, mentors should recognize that relationship development might be more difficult. However, the relationship is a primary mechanism of change and is particularly

important for these girls, who are at risk of negative outcomes. As a result, programs

should focus on training mentors about how to develop relationships with girls with a

variety of attachment related challenges. Specifically, mentors can bridge the gap

between mentees and their mothers, encouraging autonomy *and* connection. Mentors

should go slow, put mentees at ease early on, and focus on developing trust. Mentors

should also focus on engaging and connecting with mentees' families throughout the

mentoring process. In addition, these papers suggest that with strong mentoring

relationships**,** girls can develop better conflict resolution skills and learn how to interact

with others without bullying or being unkind. Finally, these papers reveal that what

mentees bring into a mentoring relationship ultimately impacts what they get out of it.

References

Allen, J. P. & Land, D (1999). Attachment in adolescence. J. Cassidy & P. R. Shaver

(Eds.) *Handbook of attachment theory and research and clinical*

applications, (pp. 319- 335), New York: Guilford

Allen, J. P., Mcelhaney, K. B., Land, D. J., Kuperminc, G. P., Moore, C. W., Obeirne-

Kelly, H., & Kilmer, S. L. (2003). A Secure Base in Adolescence: Markers of

Attachment Security in the Mother-Adolescent Relationship. *Child*

Development,74(1), 292-307. doi:10.1111/1467-8624.t01-1-00536

Armsden, G. C. &. G., M.T. (1987). The inventory of parent and peer attachment:

Individual differences and their relationship to psychological well-being in

adolescence. *Journal of Youth and Adolescence, 16*(5), 427-454.

doi:10.1007/BF02202939

Bayer, A., Grossman, J. B., & Dubois, D. L. (2015). Using Volunteer Mentors To

Improve The Academic Outcomes Of Underserved Students: The Role Of

Relationships. *Journal of Community Psychology*, *43*(4), 408–429. doi:

10.1002/jcop.21693

Bernstein, L., Dun Rappaport, C., Olsho, L., Junt, D., & Levin, M. (2009) Impact

Evaluation of the U.S. Department of Education's Student Mentoring Program,

Final Report. National Center for Education, a Evaluation and Regional

Assistance. Institute of Education Sciences. U.S. Department of Education. March

2009. (NCEE 2009-4047).

Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human

development. New York: Basic Books.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative*

Research in Psychology,3(2), 77-101. doi:10.1191/1478088706qp063oa

Buhrmester, D., Furman, W., Wittenberg, M. T., & Reis, H. T. (1988). Five domains of
    interpersonal competence in peer relationships. Journal of Personality and Social
    Psychology, 55(6), 991–1008. https://doi.org/10.1037/0022-3514.55.6.991

Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E., & Herrera, C.
    (2013). Pathways of influence in school-based mentoring: The mediating role of
    parent and teacher relationships. *Journal of School Psychology,51*(1), 129-142.
    doi:10.1016/j.jsp.2012.10.001

De Goede, I.H.A., Branje, S.J.T. & Meeus, W.H.J. Developmental Changes in
    Adolescents' Perceptions of Relationships with Their Parents. *J Youth
    Adolescence* **38,** 75–88 (2009). https://doi-
    org.proxy01.its.virginia.edu/10.1007/s10964-008-9286-7

De Wit, D. J., Lipman, E., Manzano-Munguia, M., Bisanz, J., Graham, K., Offord, D.
    R., … Shaver, K. (2007). Feasibility of a randomized controlled trial for
    evaluating the effectiveness of the Big Brothers Big Sisters community match
    program at the national level. *Children and Youth Services Review, 29,* 383-
    404. doi:10.1016/j.childyouth.2006.09.003

DuBois, D. L., Holloway, B.E., Valentine, J. C., Cooper, H., (2002). Effectiveness of
    mentoring programs for youth: A meta-analytic review. *American Journal of
    Community Psychology, 30 (2),* 157-197.

DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N., & Valentine, J.C. (2011).
    How effective are mentoring programs for youth: A systematic assessment of
    the evidence. *Psychological Science in the Public Interest, 12,* 57-91.
    doi: http://dx.doi.org.proxy.its.virginia.edu/10.1177/1529100611414806

Goldner, L., & Scharf, M. (2014). Attachment Security, the Quality of the Mentoring

    Relationship and Protégés' Adjustment. *The Journal of Primary Prevention,35*(4),

    267-279. doi:10.1007/s10935-014-0349-0

Grossman, J. B. & Tierney, J.P. (1998). Does mentoring work: An impact study of

    the Big Sisters Big Brothers Program. *Evaluation Review, 22,* 315-426.

    doi: 10.1177/0193841X9802200304

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of

    duration in youth mentoring relationships. *PsycEXTRA Dataset,30*(2), 199-219.

    doi:10.1037/e314762004-001

Jacobsen, T., & Hofmann, V. (1997). Childrens attachment representations: Longitudinal

    relations to school behavior and academic competency in middle childhood and

    adolescence. *Developmental Psychology,33*(4), 703-710. doi:10.1037/0012-

    1649.33.4.703

Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental Mentoring Match

    Characteristics: Correspondence between Mentors' and Mentees' Assessments of

    Relationship Quality. *The Journal of Primary Prevention,26*(2), 93-110.

    doi:10.1007/s10935-005-1847-x

Keller, T. E. & Blakeslee, J. E. (2014). Social networks and mentoring. In D. L. DuBois

    & M. J. Karcher (Eds.) *Handbook of youth mentoring 2*nd *Edition*. Thousand

    Oaks, CA: Sage Publications.

Lawrence, E., Roberts, K., Sovik-Johnston, A., & Thorndike, A. (2009). *Young Women*

    Leaders Program Mentor Handbook (6th Edition). Charlottesville, VA: The

    Rector and Board of Visitors, University of Virginia.

Meeus, W., Oosterwegel, A., & Vollebergh, W. (2002). Parental and peer attachment

and identity development in adolescence. *Journal of Adolescence,25*(1), 93-106.
doi:10.1006/jado.2001.0451

Mynard, H. , & Joseph, S. (2000). Development of the Multidimensional Peer
Victimization Scale. Aggressive Behavior, 26, 169-178.

National Academies of Sciences Engineering and Medicine (2019). *The promise of
adolescence: Realizing opportunity for all youth.* Washington, DC: The National
Academies Press.

Rhodes, J., (2008). Improving youth mentoring interventions through research-
based practice. *American Journal of Community Psychology, 41,* 35-42. doi:
10.1007/s10464-007-9153-9

Rhodes, J. E. (2002). *Stand by Me: The Risks and Rewards of Mentoring Today's
Youth.* Cambridge, MA: Harvard University Press.

Rhodes, J. E. (2005). A model of youth mentoring. In D. L. DuBois, & M. J. Karcher
(Eds.), Handbook of youth mentoring (pp. 30–43). Thousand Oaks, CA: Sage.

Rhodes, J.E., DuBois, D. L. (2006). Understanding and facilitating the youth
mentoring movement. *Social Policy Report, XX (III*), (3-19).

Rhodes, J. Reddy, R., Roffman, J., Grossman, J.B. (2005). Promoting successful
youth mentoring relationships: A preliminary screening questionnaire. *The
Journal of Primary Prevention,* 26. 147-167.
Doi: http://dx.doi.org.proxy.its.virginia.edu/10.1007/s10935-005-1849-8

Seiving, R. E., McRee, A., McMorris, B. J., Shlafer, R. J., Gower, A. L., Kapa, H. M.,
. . . Resnick, M. D. (2016). Youth–Adult Connectedness: A Key Protective Factor
for Adolescent Health. *American Journal of Preventative Medicine,52*, 275-278.
http://dx.doi.org/10.1016/j.amepre.2016.07.037

Smetana, J. G., & Rote, W. M. (2019). Adolescent–Parent Relationships: Progress,

    Processes, and Prospects. *Annual Review of Developmental Psychology* , *1*, 41–

    68. doi: https://doi.org/10.1146/annurev-devpsych-121318-084903

Stams, G. J., Juffer, F., & Ijzendoorn, M. H. (2002). Maternal sensitivity, infant

    attachment, and temperament in early childhood predict adjustment in middle

    childhood: The case of adopted children and their biologically unrelated

    parents. *Developmental Psychology,38*(5), 806-821. doi:10.1037//0012-

    1649.38.5.806

Tolan P, Henry D, Schoeny M, Bass A, Lovegrove P, Nichols E. (2013). Mentoring

    interventions to affect juvenile delinquency and associated problems: A

    systematic review. *Campbell Systematic Reviews, 2013:10*. doi:

    10.4073/csr.2013.10

Waters, E., & Bretherton, I. (Eds.). (1985). *Growing points of attachment theory and*

    research. University of Chicago Press for the Society for Research in Child

    Development.

Zimmerman, M. A., Copeland, L. A., Shope, J. T., & Dielman, T. E. (1997). A

    longitudinal study of self-esteem: Implications for adolescent

    development. *Journal of Youth and Adolescence, 26*(2), 117–

    141. https://doi.org/10.1023/A:1024596313925

Abstracts

Manuscript One: "What Mentees Bring: Relationship Characteristics Pre-mentoring and Mentoring Relationship Satisfaction"

A critical mechanism through which mentors are thought to influence developmental outcomes is the mentee-mentor relationship. Attachment theories suggest that a mentee's perceptions of other relationships in her life may impact the quality of the mentor-mentee relationship. This study tests this hypothesis. Data were drawn from a sample of 205 early adolescent girls who received a college-aged mentor through the Young Women Leaders Program for one academic year. In this exploratory study, we examine the association between mentees' relationship characteristics (i.e., perceptions of, feelings about maternal and peer relationships) and mentoring relationship satisfaction. Results of multiple linear regressions revealed that less maternal communication and trust was associated with lower quality mentoring relationships ($\beta=.258$, $p<.05$). Higher levels of maternal alienation were associated with higher quality mentoring relationships ($\beta=.241$, $p<.05$). Results can inform mentor training to support strong mentoring relationships with girls experiencing a variety of attachment-related challenges with their mothers.

Manuscript Two: "A Qualitative Exploration of Mentoring Relationship Development for Girls Experiencing Maternal Relationship Difficulties"

Results of a prior study of 205 middle school girls in the Young Women Leaders Program, a mentoring program that pairs middle school girls with college women, revealed that better quality maternal communication/trust as well as higher levels of maternal alienation were associated with stronger mentoring relationship quality for early adolescent girls. These results suggest that for early adolescent girls there is a distinction between foundational maternal relationship challenges and relationship challenges that are developmentally situated. Based on these results, the current study examines post-program interviews for a sub-sample of the five mentees with the highest and lowest scores for maternal communication/trust and maternal alienation as well as their mentors to gain an understanding of how relationship issues impact mentoring relationship development. Results indicate that for girls experiencing maternal communication and trust issues, first impressions and trust are very important to relationship development. Additionally, mentors of girls with communication and trust issues tended to have difficulty developing a relationship with their mentees' families. For girls experiencing maternal alienation, mentors commonly served as a bridge between mentees and their mothers and helped mentees navigate difficult conversations with their mothers. Additionally, mentors in this group developed strong relationships with their mentees' families. Findings contribute to the literature on mentoring relationship development and help to inform programs regarding training for mentors.

Manuscript Three: "Mothers and Mentoring: The Association Between Maternal Relationship Difficulties and Mentoring Outcomes"

Maternal relationship characteristics have been found to have an impact on academic and behavioral outcomes for youth. Not as much is known about how and through what mechanism these characteristics impact outcomes for mentored youth. This study examines this question. Data were drawn from 205 participants in The Young Women Leaders program, a mentoring program that pairs adolescent girls with college

women mentors for one year of group and one-on-one mentoring. Mentoring relationship quality is the hypothesized mechanism of change and is included in the analysis as a mediator. Results revealed that maternal relationship characteristics (i.e., maternal communication/trust and maternal alienation) are directly related to academic and behavioral outcomes of mentoring. The relationship between maternal relationship characteristics and behavioral outcomes of mentoring is mediated by mentoring relationship quality. Results suggest that girls with better maternal communication and trust as well as girls who are feeling more alienated from their mothers may benefit more from mentoring. Results can be used to inform mentor training to include a focus on relationship development with girls experiencing a variety of relational difficulties with their mothers in order to help improve outcomes of mentoring.

Manuscript One

What Mentees Bring**:** Relationship Characteristics Pre-mentoring and Mentoring

Relationship Satisfaction

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Abstract

A critical mechanism through which mentors are thought to influence developmental outcomes is the mentee-mentor relationship. Attachment theories suggest that a mentee's perceptions of other relationships in her life may impact the quality of the mentor-mentee relationship. This study tests this hypothesis. Data were drawn from a sample of 205 early adolescent girls who received a college-aged mentor through the Young Women Leaders Program for one academic year. In this exploratory study, we examine the association between mentees' relationship characteristics (i.e., perceptions of, feelings about maternal and peer relationships) and mentoring relationship satisfaction. Results of multiple linear regressions revealed that less maternal communication and trust was associated with lower quality mentoring relationships (β=.258, p<.05). Higher levels of maternal alienation were associated with higher quality mentoring relationships (β=.241, p<.05). Results can inform mentor training to support strong mentoring relationships with girls experiencing a variety of attachment-related challenges with their mothers.

Keywords: Mentoring; Youth; Early Adolescent girls; Mentee Characteristics, Mentoring Relationship; Maternal Relationships; Peer Relationships

Mentoring programs in the United States have become increasingly popular as a strategy for promoting positive behavioral, academic, and psychological outcomes (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). A mentor is defined as a non-parental adult (or older youth) who offers guidance and other forms of support to a young person outside of a therapeutic or counseling capacity (DuBois & Karcher, 2014). Although the putative mechanisms of mentoring are varied, the relationship that develops between mentor and mentee is often considered essential for realizing positive developmental outcomes. At the same time, evaluations of mentoring programs show mixed results, which has led to the need to understand the factors that influence a successful mentor-mentee relationship (Bernstein, Dun Rappaport, Olsho, Junt, & Levin, 2009). Considering how other relationships in a mentee's life may influence the mentoring relationship is one approach that some researchers have suggested (e.g., Keller & Blakeslee, 2014). In this study, we draw on Attachment Theory and tested the hypothesis that mentees' perceptions of and feelings about their existing relationships would have an impact on mentoring relationship development.

Evaluations of youth mentoring programs show that mentors have heterogeneous effects on youth outcomes. Grossman and Tierney (1998) found that mentored youth were less likely than non-mentored youth to skip school, use illegal drugs, or hit others, and DuBois and colleagues found mentoring programs were effective in reducing bullying and drug use (2011). Another study found that mentored youth showed improvements in academic performance and scholastic efficacy (Bayer, Grossman, DuBois, 2015). In contrast, Bernstein and colleagues (2009) found that mentoring had little to no impact on mentored youth's behavior. In their meta-analysis of mentoring programs, Tolan, Schoney, Bass and Lovegrove (2013) found overall positive effects for

academic achievement for mentored youth, while Bernstein and colleagues (2009) found

no effect on academic achievement for mentored youth. DeWitt and colleagues (2006)

found positive effects of mentoring in social and emotional domains such as a reduction

of social anxiety and emotional problems for mentored youth, while Wood and May-

Wilson (2012) found mentoring had no effect on social and emotional outcomes. One

study found that for youth at-risk due to personal vulnerabilities, poor program

implementation led to negative overall effects (DuBois, Holoway, Valentine, & Cooper,

2002). Specifically, if mentoring programs are poorly implemented and mentors attend

inconsistently or terminate the relationship early, they may have a negative impact on

mentees' self-esteem (DuBois et al., 2011). The mixed results of the effectiveness of

mentoring warrant further examination of the factors that may impact the outcomes of

mentoring.

One explanation for these heterogeneous effects is the quality of the relationship

that develops between mentor and mentee. Rhodes (2002) described this process in a

theoretical model of mentoring in which essential elements of a successful mentoring

relationship, mutuality, trust, and empathy, were hypothesized to produce positive

developmental outcomes. In a trusting and connected relationship, youth feel safe to

express their feelings and receive feedback from their mentors, contributing to

improvements in their development (Rhodes, 2002). Several empirical studies have

explored the role of the mentoring relationship and found that the strength, length, and

closeness of the mentoring relationship influence the effectiveness of mentoring (e.g.,

Rhodes, 2002; DuBois et al., 2002; Rhodes et al., 2006; Herrara et al., 2006; Bayer,

Grossman & DuBois, 2015). For example, Zand and colleagues (2009) found that the

quality of the mentoring relationship significantly predicted life skills and school bonding

outcomes for youth. Additionally, strong mentoring relationships are associated with improvement in youths' relationships with parents and teachers (Chan et al., 2011) and are associated with positive social, academic, and health-related behaviors (Sieving et al., 2016).

The mentoring relationship is thought to be a primary driver of change in the mentoring intervention, but the Rhodes model also describes how factors external to the mentoring relationship (e.g., the youth's interpersonal history, community and family context, developmental stage, and ability to form relationships) may also influence the effects of mentoring, in part through affecting the quality of the mentoring relationship (Rhodes, 2002). For example, youth with significant behavioral and social difficulties seem to be less likely to form strong and enduring ties with their mentors (Rhodes, 2005). In addition, Spencer (2007) found that mentees experiencing family instability or financial challenges had more difficulty forming mentoring relationships. Characteristics of the mentee, such as age, individual risk factors, and gender, also have been found to impact the mentoring relationship and outcomes of mentoring (Du Bois et al., 2011; Rhodes, 2002, 2008; Raposa, Rhodes, Herrerra, 2016).

Research suggests that the developmental stage (i.e., age) of a mentee may impact the quality of a mentoring relationship. Mentors that had middle or high school-aged mentees reported less close and supportive relationships than mentors of youth in elementary school (Herrera et al., 2000). Allen and Land (1999) describe the increasing desire for autonomy and independence in adolescence, which may cause adolescents to be less engaged in a mentoring relationship with an adult. In addition, peers and romantic relationships become increasingly important during adolescence, which could lessen the adolescent's focus on the mentoring relationship. Further, matches in which the mentee

was of middle school or high school age were more likely to terminate early than those in which the mentees were in elementary school (Kupermidt, Stump, Stelter, Rhodes, 2017). Thus, the age and associated developmental tasks of mentees may moderate the effectiveness of these programs.

The mentee's gender may also influence the outcomes of mentoring (Rhodes, Lowe, Litchfield, Walsh-Samp, 2008). Adolescence is a time commonly characterized by conflict with parents, mood disruptions, and an inclination to take risks (Arnett, 1999; National Academies of Sciences, Engineering & Medicine, 2019). However, adolescent girls may face unique developmental experiences when compared to their male counterparts (Hipwell & Loeber, 2006). Girls are more likely to confront issues within their peer groups (Hipwell & Loeber, 2006), report significantly lower levels of parental trust and higher levels of parental alienation, and place more importance on interpersonal relationships than boys do (Rhodes et al., 2008). Such factors may play an important role within the mentoring context. Female-female mentoring relationships have been found to be slightly more likely to end early when compared with male-male mentoring relationships (Grossman & Rhodes, 2002). Initial feelings of alienation and mistrust of adults may impact the development of a close mentoring relationship, at least in the beginning stages (Rhodes et al., 2008), and this may be especially salient for adolescent girls.

Mentoring programs typically target youth labeled at-risk due to a variety of ecological or individual factors. However, the extent and type of risk faced by the youth has been found to impact the development of the mentoring relationship. Reasons for matches ending and the challenges that mentors face within their mentoring relationships vary depending on mentees' risk profiles (i.e., level and type of risk) (Herrera, DuBois &

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Grossman, 2013). Behavioral and academic risk status is significantly associated with mentor reports of relationship quality (Karcher, Nakkula, & Harris, 2005). Additionally, mentees who had experienced prior abuse and those who had been referred to psychological or educational services have been found to be more likely to have their mentoring relationships terminate early (Grossman & Rhodes, 2002).

Prior Relationships as Predictors of Mentoring Relationship Quality

There is increasing interest in the ways in which relationships external to the mentoring dyad (e.g., parents, peers, etc.) may influence the quality and impact of mentoring relationships (e.g., Keller & Blakslee, 2014). A mentee's perceptions of and feelings about other key relationships (i.e., with her parents and peers) in her life before she enters into a mentoring relationship may influence her ability and willingness to develop a mentoring relationship. How much a mentee trusts her mother or how confident she feels about her peer relationships could impact how open she is to developing a close bond with a new person.

Maternal attachment is thought to have a significant impact on the development of later relationships. According to Bowlby's attachment theory and Ainsworth's "Strange Situation" study, the persistent presence of a responsive and nurturing mother or maternal figure is necessary for children to feel secure in exploring the world around them (Bowlby, 1988; Ainsworth & Bell, 1970). These childhood attachments and relationships help to inform a child's understanding of the world and the people in it (Waters & Bretherton, 1985). This model informs future interactions and expectations for how people will behave (Waters & Bretherton, 1985). How adolescents perceive and experience the parental relationship is key in determining attachment security in this stage, with secure adolescents reporting greater maternal supportiveness than those who

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are less secure (Allen et al., 2003). Secure maternal attachment can be seen in a strong maternal relationship that allows for increasing autonomy and independence (Allen & Land, 1999). Within a secure, well-maintained, mother-adolescent relationship, the adolescent is able to safely explore her autonomy and emotional and cognitive independence while maintaining maternal relatedness and connection (Allen et al., 2003).

Drawing from attachment theory, Sarason, Pierce and Sarason (1990) theorize that early relationships influence one's feeling of acceptance, which impacts one's sense of security in forming new relationships. Based on this model, a mentee's pre-existing attitudes towards and experiences of other relationships in her life could impact her experience of a mentoring relationship. For example, if a mentee feels that she cannot trust her mother, she may expect that she cannot trust her mentor either, which will impact the quality of her mentoring relationship. A prior study that examined the impact of mentee relational profiles on outcomes of mentoring found that mentees in the relationally vulnerable group (i.e., those who reported lower quality relationships with parents, peers and teachers) showed only marginal benefits from mentoring while those with adequate relational quality benefitted the most from mentoring (Schwartz, Rhodes, Chan and Herrerra, 2011). Social network theory suggests that other people in a mentee's social network will likely have an impact on the mentoring relationship; the support or lack of support from others in the social network could help or hinder the relationship (Keller & Blakeslee, 2014). Additionally, experiences with other members of the mentee's social network such as those with coaches or teachers could influence a mentee's expectations of a mentoring relationship, either positively or negatively (Keller & Blakeslee, 2014).

Thus, mentees who have secure maternal relationships may feel safer in exploring

a relationship with a mentor. In contrast, mentees who experience difficulties in their maternal relationships may feel more hesitant or wary to develop a relationship with a new adult such as a mentor. They also may not trust their mentor to meet their needs if that is the model that they have experienced in their maternal relationship. Consistent with these theories, youth who developed natural (i.e., not as part of a formal mentoring program) mentoring relationships reported stronger maternal relationships than those that did not develop natural mentoring relationships, indicating a connection between maternal relationships and mentoring relationship development (Rhodes, Contreras, & Manglesdorf, 1994). Further, one study found that strong mentoring relationships were more beneficial to securely attached children in enhancing global self concept and decreasing loneliness than for insecurely attached children (Goldner & Scharf, 2014).

Alternatively, maternal relationship challenges could lead adolescents to be more receptive to a mentoring relationship in order to compensate for less-than-ideal maternal relationships. One qualitative study found that in mentoring relationships between adult women and adolescent girls, mentors were able to provide emotional and instrumental support for girls who's parents were often pressed for time and stretched thin across several other children (Spencer & Liang, 2009).

While the measurement of attachment security in infancy can occur through observation, such as through The Strange Situation test (Ainsworth & Bell, 1970), measuring attachment in adolescence is more difficult. Measurement of attachment at this stage requires adolescents to self-report on their internal thoughts and feelings about the state of their maternal relationships. One measure that has been validated and used in other studies is the Inventory of Peer and Parent Attachment (IPPA), which is comprised of three sub-scales, Communication, Trust, and Alienation. The IPPA evaluates a

person's perceptions of and feelings about her relationship with her mother and can help researchers better understand an adolescent's relationship with her parents. However, this measure has been criticized as not being a true measure of attachment (Allen et al., 2003). Previous studies using this measure have looked at the three sub-scales as a composite to evaluate the overall status of the parental relationship, but it may be important to look at the scales separately in order to understand the different elements of the maternal relationship. This is especially true when using this measure to study the impact of the maternal relationship on a relationship-based intervention such as mentoring. In fact, the original validation of the study found that the Alienation scale was sometimes operating differently than expected (Armsden & Greensburg, 1987). Specifically, they found that a subset of their sample had an "unclassifiable" attachment pattern: high levels of alienation combined with medium levels of trust and communication (Armsden & Greensburg, 1987). This demonstrates that the subscales may be each capturing unique facets of the overall maternal relationship. These facets may be particularly important to investigate separately for early adolescent girls, for whom individuation from their mother is a salient developmental task (Allen et al., 2003).

Adolescents' perceptions of peer relationships and how secure they feel with their friends may also be related to mentoring relationship development. Peers may be a particularly important relational context for early adolescents (Brown & Larson, 2009). Insecurity in a romantic relationship is most closely associated with insecurity with a best friend in early adolescence, indicating a relationship between peer relationships and the development of other relationships (Doyle, Lawford, Markiewicz, 2009). How confident mentees feel with peers could impact how confident they feel developing a new relationship with a mentor. According to social network theory, peers are particularly

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influential when it comes to the mentoring relationship (Keller & Blakeslee, 2014). What peers think of mentoring or a mentee's mentor could impact the mentee's willingness to engage in the relationship (Keller & Blakeslee, 2014). Mentees who have lower peer self-esteem (e.g., wish their friends liked them more or want more close friends) may be particularly susceptible to the influence of peers (Zimmerman, Copeland, Slope, Dielman, 1997). This phenomenon could be particularly salient within the context of a group mentoring setting in which one-on-one relationships are developing partially within a group of peers. In addition, if a mentee lacks confidence in regards to her social abilities or likeability amongst peers, she may be more wary of developing a new relationship with a mentor out of fear of rejection or ridicule. Thus, peer self-esteem could impact a mentee's ability to form a new relationship with a mentor.

Current Study

The current exploratory study examines how mentored adolescent girls' perceptions of their prior relationships with their mother figures and peers impact their reports of how satisfied they are with their mentoring relationship (i.e., mentoring relationship satisfaction). This study addresses the following question: Among early adolescent girls referred by school personnel to a mentoring program, are there associations between a mentee's relationship characteristics (i.e., perceptions of their maternal attachment, sense of self-esteem in the context of their peer relationships) and mentoring relationship satisfaction?

It is hypothesized that the mentee's satisfaction with their mentoring relationship will be significantly associated with the mentee's perceptions of and feelings about their prior relationships with their mothers and peers. Mentees with more positive relationship characteristics (i.e., higher levels of maternal communication and trust, lower levels of

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maternal alienation, and higher levels of peer self-esteem) are expected to report higher

levels of satisfaction with their mentoring relationship. However, girls who report more

difficulties in their prior relationships with their mothers and peers may be the most in

need of a satisfying mentoring relationship experience. By examining the association

between relationship characteristics prior to mentoring and mentoring relationship

satisfaction we can begin to understand critical factors related to mentoring relationship

development, especially for those with relational difficulties. This can help programs

better support quality mentoring relationships for girls with relational difficulties by

modifying mentor training to target potential barriers and opportunities for relationship

development and in doing so ultimately improve outcomes for mentored youth.

Method

This study used data collected as part of a larger study of the Young Women

Leaders Program (YWLP), a gender-specific mentoring program focused on fostering

early adolescent girls' competence, connection, and autonomy (Citation removed for

blind review). This study used pre-mentoring data assessing mentees' feelings about their

existing relationships, including self-report items regarding maternal attachment and peer

self-esteem. Data collected immediately after the mentoring relationship and program

ended was used to examine differences in mentoring relationship satisfaction. Only

mentees who completed the full academic year of mentoring were included in the

analyses.

The mentoring intervention: Young Women Leaders Program (YWLP)

All study participants were enrolled in the YWLP for one academic year between

2007 and 2010. YWLP is a school-based mentoring program that pairs middle school

girls with college women for the academic year. The pairs meet once a week after school

with five to seven other mentoring pairs for two-hour group mentoring sessions that follow a semi-structured curriculum. Pairs also meet one-on-one throughout the year for four hours per month. The YWLP curriculum is built on self-determination theory (SDT) (Ryan & Deci, 2000) with activities focused on promoting participants' competence, connection, and autonomy (Lawrence et al., 2009). The curriculum also addresses a number of issues pertinent to adolescent girls such as positive body image, leadership skills, and interpersonal aggression, and is designed to promote positive youth development both within the group mentoring and during one-on-one time (Leyton-Armakan, Lawrence, Deutsch, Williams, & Henneberger, 2012). Graduate students or experienced undergraduate students serve as facilitators for the mentoring groups. Facilitators and mentors take a class focused on adolescent development and specific issues pertaining to mentoring adolescent girls. They receive ongoing training and support throughout the year in the form of a yearlong course on adolescent development and mentoring, weekly group mentor meetings, and readily accessible mentor program staff. Previous qualitative program evaluations have found that YWLP participants report changes in relational development, self-understanding, academics, and self-regulation, which they attribute to both the group and one-on-one mentoring components of the program (Deutsch et al., 2016). A quantitative evaluation of the program found that girls in YWLP maintained a consistent level of global self-esteem while girls in the control group declined over the course of the year (Henneberger, Deutsch, Lawrence, Sovik-Johnston, 2012). Finally, a longitudinal evaluation found that five years after the program girls who had been in YWLP in 7th grade showed decreased delinquency compared to a control group as well as significant improvements in peer self-esteem at the end of the

mentoring year, which was a significant predictor of school bonding five years later (Deutsch & Melton, 2018).

Participants & Procedures

The sample for this study included three cohorts of girls (n=205) who participated in YWLP between 2007 and 2010 at four middle schools located in the Southeastern United States. School counselors from the four middle schools identified girls as being at risk for social, emotional, and/or academic problems and referred them to YWLP. Their ages ranged from 11-14 at the start of the study (when they entered YWLP; M=12.2). Among those that reported race (n=166), 41.6% identified as African American, 26.5% identified as Caucasian 6.6% identified as Hispanic, 24.1% identified as mixed-race or other, and 1.1% identified as Asian. The majority (64.5%) qualified for free or reduced lunch at school. The study is part of an ongoing YWLP research protocol. A parent or guardian of each middle school girl provided informed consent prior to participation in the study. The middle school girls also assented to participate in the study at the start of the YWLP programming. Pre-intervention data were collected through self-report questionnaires that included demographic information as well as assessments of participants' emotional, social, and academic characteristics. Self-report questionnaires were also administered to the study participants immediately after the conclusion of the program in the spring, one of which asked mentees to rate the quality of their mentoring relationship. A comparative analysis of participants who dropped out compared to those who completed the program revealed that participants who dropped out were more likely to identify as Hispanic. Some data were missing due to participants failing to complete the pre and post surveys. Participants that completed the program but did not complete the post survey (n=49), including the mentoring relationship satisfaction scale, were more

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likely to receive reduced lunch. More investigation is needed to determine why the

Hispanic population is more likely to drop out and to better understand the relationship

between reduced lunch and failure to complete the end-of-the-year survey. No other

significant differences were found between those that completed the survey and those that

did not complete it.

Measures

For the purposes of this study, pre-program measures were chosen from the

original study measures that assess particular relationship characteristics of the mentees

prior to starting the program. Control measures included socio-economic status and race.

Outcome measures were chosen that assess the quality of the mentoring relationship.

Maternal Attachment. To evaluate participants' feelings of attachment and

bonding with their mother or maternal figure, the Inventory of Peer and Parent

Attachment (IPPA) scale developed by Armsden & Greensburg (1987) was administered.

The IPPA was developed for adolescents and its design is based on attachment theory's

formulations regarding the nature of feelings towards attachment figures. This measure

includes three sub-scales, Trust, Communication, and Alienation, and asks participants to

rate how true each item is for them on a scale of 1 (*not true*) to 4 (*almost always true)*.

The wording of the scale was adjusted to ask about mothers and/or maternal figures. The

Trust subscale captures themes of maternal understanding and respect as well as mutual

trust (e.g., "She accepts me as I am" and "I trust her."). The Communication subscale

captures the extent and quality of maternal communication (e.g., "She can tell when I'm

upset" and "She cares about how I am."). Finally, the Alienation subscale captures

instances of emotional and behavioral withdrawal from maternal figures due to

dissatisfaction with their help (e.g., "I feel alone or apart when I'm with her" and "I feel

angry with her."). Items were not reverse coded so higher scores indicate higher levels of

trust and communication as well as alienation. Each scale was constructed by averaging

each participant's responses. An average was calculated as long as the participant had

responded to the majority of questions in the scale (i.e., number of missing items $\leq$ 2).

This measure showed strong internal reliability in each subscale for our sample

(α_{Trust}=.90, $\alpha_{Communication}$ = .91, and $\alpha_{Alienation}$= .83).

Peer Self Esteem. The peer sub-scale of the Self-Esteem Questionnaire

developed by DuBois, Felner, Brand, Phillips, and Ruby (1996), was used to measure

participants' peer self-esteem. The peer sub-scale's 8 items evaluate participants' peer

relationships (e.g., "I am as popular with kids my own age as I want to be;" "I'm as good

as I want to be at making new friends;" and "I have as many close friends as I would like

to.") Participants were asked to select the response which best described their feelings

about themselves using a four-point scale from 1 (*strongly disagree)* to 4 (*strongly*

agree). The scale was calculated by computing an average for each participant. An

average was calculated as long as the participant had responded to the majority of

questions in the scale (i.e., number of missing items $\leq$ 2). For our sample, the

Cronbach's Alpha for this scale was .82.

Socio-Economic Status. Receiving free or reduced lunch was used as a proxy for

socio-economic status (SES) along with parental level of education. These measures were

chosen to evaluate SES because they capture two of the three main types of capital

identified to be essential for optimal development: financial capital and human capital

(Coleman, 1988). Free/reduced lunch status is used to evaluate financial capital, since

eligibility for the school lunch program is based on family income at or below 1.3 times

federal poverty guidelines (USDA). Parental education has been suggested as an

accurate measure of human capital, (Entwisle & Astone, 1994). Study participants self-reported this information on the pre-intervention survey. These two variables were each controlled for separately in the regression model. In this study, maternal education was measured from mentee-report on a six level, categorical variable. Levels corresponded to Some High School, Completed High School, Some College, Completed College, and More than College. Completed High School was coded as the referent category. Free/Reduced lunch status was measured from mentee-report on a three level, categorical variable. Levels corresponded to Free Lunch, Reduced Lunch, and Neither Free or Reduced Lunch. Neither Free or Reduced Lunch was coded as the referent category.

Race. Participants were asked to report their race in the pre-intervention survey. Options included Caucasian, African American, Asian, Hispanic, and Other. This variable was included as a control in the regression model with African American coded as the referent category.

Mentoring Relationship Satisfaction. Rhodes, Reddy, Roffman, and Grossman's (2005) measure of mentoring relationship satisfaction was used to evaluate mentees' perception of their one-on-one mentoring relationship at the end of the mentoring program. The 15-item questionnaire consists of four subscales: helpfulness, meeting expectations, negative emotions, and closeness and has been shows to have good internal reliability (Rhodes et al., 2005). The wording was changed for the purposes of this study from "Mentor" to "Big Sister" in order to reflect the language used in YWLP. Responses were provided on a 4-point scale of 1 (*not true at all)* to 4 (*very true)* and included positive and negative questions such as: "My big sister has lots of good ideas about how to solve problems;" "When I am with my big sister I feel ignored;" "My big sister helps me take my mind off things by doing something with me." The scale was

calculated as an overall average for mentoring relationship quality. An average was

calculated as long as the participant had responded to the majority of questions in the

scale (i.e. number of missing items ≤ 2). For our sample, the Chronbach's Alpha for this

scale was .93.

Data analytic approach

All data analyses were conducted using SPSS version 24 and AMOS version 24.

To examine the association between mentees' relationship characteristics pre-mentoring

(i.e., maternal attachment and peer self esteem) and mentoring relationship satisfaction

we used multiple linear regression. The regression model included the key independent

variables (peer self esteem, maternal alienation, and maternal communication/trust as

well as control variables for race and socio-economic status (maternal education, and

free/reduced lunch status). Descriptive statistics for each variable are presented in Table1.

Table 1. *Descriptive Statistics for all key measures*

	N	Minimum	Maximum	Mean	Std. Deviation
Maternal Communication/Trust Composite	172	1.05	4.00	3.20	.71
Maternal Alienation	170	1.00	4.00	2.30	.84
Peer Self Esteem	181	1.63	4.00	3.23	.51
Mentoring Relationship Quality	156	1.13	4.00	3.30	.69

Inspection of each variable revealed that no outliers, defined as three standard

deviations from the mean, significantly impacted the variable mean so they were not

removed from the data set. In this sample, the Maternal Trust and Communication

subscales of the IPPA were found to be significantly correlated ($p< .01$, $r= .898$), which

suggests an issue of multicolinearity within the regression model. To investigate the

potential issue of multicolinearity between subscales, the Variance Inflation Factor (VIF) scores were also analyzed. The VIF scores when the Trust and Communication scales are separated but both included in the model are both over 5 (VIF Trust = 6.75, VIF Communication= 6.20), which also suggest multicolinearity and violate the general guideline of VIF cutoffs (Craney & Surles, 2002). In light of this finding, these two scales were combined for this study to create a Communication/Trust composite scale that appears to better capture these attachment characteristics for early adolescent girls. The Cronbach's alpha for the composite scale was .950.

The assumptions of linear regression were tested. Responses tended to be high on all variables, but data was still within the range of normal (skewness between 1 and -1). Most participants had overall high levels of peer self-esteem. Homoscedasticity was evaluated by examining a scatter plot of standardized residuals versus predicted values. Scatter plots of each variable were examined for linear relationships with the mentoring relationship quality. VIF scores were evaluated to test the assumption of multicolinearity. The assumptions of homoscedasticity, linearity, and multicollinearity were all met. All scales were centered in order to address any residual multicollinearity issues due to a moderate correlation between the Trust/ Communication scale and Alienation (r = -.17, $p < .05$).

With regard to missing data, participants who dropped out of the program prior to the end of the school year (n=12) were removed from the data set. There were participants who completed the program but did not complete the end-of-year survey (n=49) who were not removed from the data set. Participants who partially completed the survey were also not removed from the data set. In order to address the issue of missing data, the Full Information Maximum Likelihood method was used as this method is more

robust against violations of assumptions such as data missing not at random and is generally considered to be a preferable method over older methods such as Listwise Deletion (Peugh & Enders, 2004, Graham, 2009).

Results

Overall, participants in the sample reported high satisfaction in their mentoring relationships (see Table 1). In addition, most participants reported good communication and trust in their relationships with their mothers or maternal figures. Reports of Maternal Alienation followed a normal curve. The Maternal Communication/Trust composite scale was significantly associated with Mentoring Relationship Quality ($p=.$ 003, $\beta= .258$) indicating that mentees reporting better communication and trust with their mothers or maternal figures was predictive of more satisfying mentoring relationships. Maternal alienation was also significantly associated with mentoring relationship quality ($p=.$ 003, $\beta= .241$), indicating that girls who feel more alienated from their mothers or maternal figures were more likely to report satisfying mentoring relationships than those with lower levels of alienation. The associations between communication/trust, alienation and mentoring relationship satisfaction, while statistically significant, had small coefficients indicating that the impact of maternal relationship characteristics on mentoring relationship satisfaction is modest. Peer self esteem was not significantly associated with mentoring relationship satisfaction. However, the association between peer self esteem and mentoring relationship quality did approach marginal significance in the negative direction in the second model. A summary of regression results is provided in Table 2.

To understand the association between mentees' attachment characteristics and mentoring relationship quality, two post-hoc examinations of the subscales were conducted. We hypothesized that the relationship between maternal trust and

Table 2: Results of multiple regression analyses of mentoring relationship quality

Model	Predictors	Standardized Estimate (β)	SE	p-Value	R2	ΔR2
Model 1					.159	
	Peer Self-Esteem	-.143	.119	.108		
	MQCT	.258	.081	.003		
	Maternal Alienation	.241	.066	.003		
	Race*					
	Caucasian	.092	.153	.349		
	Asian-American	-.113	.523	.174		
	Hispanic	.006	.242	.948		
	Other	-.121	.150	.198		
	Maternal Education**					
	Some High school	.067	.179	.421		
	Some College	.018	.187	.979		
	Finished College	-.096	.162	.297		
	More than College	.096	.193	.293		
	Socioeconomic status***					
	Free Lunch Status	-.090	.136	.364		
	Reduced Lunch Status	-.007	.184	.939		
Model 2					.169	.010
	Peer Self-Esteem	-.155	.119	.081		
	MQCT	.253	.081	.004		
	Maternal Alienation	.233	.067	.004		
	Race*					
	Caucasian	.098	.153	.321		
	Asian-American	-.115	.520	.166		
	Hispanic	.003	.241	.973		
	Other	-.137	.149	.142		
	Maternal Education**					
	Some High school	.071	.179	.391		
	Some College	.002	.187	.953		
	Finished College	-.092	.161	.296		
	More than College	.093	.193	.295		
	Socioeconomic status***					
	Free Lunch Status	-.094	.136	.342		
	Reduced Lunch Status	-.016	.183	.859		
	MQCT x Maternal Alienation	-.084	.087	.270		

Note: Maternal Communication/Trust (MCQT); Standard error (SE)

* "African American" reference group for race;
** "Finished high school" reference group for maternal education;
*** "Neither free or reduced lunch status" reference group for socioeconomic status

communication and mentoring relationship quality may vary based on the level of alienation because of the divergent results from the first regression model (i.e., highly alienated girls had better quality mentoring relationships, while those with lower maternal trust and communication had worse quality mentoring relationships). To determine if there was an interaction effect between maternal communication/trust and alienation we ran an additional model that included an interaction term. The interaction was not a significant predictor of mentoring relationship quality (β=-.084, *p*=. 270) and only accounted for an additional 1% explained variance (i.e., change in R^2 equaled .010). Overall the results of this analysis suggest that the association between maternal trust/communication and mentoring relationship quality does not change dependent on the value for maternal alienation. Given that the direction of the association between maternal alienation and mentoring relationship quality was unexpected, we examined the correlations between the individual sub-scale items and mentoring relationship quality to better understand these results. Item-level correlation results can be found in Tables 3 and 4. Bivariate correlations of the main variables can be found in Table 5.

Table 3: Bivariate correlations of Maternal Communication/Trust sub-scale items and mentoring relationship quality

Maternal Communication/Trust Items	Mentoring Relationship Quality
	r
I like to get her point of view	.01

She can tell when I'm upset	.22**
When we discuss things she cares about my point of view	.14
I wish I had a different parent	-.25**
She understands me	.06
She helps me talk about my difficulties	.07
She accepts me as I am	.24**
She listens to what I have to say	.17*
I feel that she is a good parent	.17*
She is fairly easy to talk to	.04
When I am angry about something, she tries to listen	.09
She helps me to understand myself better	.14
She cares about how I am	.24**
I can count on her when I need to get something off my chest	.16
I trust her	.20*
She respects my feelings	.17*
I can tell her about my problems and troubles	.17*
If she knows something is bothering me, she asks me about it	.13

$**p<.01, *p<.05$

Table 4. Bivariate correlations of Alienation sub-scale items and mentoring relationship quality

Alienation Items	Mentoring Relationship Quality
	r
Talking over my problems with her makes me feel ashamed or foolish	-.03
I feel the need to be in touch with her more often	-.01
She doesn't under stand what I'm going through these days	.11
I feel alone or apart when I am with her	.23**
I feel angry with her	.26**
I get upset a lot more than she knows about	.14
It seems as if she is irritated with me for no reason	.23**

**p<.01, *p<.05

Table 5. Bivariate correlations of main variables

	Maternal Trust/Comm.	Maternal Alienation	Peer Self Esteem
Maternal Trust/Comm.	-		
Maternal Alienation	-.17*	-	
Peer Self Esteem	.19*	-.05	-
Mentoring Relationship Quality	.13	.20*	-.06

*p<.05

Discussion

This exploratory study examined the hypothesis that mentees' perceptions of their pre-mentoring relationships could influence the development of a satisfying mentoring relationship. These results could offer one explanation for why some mentees benefit more from mentoring than others. Overall, participants in the study were highly satisfied with their mentoring relationships. Indeed, these results capture differences within mentoring relationships that were generally successful, as all participants completed the full year of mentoring and none of the relationships assessed here terminated early. This suggests that the group and one-on-one format and training provided in YWLP may be conducive for the development of supportive mentoring relationships. This also provides

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support for using college women as mentors for middle school girls using this format. Yet results of the current study also suggest that for early adolescent girls, their perceptions of maternal trust, communication and alienation not only may operate differently than has been previously assumed, but may also impact satisfaction in a mentoring relationship in unanticipated ways.

The divergent findings across the Maternal Communication/Trust and Alienation scales were unexpected, and suggest that there may be nuanced but important differences in the types of attachment-related challenges that are present for early adolescent girls. Study results revealed that adolescent perceptions of specific sub-components of maternal attachment, specifically trust, communication and alienation, operate differently in terms of their association with mentoring relationship development. Lower levels of trust and communication within the mother-daughter relationship was associated with less satisfaction with the mentoring relationship. This suggests that if early adolescent girls are experiencing relationship challenges related to a lack of trust and communication with their mothers or maternal figures, they may be less willing or able to develop relationships with their mentors. This finding is aligned with attachment theories, which suggest that foundational attachment experiences influence individuals' later relationship development (Bowlby, 1988; Ainsworth & Bell, 1970).

On the other hand, girls who feel more alienated from their mothers reported higher quality mentoring relationships. This suggests that the influence of maternal attachment issues on the development of a mentoring relationship may be more nuanced for early adolescent girls than previously thought. In particular, it is possible that early adolescent girls who are feeling alienated from their mothers may have more incentive to

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develop a strong mentoring relationship to compensate for a feeling of disconnection within the maternal relationship.

Considering these findings together, we hypothesize that maternal trust and communication may represent foundational attachment challenges for early adolescent girls. Alienation, on the other hand, may represent an attachment challenge that is more developmentally situated in the specific tasks of early adolescence for girls (i.e., individuating themselves from their mothers; Allen et al., 2003). In the original validation of the IPPA scale there were some participants whose results did not fit into the overall expected pattern, suggesting that there are potentially different ways in which these sub-scale constructs operate in relation to each other (Armsden & Greenburg, 1987). As this study is exploratory in nature, and this proposition is emergent and contrary to our initial hypotheses, more studies are needed to further examine this difference.

Early adolescent girls who report low levels of trust and communication with their mothers may have deeper relational and attachment challenges with their mothers that have been developing over longer periods of time and may persist into the future. The association between maternal trust and communication and mentoring relationship quality suggests that foundational attachment is important in regards to the development of a satisfying mentoring relationship. This is supported by research by Allen and colleagues who found that maternal attunement and supportiveness were associated with greater adolescent security and ability to explore the world independently due to the presence of a secure base, suggesting the foundational nature of maternal trust and communication (2003). In adolescence, a well-maintained maternal-adolescent relationship, which includes communication and trust, is a significant contributor to overall security (Allen et al., 2003). Girls who feel secure in their relationships with their

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mothers and feel that they can rely on them may be more willing to trust a mentor and believe that she will be supportive. Conversely, girls who do not feel secure with their mothers or maternal figures and have not had a consistent maternal presence that they can rely on, may be more wary of a new relationship and not be as open or quick to develop a connection with a mentor. These results are consistent with Bowlby's attachment theory and the concept that children develop an internal working model of the self and others based on early attachment experiences, which serves to inform expectations about future relationships (1988). In adolescence, the secure-base phenomenon remains relevant, with teens exploring emotionally and cognitively rather than physically (Allen et al., 2003).

In contrast to foundational elements of attachment, early adolescent girls who report high levels of alienation from their mothers may be experiencing a more temporary and developmentally situated disconnection from their mothers. Early adolescence is characterized by an increased desire for autonomy, and allowing for autonomy while maintaining relatedness is a key task of both mothers and daughters at this stage (Allen & Land, 1999). Girls and mothers who are having difficulty with this task may be experiencing more disconnection in their relationship. This could lead mentees to seek out mentor support in order to compensate for less connected maternal relationships. This is consistent with findings that girls are typically referred to mentoring programs by their mothers and report higher levels of alienation at baseline than boys, suggesting that girls who are referred to mentoring programs may be struggling to connect with their mothers during this developmental stage (Rhodes et al., 2008). Additionally, girls tend to have more conflict with their mothers than boys, which may lead to more feelings of alienation (Almeida, Chandler, Wethington, 1999). Within the context of a supportive and connected mother-teen relationship, adolescents asserting autonomy and dealing with

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conflict is developmentally appropriate and not indicative of an insecure relationship (Allen et al., 2003). However, the challenges of this developmental stage may cause less secure mother-daughter relationships to become more disconnected. This type of attachment challenge allows for a mentor to provide needed support and guidance. Girls who are feeling that their mothers or maternal figures are not understanding their problems or are being unfairly restrictive when they want more freedom may be more inclined to connect with a mentor that is seen as closer to a peer than an authority figure, and can help bridge the gap between mentees and their mothers.

The item-level correlations between maternal alienation and mentor relationship quality are consistent with this concept. Significant items such as "I feel angry with my mother" and "my mother seems irritated with me for no reason" seem symptomatic of developmentally related disconnection that occurs during this stage and often leads to disgruntled interactions between mothers and daughters. In contrast, significantly related items on the maternal trust and communication scale include "I wish I had a different parent", "I trust her" and "she accepts me as I am". These items seem to capture the girls' deeper feelings about the overall state of their relationships with their mothers. More research is needed to further explore these subscale differences for early adolescents. The lack of significant results for the interaction between Communication/Trust and Alienation could indicate that examining these factors together does not provide more information regarding mentoring relationship quality than when examining these characteristics separately. However, this could also be due to a lack of power given the small sample size.

The lack of significant results for peer self esteem suggests that adolescents who have less confidence in their peer relations can still develop strong mentoring

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relationships. This also may suggest that peer relationships do not influence adolescent girls' beliefs or expectations about mentoring relationships as much as their maternal relationships do. However, although not a significant result, the direction of the association between peer self-esteem and mentoring relationship quality suggests that girls who have more relational needs (i.e., have less confidence in their peer relationships) may be more open to and could benefit more from a strong mentoring relationship than girls who feel more secure in their peer relationships. Taken with the maternal alienation results, this suggests that the need for a mentor to fill in for less than ideal peer and maternal relationships may have more bearing on the development of a strong mentoring relationship than the mentee's relational skills and abilities. This could be an area for further exploration in future studies.

Overall, results of this study indicate that the association between maternal attachment and mentoring relationship development for early adolescent girls should be highlighted during mentor training so that mentors can be cognizant of potential barriers and opportunities for developing a strong mentoring relationship with their mentees. The results of this study can be utilized to help modify mentor training to include a focus on relationship development with girls experiencing issues with their mothers. For mentees who are experiencing foundational attachment challenges within their maternal relationship, such as lack of trust or communication, mentors will need to focus more on developing trust and reassuring the mentee that the mentoring relationship is safe. They should also be cognizant that it may take longer to develop a close relationship with this population, but should persist despite initial challenges, since girls are more satisfied with longer mentoring relationships even when they report low levels of maternal trust (Rhodes et al., 2008). Additionally, girls who feel disconnected from their mothers may

provide mentors with an opportunity to develop a closer relationship by providing support and understanding that may be lacking in their maternal relationships. However, mentors should be aware that mentees who feel more alienated from their mothers might be experiencing a more developmentally related disconnection rather than a foundational relationship problem and should not rush to give advice or try to fill the maternal role. Instead, mentors should work to encourage mentee autonomy from as well as reconnection with their mothers, as the development of autonomy is most beneficial when it occurs within the context of a connected maternal relationship (Allen & Hauser, 1996). Continued mentor support and training throughout the mentoring relationships would also be beneficial so that as issues related to adolescent-parent relationships arise, programs can provide specific assistance to help improve the mentor-mentee relationship.

Limitations and Future Directions

Although there are many potential contributions of this study, there are also some limitations. Pre-intervention surveys relied on self-reported data from the middle school girls and thus may be vulnerable to social desirability bias. An adolescent's mood on that particular day could have impacted how she answered certain questions, particularly questions regarding emotional state. Social desirability bias could also impact how participants responded to survey questions. These factors may cause the data to provide only a snapshot of the mentees' relationship characteristics. We were unable to control for mentee risk profile or early termination of relationships due to limited data availability, which is an additional limitation.

There are also many other potential moderators, outside of the mentoring relationship, which may impact the outcomes of mentoring. In addition, the study only includes a limited number of relationship characteristics. It may be that other factors have

more of an association with mentoring relationship satisfaction. Another limitation is that the sample only includes middle school girls, limiting their generalizability. In addition, the mentoring program in this study, unlike the majority of mentoring programs, includes a group component in addition to one-on-one mentoring. These factors may limit the applicability of these results to other mentoring programs. Missing data also limits our ability to make definitive conclusions from this study. Specifically, Hispanic girls and those from lower socio-economic status were more likely to drop out of the program. Finally, participant responses on most measures tended to be high, causing data to have limited variability.

In order to develop a better understanding of the important nuances of the association between mentee relationship characteristics and mentoring relationship satisfaction for early adolescent girls identified in this study, future studies should include qualitative interview data. The inclusion of parent reports of attachment as well as teacher reports of relationship qualities could also offer a clearer understanding of these associations. Results also suggest that more examination of the IPPA is needed specifically when used with early adolescent girls since this scale may be measuring different elements of attachment for this population (e.g., foundational vs. developmental elements of attachment). Trust and communication are also more highly correlated with this sample, which warrants further examination of the measure. In the original normative sample these subscales were not highly correlated (Armsden & Greenburg, 1987). However, the original scale was normed with a sample of males and females who were college-aged (Armsden & Greenburg, 1987). For this population, which is all female and in the early adolescent phase, maternal trust and communication seem to be

more associated with each other. This could be because for early adolescent girls trust may be more important when communicating with mothers at this stage.

Conclusion

This study provides potential insight into elements that impact the development of positive mentoring relationships, which are known to affect overall outcomes of mentoring. Results can also provide mentoring programs with guidance to better train mentors on how to develop relationships with early adolescent girls that are facing a variety of challenges within their maternal relationships. In addition, results suggest that foundational and developmentally situated relationship challenges may operate differently in relation to mentoring relationship development for this age group. Understanding these differences could help mentors to better support mentees in improving their maternal relationships, which is a key outcome identified in the Rhodes (2002) model of mentoring. Overall, the results of this study contribute to the mentoring field by identifying specific mentee pre-mentoring relationship characteristics that impact the arguably most important part of the mentoring process, the quality of the mentoring relationship.

References

Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child development*, 49-67.

Allen, J. P., & Hauser, S. T. (1996). Autonomy and relatedness in adolescent-family

interactions as predictors of young adults states of mind regarding

attachment. *Development and Psychopathology,8*(04), 793.

doi:10.1017/s0954579400007434

Allen, J. P. & Land, D (1999). Attachment in adolescence. J. Cassidy & P. R. Shaver

(Eds.) *Handbook of attachment theory and research and clinical*

applications, (pp. 319- 335), New York: Guilford

Allen, J. P., Mcelhaney, K. B., Land, D. J., Kuperminc, G. P., Moore, C. W., Obeirne-

Kelly, H., & Kilmer, S. L. (2003). A Secure Base in Adolescence: Markers of

Attachment Security in the Mother-Adolescent Relationship. *Child*

Development,74(1), 292-307. doi:10.1111/1467-8624.t01-1-00536

Almeida, D. M., Chandler, A., & Wethington, E. (1999). Daily spillover between marital

and parent child conflict. Journal of Marriage and the Family, 61, 49–61.

Arnett, J.J., (1999). Adolescent storm and stress reconsidered. *American*

Psychologist, 54, 317-326.

Armsden, G. C. &. Greensburg, M.T. (1987). The inventory of parent and peer

attachment: Individual differences and their relationship to psychological well-

being in adolescence. *Journal of Youth and Adolescence, 16*(5), 427-454.

doi:10.1007/BF02202939

Bayer, A., Grossman, J. B., & Dubois, D. L. (2015). Using Volunteer Mentors To

Improve The Academic Outcomes Of Underserved Students: The Role Of

Relationships. *Journal of Community Psychology*, *43*(4), 408–429. doi:

10.1002/jcop.21693

Bernstein, L., Dun Rappaport, C., Olsho, L., Junt, D., & Levin, M. (2009) Impact

Evaluation of the U.S. Department of Education's Student Mentoring Program,

Final Report. National Center for Education, a Evaluation and Regional

Assistance. Institute of Education Sciences. U.S. Department of Education. March

2009. (NCEE 2009-4047).

Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human

development. New York: Basic Books.

Brown, B. B. and Larson, J. (2009). Peer Relationships in Adolescence. In Handbook

of Adolescent Psychology (eds R. M. Lerner and L. Steinberg).

doi:10.1002/9780470479193.adlpsy002004

Craney, T. A., & Surles, J. G. (2002). Model-Dependent Variance Inflation Factor Cutoff

Values. *Quality Engineering*, *14*(3), 391–403. doi: 10.1081/qen-120001878

Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E., & Herrera, C.

(2013). Pathways of influence in school-based mentoring: The mediating role of

parent and teacher relationships. *Journal of School Psychology,51*(1), 129-142.

doi:10.1016/j.jsp.2012.10.001

Coleman, J. S. (1988). Social capital in the creation of human capital. *American

Journal of Sociology*, 94, S95-S120.

Deutsch, N. L., Wiggins, A. Y., Henneberger, A. K., & Lawrence, E. C. (2012).

Combining Mentoring With Structured Group Activities. *The Journal of Early

Adolescence,33*(1), 44-76. doi:10.1177/0272431612458037

Deutsch, N. L., Reitz-Krueger, C. L., Henneberger, A. K., Futch Ehrlich, V. A., &

Lawrence, E. C. (2016). How group experiences influence mentor–mentee

relational development in a combined group and one-on-one mentoring program

for early adolescent girls. *Journal of Adolescent Research,*1-32.

doi:10.1177/0743558416630813

Deutsch, N. L., & Melton, T. N. (2018). Preventing Girls' Deliquency: A Longitudinal

    Evaluation of the Young Women Leaders Program Final Technical Report (pp. 1-

    41, Tech.). Department of Justice Office of Juvenile Justice and Delinquency

    Prevention.

De Wit, D. J., Lipman, E., Manzano-Munguia, M., Bisanz, J., Graham, K., Offord, D.

    R., … Shaver, K. (2007). Feasibility of a randomized controlled trial for

    evaluating the effectiveness of the Big Brothers Big Sisters community match

    program at the national level. *Children and Youth Services Review, 29,* 383-

    404. doi:10.1016/j.childyouth.2006.09.003

Doyle, A. B., Lawford, H., & Markiewicz, D. (2009). Attachment Style With Mother,

    Father, Best Friend, and Romantic Partner During Adolescence. *Journal of*

    Research on Adolescence,19(4), 690-714. doi:10.1111/j.1532-7795.2009.00617.x

DuBois, D. L., Felner, R. D., Brand, S, Phillips, Ruby S.C (1996). Early adolescent

    self-esteem: A developmental–ecological framework and assessment strategy.

    Journal of Research on Adolescence, 6, 543-579.

DuBois, D. L., Holloway, B.E., Valentine, J. C., Cooper, H., (2002). Effectiveness of

    mentoring programs for youth: A meta-analytic review. *American Journal of*

    Community Psychology, 30 (2), 157-197.

DuBois, D.L., Karcher, J.M., (2014). Youth mentoring in contemporary perspective.

    In DuBois, D.L., Karcher, J.M. (eds) Handbook of Youth Mentoring, 2nd ed (3-

    13). Thousand Oaks, CA: Sage.

DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N., & Valentine, J.C. (2011).

    How effective are mentoring programs for youth: A systematic assessment of

    the evidence. *Psychological Science in the Public Interest, 12,* 57-91.

doi: http://dx.doi.org.proxy.its.virginia.edu/10.1177/1529100611414806

Entwisle, D. R. , & Astone, N. M. (1994). Some practical guidelines for measuring

youth's race/ ethnicity and socioeconomic status. *Child Development*, 65, 1521-

154

Graham, J. W. (2009). Missing Data Analysis: Making It Work in the Real

World. *Annual Review of Psychology*, *60*(1), 549–576. doi:

10.1146/annurev.psych.58.110405.085530

Goldner, L., & Scharf, M. (2014). Attachment Security, the Quality of the Mentoring

Relationship and Protégés' Adjustment. *The Journal of Primary Prevention,35*(4),

267-279. doi:10.1007/s10935-014-0349-0

Grossman, J. B. & Tierney, J.P. (1998). Does mentoring work: An impact study of

the Big Sisters Big Brothers Program. *Evaluation Review, 22,* 315-426.

doi: 10.1177/0193841X9802200304

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of

duration in youth mentoring relationships. *PsycEXTRA Dataset,30*(2), 199-219.

doi:10.1037/e314762004-001

Herrera, C., Sipe, C. L., & McClanahan, W. S. (2000). Mentoring school-age

children: Relationship development in community-based and school-based

programs.

Herrara, C., DuBois, D.L., Grossman, J. B., (2013). Role of Risk: mentoring

experience and outcomes for youth with varying risk profiles. New York, NY: A

Public/Private Ventures project distributed by MDRC.

Hipwell, A. E., & Loeber, R. (2006). Do we know which interventions are effective

for disruptive and delinquent girls? *Clinical Child and Family*

Psychology Review, 9, 221-255.

Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental Mentoring Match

Characteristics: Correspondence between Mentors' and Mentees' Assessments of

Relationship Quality. *The Journal of Primary Prevention,26*(2), 93-110.

doi:10.1007/s10935-005-1847-x

Keller, T. E. & Blakeslee, J. E. (2014). Social networks and mentoring. In D. L. DuBois

& M. J. Karcher (Eds.) *Handbook of youth mentoring 2nd Edition*. Thousand

Oaks, CA: Sage Publications.

Kupersmidt, J. B., Stump, K. N., Stelter, R. L., & Rhodes, J. E. (2017). Predictors of

Premature Match Closure in Youth Mentoring Relationships. *American Journal of*

Community Psychology,59(1-2), 25-35. doi:10.1002/ajcp.12124

Lawrence, E.C., Levy, M., Martin, N., & Strother-Taylor, J. (2008). One-on-one and

group mentoring: An integrated approach. Folsom, CA: Mentoring Resource

Center (p. 1–5). Retrieved from

http://www.edmentoring.org/pubs/ywlp_study.pdf.

Lawrence, E., Roberts, K., Sovik-Johnston, A., & Thorndike, A. (2009). *Young Women*

Leaders Program Mentor Handbook (6th Edition). Charlottesville, VA: The

Rector and Board of Visitors, University of Virginia.

Leyton-Armakan, J., Lawrence, E. C., Deutsch, N., Williams, J. L., & Henneberger,

A. (2012). Effective youth mentors: The relationship between initial

characteristics of college women mentors and mentee satisfaction and outcome.

Journal of Community Psychology, 40(8), 906-920. DOI: 10.1002/jcop.21491

Peugh, J. L., & Enders, C. K. (2004). Missing Data in Educational Research: A Review

of Reporting Practices and Suggestions for Improvement. *Review of Educational Research*, *74*(4), 525–556. doi: 10.3102/00346543074004525

Raposa, E. B., Rhodes, J. E., & Herrera, C. (2016). The Impact of Youth Risk on Mentoring Relationship Quality: Do Mentor Characteristics Matter? *American Journal of Community Psychology,57*(3-4), 320-329. doi:10.1002/ajcp.12057

Rhodes, J. E. (2002). *Stand by Me: The Risks and Rewards of Mentoring Today's Youth.* Cambridge, MA: Harvard University Press.

Rhodes J.E. (2005). A model of youth mentoring. In DuBois D.L., Karcher M.J. (Eds.), *Handbook of youth mentoring* (pp. 30–43). Thousand Oaks, CA: Sage.

Rhodes, J., (2008). Improving youth mentoring interventions through research-based practice. *American Journal of Community Psychology, 41,* 35-42. doi: 10.1007/s10464-007-9153-9

Rhodes, J. E., Contreras, J. M., & Mangelsdorf, S. C. (1994). Natural mentor relationships among latina adolescent mothers: Psychological adjustment, moderating processes, and the role of early parental acceptance. *American Journal of Community Psychology,22*(2), 211-227. doi:10.1007/bf02506863

Rhodes, J., Lowe, S.R., Litchfield, L., Walsh-Samp, K. (2008). The role of gender in youth mentoring relationship formation and duration. *Journal of Vocational Behavior, 72, 183-192.*

Rhodes, J. Reddy, R., Roffman, J., Grossman, J.B. (2005). Promoting successful youth mentoring relationships: A preliminary screening questionnaire. *The Journal of Primary Prevention,* 26. 147-167. Doi: http://dx.doi.org.proxy.its.virginia.edu/10.1007/s10935-005-1849-8

Rhodes, J.E., Spencer, R., Keller, T.E., Belle, L., Gill, N. (2006). A model for the

influence of mentoring relationships on youth development. *Journal of*

Community Psychology, 34, 691-707. DOI: 10.1002/jcop.20124

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the

facilitation of intrinsic motivation, social development, and well-

being. American Psychologist, 55(1), 68–78. doi:10.1037/0003-066X.55.1.68

Schwartz, S. E. O., Rhodes, J. E., Chan, C. S., & Herrera, C. (2011). The impact of

school-based mentoring on youths with different relational profiles. *Developmental*

Psychology, 47(2), 450-462. doi:10.1037/a0021379

Seiving, R. E., McRee, A., McMorris, B. J., Shlafer, R. J., Gower, A. L., Kapa, H. M.,

. . . Resnick, M. D. (2016). Youth–Adult Connectedness: A Key Protective Factor

for Adolescent Health. *American Journal of Preventative Medicine,52*, 275-278.

http://dx.doi.org/10.1016/j.amepre.2016.07.037

Spencer R. (2007). "It's not what I expected": A qualitative study of youth mentoring

relationship failures. Journal of Adolescent Research, 22, 331–354.

Spencer, R., & Liang, B. (2009). "She Gives Me a Break from the World": Formal Youth

Mentoring Relationships Between Adolescent Girls and Adult Women. *The*

Journal of Primary Prevention,30(2), 109-130. doi:10.1007/s10935-009-0172-1

Tolan P, Henry D, Schoeny M, Bass A, Lovegrove P, Nichols E. (2013). Mentoring

interventions to affect juvenile delinquency and associated problems: A

systematic review. *Campbell Systematic Reviews, 2013:10.* doi:

10.4073/csr.2013.10

Waters, E., & Bretherton, I. (Eds.). (1985). *Growing points of attachment theory and*

research. University of Chicago Press for the Society for Research in Child

Development.

Wood, S., & Mayo-Wilson, E. (2012). School-Based Mentoring for

    Adolescents. *Research on Social Work Practice,22*(3), 257-269.

    doi:10.1177/1049731511430836

Zand, D. H., Thomson, N., Cervantes, R., Espiritu, R., Klagholz, D., Lablanc, L., &

    Taylor, A. (2009). The mentor–youth alliance: The role of mentoring

    relationships in promoting youth competence. *Journal of Adolescence,32*(1), 1-17.

    doi:10.1016/j.adolescence.2007.12.006

Zimmerman, M. A., Copeland, L. A., Shope, J. T., & Dielman, T. E. (1997). A

    Longitudinal Study of Self-Esteem: Implications for Adolescent

    Development. *Journal of Youth and Adolescence,26*(2), 117-141.

    doi:10.1023/a:1024596313925

Manuscript Two

A Qualitative Exploration of Mentoring Relationship Development for Girls
Experiencing Maternal Relationship Difficulties

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Abstract

Results of a prior study of 205 middle school girls in the Young Women Leaders Program, a mentoring program that pairs middle school girls with college women, revealed that better quality maternal communication/trust as well as higher levels of maternal alienation were associated with stronger mentoring relationship quality for early adolescent girls. These results suggest that for early adolescent girls there is a distinction between foundational maternal relationship challenges and relationship challenges that are developmentally situated. Based on these results, the current study examines post-program interviews for a sub-sample of the five mentees with the highest and lowest scores for maternal communication/trust and maternal alienation as well as their mentors to gain an understanding of how relationship issues impact mentoring relationship development. Results indicate that for girls experiencing maternal communication and trust issues, first impressions and trust are very important to relationship development. Additionally, mentors of girls with communication and trust issues tended to have difficulty developing a relationship with their mentees' families. For girls experiencing maternal alienation, mentors commonly served as a bridge between mentees and their mothers and helped mentees navigate difficult conversations with their mothers. Additionally, mentors in this group developed strong relationships with their mentees' families. Findings contribute to the literature on mentoring relationship development and help to inform programs regarding training for mentors.

Mentoring is a popular and widely used intervention for youth in the United States (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Central to the success of mentoring programs is the quality of the mentoring relationship (Rhodes, 2002). Specifically, the strength, length, and closeness of the mentoring relationship are key factors that contribute to mentoring's effectiveness (Rhodes, 2002; DuBois et al., 2002; Rhodes et al., 2006; Herrara, DuBois, & Grossman, 2013). According to the Rhodes' model of mentoring influence, the elements of a successful mentoring relationship are mutuality, trust, and empathy (Rhodes, 2002). When mentors and mentees develop a trusting and connected relationship, youth feel safe to express their feelings and receive feedback from their mentors, contributing to positive developmental change (Rhodes, 2002). Strong mentoring relationships are also associated with improvement in other relationships, such as youths' relationships with parents and teachers, as well as gains in social, academic, and behavioral skills (Chan et al., 2011; Sieving et al., 2016). Given the importance and centrality of the mentoring relationship to the effectiveness of mentoring, it is beneficial to understand the factors that contribute to the development of a quality mentoring relationship.

Developing a strong and close mentoring relationship is a challenging task. Adolescents who are referred for mentoring programs often have a history of inconsistent and unreliable relationships, leading them to be wary of new adults (Rhodes, 2002). Characteristics of the mentee such as age and gender can impact the development of the mentoring relationship. For example, one study found that mentors of middle or high school aged mentees reported less close and supportive relationships than mentors of youth in elementary school (Herrera, Sipe, & McClanahann, 2000). Gender has also been found to impact mentoring relationship quality (Rhodes, Lowe, Litchfield, Walsh-Samp,

2008). Adolescent girls in particular may present unique challenges in terms of developing a mentoring relationship as they often have existing relational difficulties when they are referred for mentoring (Rhodes, 2002). Specifically, findings have shown that girls are commonly referred to mentoring programs due to difficulties such as trust and communication issues with their mothers (Rhodes, 2002). Further, girls report having less trust and feeling more alienated from their parents, and place more importance on interpersonal relationships than boys do (Rhodes et al., 2008). Since mentoring is a relationship-based intervention, girls who are referred for relational issues may have more difficulty engaging in the process of relationship development with a mentor.

One characteristic that may influence mentoring relationship development but has not been adequately examined is the quality of mentees' maternal relationships. Maternal relationship characteristics, defined here as an individual's perceptions of and feelings about her relationship with her mother or mother figure, are theoretically linked to attachment. Attachment issues become particularly salient during adolescence as relationships with peers and parents begin to shift and adolescents explore their own identities in more depth (Rhodes, 2002). According to Bowlby's attachment theory and Ainsworth's "Strange Situation" study, the persistent presence of a mother or maternal figure is necessary for children to feel secure in exploring the world around them (Bowlby, 1988; Ainsworth & Bell, 1970). These early attachment experiences lead to the development of an internal working model of relationships, and help to inform a child's understanding and expectations of the world and the important people in it (Bowlby, 1988; Waters & Bretherton, 1985). A prior study, which examined the relationship between mentees' maternal relationship characteristics and mentoring relationship quality in early adolescent girls, found that girls who reported difficulty with maternal trust and

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communication tended to have lower quality mentoring relationships (Williamson,

Lawrence, Lyons, & Deutsch, 2019). These findings lend support to the theory that

maternal attachment impacts individuals' later relationship development, particularly for

early adolescent girls. However, while difficulties with trust and communication in the

maternal relationship, which likely reflect more deep-seeded relational issues, were found

to be associated with lower quality mentoring relationships, girls who reported higher

levels of maternal alienation tended to also report higher quality mentoring relationships

(Williamson et al., 2019). This difference suggests that there may be a distinction in how

different types of maternal relationship issues operate in regards to mentoring

relationship development for early adolescent girls. Trust and communication issues may

represent foundational relationship difficulties that are more firmly rooted in ongoing

difficulties in the maternal relationship. Alienation, on the other hand, may be linked to

the developmental tasks of early adolescence, in particular the need to assert autonomy

while maintaining connectedness. When adolescent girls struggle with this task, they may

experience more challenges and feelings of alienation within their maternal relationships

(Smetana & Rote, 2019). It may be that we should consider these different dimensions of

the maternal relationship similar to the way we think about trait and state personality

characteristics. Thus, developmental relational issues, i.e., issues related to particular

developmental tasks or needs, may come and go, while foundational attachment issues

may be more likely to be fixed or steady.

        If a mentee has an internal working model in which adults are not trustworthy,

this foundational issue could impact the development of a trusting mentoring relationship.

Several studies (e.g., Meeus, Oosterwgel, Vollebergh, 2002; Stams et al., 2002) have

found an association between maternal attachment and subsequent relationship and social

development with peers and others, which could include the development of mentoring relationships. Difficulties or insecurities in a mentee's relationship with her mother could lead her to feel less secure or willing to open up to a mentor, especially in the initial stages of the relationship. In line with these theories, one study found that youth who developed natural (i.e., not as part of a mentoring program) mentoring relationships reported stronger maternal relationships than those that did not develop natural mentoring relationships, suggesting an association between strong maternal relationships and mentoring relationship development (Rhodes, Contreras, & Manglesdorf, 1994). Mentees with foundational attachment difficulties may also have low expectations for the success of new relationships, causing them to put their guard up and not participate in the relationship development process. This could lead to frustration for mentors and cause the relationship to break down (Rhodes, 2002; Spencer, 2007). Further, maternal attunement and supportiveness have been associated with security and the ability to explore the world independently in adolescence, suggesting that maternal trust and communication may be more foundational (Allen et al., 2003).

On the other hand, maternal alienation could be a developmentally situated relationship issue, particularly for adolescent girls. Early adolescence is characterized by an increased desire for autonomy and independence. However, early adolescent girls still need support and connection; allowing for autonomy while maintaining relatedness is a key task of both mothers and daughters at this stage (Allen & Land, 1999). Mentees who report higher levels of alienation may be having difficulty maintaining a close and supportive relationship with their mothers while also asserting their autonomy, leading to tension in the mother-daughter relationship. Further, girls tend to have more conflict with their mothers than boys (Almeida, Chandler, Wethington, 1999). This concept is

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supported by findings that girls who are referred to mentoring programs report higher levels of alienation at baseline than boys, suggesting that girls may struggle with remaining connected with their mothers during this developmental stage (Rhodes et al., 2008). This maternal disconnection could open the door for mentors to develop a strong relationship as they can serve as a bridge between mentees and their parents. Mentors can act as a sounding board and model effective communication, which can help mentees to cope better with difficulties in their maternal relationships during this developmental stage (Rhodes, 2002). Additionally, mentors can reinforce parental advice, which mentees may be more open to when coming from an alternative adult figure (Rhodes, 2002). By playing this role and filling the mentees' need for continued support and connection, while also helping them assert their autonomy, mentors potentially can develop a strong mentoring relationship with girls experiencing developmental relationship issues.

Current Study

Building from results of a prior quantitative study, which found an association between maternal relationship characteristics and mentoring relationship quality for early adolescent girls, the current study examines interview data from mentees with and without maternal relationship difficulties as well as their mentors. Specifically, this study addresses the following question: How do mentees who reported higher or lower levels of communication/trust and alienation in their maternal relationships and their mentors talk about the development of their mentoring relationship?

Given the potential nuanced differences between types of relationship issues as well as the overall importance of quality mentoring relationships for the effects of mentoring, it is valuable to understand how maternal relationships impact the mentoring

relationship development process. By examining the qualitative differences between the ways in which early adolescent girls with and without maternal relationship difficulties experience the development of their mentoring relationships, we can better understand how relationship challenges influence mentoring relationship development. In addition, we can explore the specific factors that may contribute to or impede quality relationships. The results of this study can help mentoring programs tailor mentor training to include a focus on developing relationships with mentees with maternal relationship difficulties.

Methods

This study used data collected as part of an evaluation of the Young Women Leaders Program (YWLP), a combined group and one-on-one mentoring program for early adolescent girls (Lawrence et al., 2009). The current study builds on results of a prior study that found that maternal relationship characteristics (i.e., communication/trust and alienation) impacted mentoring relationship quality (Williamson, Lawrence, Lyons & Deutsch, 2019). The prior study used the Inventory of Peer and Parent Attachment (IPPA; Armsden & Greensburg, 1987) to evaluate mentees' relationship characteristics, defined as mentees' feelings about and perceptions of their peer and parent relationships, at the start of the mentoring year. The IPPA is comprised of three sub-scales, which are typically combined to provide an overall composite score. However, looking at the scales separately for our sample revealed important but nuanced differences in how unique elements of the maternal relationship operated, particularly in relation to mentoring relationship development (Williamson et al., 2019). Communication and trust operated as a single sub-scale and impacted the mentoring relationship negatively, whereas the alienation scale had a positive impact on the mentoring relationship (Williamson, et al, 2019). In fact, the original validation of the measure also found differences in how the

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alienation sub-scales operated in comparison to the other scales. Specifically, a subset of Armsden & Greensburg's (1987) sample had an "unclassifiable" attachment pattern: high levels of alienation combined with medium levels of trust and communication. This lends support to the idea that the sub-scales are measuring unique aspects of the overall maternal relationship and should be examined separately. As noted above, in our sample, the communication and trust subscales were highly correlated and were thus combined into one scale (Williamson et al., 2019). The resulting Communication/Trust subscale captures the extent and quality of maternal communication (e.g., "She can tell when I'm upset" and "She cares about how I am.") as well as maternal understanding, respect, and mutual trust (e.g., "She accepts me as I am" and "I trust her."). The Alienation subscale captures instances of emotional and behavioral withdrawal from maternal figures due to dissatisfaction with their help (e.g., "I feel alone or apart when I'm with her" and "I feel angry with her."). This study builds on the quantitative results from that prior study and uses qualitative data to better understand the ways in which dimensions of mentees' relationships with their mothers may influence the mentoring relationship. We examine interviews with mentees who began the program with higher and lower levels of communication/trust and alienation in their maternal relationships, as well as interviews with their mentors, focusing on how the girls and their mentors describe their mentoring relationships.

The Young Women Leaders Program

All study participants were enrolled in the YWLP between 2008 and 2010. The YWLP is a school-based mentoring program that pairs middle school girls with college women mentor for an academic year. The pairs meet once a week after school with five to seven other mentoring pairs for two-hour group mentoring sessions that follow a semi-

structured curriculum. Pairs also meet one-on-one throughout the year for four hours per month. The YWLP curriculum is built on self-determination theory (SDT) (Ryan & Deci, 2000) with activities focused on promoting participants' competence, connection, and autonomy (Lawrence et al., 2009). The curriculum also addresses issues pertinent to adolescent girls such as positive body image, leadership skills, and interpersonal aggression, and is designed to promote positive youth development both within the group mentoring and during one-on-one time (Leyton-Armakan, Lawrence, Deutsch, Williams, & Henneberger, 2012). Graduate students or experienced undergraduate students serve as facilitators for the mentoring groups. Facilitators and mentors take a class focused on adolescent development and specific issues pertaining to mentoring adolescent girls as well as receive ongoing training and support throughout the year.

Participants and Procedures

Based on the quantitative results of the previously discussed study (Williamson et al., 2019), we selected a sub-sample for this study. The mentees with the five highest and lowest scores on the maternal communication/trust scale, and the five highest and lowest scores on the alienation scale were selected. One participant was in both the more alienated and low communication/trust groups, for a total of 19 unique middle school girl interviews. Their mentors were also included in the sample (n=18). In the communication/ trust group, one mentee interview was included that did not have a corresponding mentor interview, for a total sample size of 37.

Within the alienation sub-group, mentees were all 12 years old. Thirty percent reported their race as Caucasian, 40% classified themselves as African-American, and 30% classified their race as "other". Of those that reported free/reduced lunch status (n=9), 50% stated that they receive free lunch. Within the communication/trust sub-

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group, mentees' average age was 12.2. Of those that reported race (n=9), 22% identified as Caucasian, 55% identified as African American, and 22% identified as "other". Of those that reported free/reduced lunch status (n=9), 40% received free lunch.

Eight out of ten mentors of mentees in the alienation sub-group reported demographic information. Fifty percent of mentors in this group were in their second year of college. Twenty-five percent were in their third year and 25% were in their fourth year. Seventy-five percent of mentors identified their race as White/Caucasian, and 25% identified themselves as African American. Of those that reported their parents' income (n=7), 86% reported it to be $100,000 or above and 14% reported it to be between $60,000 and $79,999. All nine mentors of girls in the communication/trust group reported demographic information. In this group, 44.4% were in their second year of college, 33.3% were in the third year, and 22.2% were in their fourth year. Sixty-six percent identified as White/Caucasian and 33% identified as African American. Of those who reported on their parents' income (n=4), 75% reported it to be over $100,000 and 25% reported that it was between $80,000 and $99,999.

All YWLP mentors and mentees were invited to participate in interviews at the end of the program year. Interviews with mentees were conducted at the girls' schools during lunch or after-school and with mentors on campus at a time convenient for them. Interviews were conducted by trained researchers (faculty, post-docs or graduate students) and were audio-recorded, transcribed, and uploaded into NVivo, and later transferred into Dedoose, an analysis software which assists with qualitative and mixed methods data organization and retrieval. Interviews took anywhere from 18-45 minutes, with most lasting around 25-30 minutes. Interviews asked mentees and mentors about

themselves, changes they (or their mentee) had made over the course of the year, and their experiences in YWLP and their mentoring relationship.

Interviews were initially coded and checked for coding consistency by trained researchers who applied organizational codes based on the overall study's major research questions. To select the interview segments in which mentees and mentors discussed their relationships, excerpts of the interviews that had been previously coded as "one-on-one relationship" were selected. We used thematic analysis (Braun & Clark, 2006) to further code these data. We began with open coding, wherein the first author read the interviews and created codes based on common themes that emerged across the interviews. Sample codes include, "Mentor Relationship with Mentee's Family", "Relationship Conflict", and "Trust". After the initial codes were created, two interviews were selected at random and were coded by two trained researchers using Dedoose. The coding was then compared for reliability and consistency, and the final code list was established (see appendix A for code list and example excerpts). Two researchers used this final code list to code the remaining interviews, which they then crosschecked for reliability and consistency. Finally, we examined the data for patterns within and across the high and low communication/trust and alienation groups. We first analyzed for differences in the presence and absence of codes and then read the content of all codes in-depth for differences in meaning as well as prevalence. Some codes differed between groups in both prevalence and content, while others only differed in one area or the other.

Results

Several themes and notable differences emerged from the data related to how mentees with different types of maternal relationship difficulties and their mentors talked about their mentoring relationships (see Table 1 and Figures 1 and 2 in Appendix B for a

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summary of key results). For mentees experiencing alienation from their mothers, analysis showed that there were three primary factors that contributed to strong mentor-mentee relationship development. Mentors in these relationships: 1) developed a strong relationship with the mentees' families; 2) gave advice and communicated with mentees about issues in their parental relationships, and; 3) appreciated and considered differences between themselves and their mentees rather than seeing differences as barriers to the relationship. For mentees experiencing trust and communication challenges in their maternal relationships, there were three primary factors that were emphasized by the mentors and mentees that influenced mentoring relationship development: 1) initial impressions; 2) developing trust in the relationship, and; 3) challenges in the relationships between the mentors and mentees' families.

Relationship with mentee's family. In a result that seemed counterintuitive at first, there appeared to be more discussion of positive relationships between the mentor and the mentee's family for mentees who reported more alienation from their mothers than for the mentees who did not report feeling alienated from their mothers. Eighty percent of both mentees and mentors among the more alienated group discussed positive relationships between the mentors and their mentees' families. In comparison, none of the mentees and 40% of mentors among the less alienated group characterized the relationship between the mentor and the mentee's family as positive. In fact, 30% of those in the less alienated group (0% of mentees and 60% of mentors) discussed negative aspects of the mentor's relationship with the mentee's family, whereas none of the mentors or mentees in the more alienated group did.

There were also noteworthy differences in the thematic content between the groups. Within the more alienated group, there were common themes of the mentor

taking initiative in establishing a relationship with the mentee's parents as well as being open to participating in family events. For example one mentor said,

I would say that I always took initiative [...] sometimes [my Little Sister's] mom would be [at my little sister's house] and I would be able to talk to her. [...] You know just always going […] whenever she invited me over for some type of dinner or anything like that. I always also helped [my Little Sister] get ready for her dances so I would just talk with her mom while [my Little Sister] got ready.

Another mentor mentioned, "[my Little Sister] and her family are really nice, and they've been very open in letting me into their home, and letting me hang out with them." In addition, mentors and mentees in this group commonly mentioned the mentee's families having positive first impressions of the mentors. For example, when asked what her family thought about her mentor when they first met her one mentee stated, "they really liked her." When asked how her mentor's relationship with her family has changed over time, another mentee stated, "I think it was pretty friendly from the get go."

This relationship was reversed when looking at girls in the trust and communication groups. Eighty percent of interviewees in the high communication/trust group talked about positive relationships between the mentor and the mentee's family. Yet only 33% of interviewees in the low maternal communication/trust group (0% mentees and 75% of mentors) discussed positive relationships between mentors and mentees' families, and 22% of interviewees (20% of mentees and 25% of mentors) described this relationship as negative.

Mentees in the low communication/trust group tended to not know how their families felt about their mentor. For example, when asked what her family thought about her mentor, one mentee said, "I don't know because I didn't ever talk to them about her."

Amongst these girls' mentors who discussed their relationships with their mentees'

families, a common theme was the presence of cultural or language barriers impeding the

relationship development between mentors and their mentees' families. For example, one

mentor stated,

> Me and her family never became close. When I look at other big sisters and their
>
> little sisters, they talk to their parents; the parents know them. But with the
>
> language barrier, it was really hard, so we never really made connection with the
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> family.

Given these qualitative results regarding language barriers, we ran a one-way ANOVA

comparing mentees' communication/trust scores by racial/ethnic group to determine if

girls with more communication and trust challenges were more likely to be from homes

in which parents did not speak English[1]. However, these results were not significant.

Communication and trust in the mentoring relationship. Mentor and mentee

interview data was analyzed to assess the quality of the communication between the

mentor and mentee; excerpts were coded and classified as positive/open, negative, or

absent (i.e., a lack of communication). Ninety percent of participants in the more

alienated group (100% of mentees and 80% of mentors) discussed instances of positive or

open communication between the mentor and mentee, as compared to 60% of mentees

and mentors in the less alienated group. Only 30% in the more alienated group (0% of

mentees and 30% of mentors) discussed instances of absent communication, compared to

50% of mentors and mentees in the less alienated group.

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[1] For our sample, the majority of girls whose parents did not speak English were from
Hispanic/Latinx so this was used as a proxy in this analysis.

There were notable differences between maternal alienation groups in the content of the mentees' and mentors' discussions of their communication with each other, as well. Communication between mentors and mentees in the more alienated group that was coded as open and positive often focused on the mentees' relationships with their mothers. For example, one mentor stated: "Sometimes [my little sister's] mom would call me for advice so I was just always trying to be there and be [...] another support system for my little sisters if they weren't really comfortable talking to their parents about stuff like that." One mentee explained:

> My mom got really mad and [my big sister] was there, and she helped me to go through it, and that was really nice. [...]She like wrote things down that I could do and she talked to my mom and stuff like that.

Interviewees in the more alienated group often characterized their communication as positive due to mentees feeling that they could tell their mentor anything and felt comfortable being open with them. For example, one mentee stated, "we can tell each other anything and just rely on each other." Another mentee expressed, "[My big sister] acts more like me, like my personality so she gets me and I get her and stuff. We ask personal questions and then we don't feel uncomfortable. We can tell each other anything. I just love her." On the other hand, when interviewees discussed absent communication it tended to be due to mentees shutting down when they were upset about something.

Interviewees from both the high and low maternal communication/trust groups frequently discussed instances of positive and open communication (90% of low group and 70% of high group), and had few instances of negative communication (0% in the low group and 10% of the high group). However, there were differences in the presence

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and content of the absent communication code. In the low communication/trust group, 66% of interviewees discussed absent communication between the mentor and mentee (40% of mentees and 100% of mentors). In contrast, only 40% of interviewees in the high communication/trust group (0% of mentees and 80% of mentors) discussed instances of absent communication within the dyad. Both the mentees with more maternal communication and trust challenges and their mentors frequently emphasized the negative impact of the absent communication between mentor and mentee on the mentoring relationship. Mentees were often reported to be the ones not communicating well within the mentoring relationship. For example one mentor stated,

> She has a tendency to when things get tough and she doesn't know how to deal with them to not talk, like literally be silent with you. So the first time she did that that was the most challenging because we were supposed to hang out and I couldn't do what I had planned on to do with her [...] and she just shut down and did not say a word to me the entire time and so learning how to deal with that aspect of her personality was challenging.

One mentee stated, "I usually didn't talk that much.[...] In group I didn't talk."

In contrast, within the high maternal communication/trust group the interviewees more frequently talked about absent communication within the mentoring relationship as a result of mentors lacking relational skills. For example one mentor stated,

> I would much rather be in group because there's constant talking and when we are alone I have to ask her how her day was and then sometimes she'll like you know say I'm going to do this for my birthday or something like that. And I'm like that's great but then after that it's, I don't know, it's nothing. So I mean during sister time after we talk for like five minutes I'm trying to find some other group

or I'm sitting in the room still and I'm talking to some other big sister instead of

talking to her.

Another mentor stated, "There hasn't been a time 100% that I'm like this is great. I want

to hang out with you longer. Most of the time it's like oh my goodness we're going to

have to sit in silence in the car and I'm going to have to ask you questions."

Within the low maternal communication/trust group, 55% of interviewees (80%

of mentees and 50% of mentors) discussed trust within the mentoring relationship as

compared to 20% of the high maternal communication/trust interviewees (40% of

mentees and 0% of mentors). Within the low maternal communication/trust group,

mentees commonly talked about their mentors' personalities allowing them to trust them.

For example, when asked what it was about the mentor that made the mentee feel she

could talk to her one mentee stated, "I don't know, just her personality." Mentees also

often mentioned that they knew their mentors would not tell anyone what they said.

Conflict in the mentoring relationship. Ten percent of those in the more alienated

group (0% of mentees and 20% of mentors) discussed conflict in their mentoring

relationships. In contrast, fifty percent of those in the less alienated group (40% of

mentees and 60% of mentors) discussed relationship conflict. The thematic content of the

interviews were similar in both groups, and centered on mentees disagreeing with advice

given by mentors. These conflicts occurred more frequently in the less alienated group

than in the more alienated group.

Eighty percent of the interviewees in the high communication/trust group (60% of

mentees and 100% of mentors) and 11% of those in the low communication/trust group

(25% of mentors and 0% of mentees) discussed conflict in their mentoring relationship.

Mentors and mentees in the high maternal communication/trust group often discussed

differences in opinion about how to approach a problem or project. For example one mentor stated,

> Let's see I guess it would be during the [University] day first performance, there was some dance moves that Little Sister wanted to implement into our performance and it was just a little small disagreement.

> *Advice.* While mentees who reported both more and less alienation in their maternal relationships and their mentors discussed advice being given by mentors in the mentoring relationship, the types of advice differed between the two groups. In the more alienated group the interviewees commonly discussed advice given about parental relationships, which was a theme not present in the less alienated group. For example, one mentor stated:

> She just would always listen to me and I would always just stress to her that you have to think before you act. Because that's the key to getting out of trouble, you know, you have to think before you say anything back to your mother.

Another mentor explained:

> Oh there was times when she thought that she shouldn't be in punishment like once she said she got blamed for something by her little sisters and she thought it wasn't right but I felt like she did play a little part in it. [...] I just told her that even though you didn't really play that big of a part your reactions weren't the best, the way that you handled the situation wasn't really the best way so I see why your mother did place you in punishment.

Advice given within the less alienated group focused more on general interpersonal skills and friendships. For example one mentor stated:

Well sometimes she would you know like use cusswords or things like that and I just like I remember one time specifically at the middle school I was like [Little Sister], I really don't, that's not appropriate to use I don't think you should talk to your friends like that or anyone really because it's disrespectful and it's hurtful.

Describing differences between each other. Nearly all mentors and mentees talked about ways in which they were different from each other. Yet they did so differently. Within the more alienated group, interviewees, mentors in particular, talked about keeping differences between themselves and their mentees in mind when developing their relationships and focused on using differences to better understand their mentees. For example, one mentor explained:

… I have to consider that the way that [my little sister] would solve a problem and the way that her family would solve a problem is not always the way that mine would and that doesn't mean it's a worse way or a better way it's just different. So I have to consider that when I interact with her.

In contrast, when interviewees in the less alienated group talked about differences they tended to focus on the ways in which differences caused them to not be able to relate to each other as well. For example, one mentor stated:

Just like with school it's hard for me to relate to her like struggling with school and being in the lower classes and stuff just because [...] I was always at the opposite end of that. So it's sort of been difficult for me to be like, oh, like you – you know like she really does need a lot of help.

Initial Impressions and the development of the mentoring relationship. Seventy percent of the interviewees in the high communication/trust group (60% of mentees and 80% of mentors) and 55% of those in the low communication/trust group (60% of

mentees and 50% of mentors) talked about the development of their mentoring relationship over time, characterizing that development as either fast or slow. All of the mentors and most of the mentees in the high communication/trust group who talked about the development of the relationship characterized the development as slow. Within this group, mentors and mentees talked about ups and downs in the relationship For example, one mentor stated:

> [Our mentoring relationship is] okay. It's not amazing, it's not terrible. It's difficult sometimes to want to hang out with her outside of group because she goes through such highs and lows of really wanting to see me and then like not wanting to be at group at all and wishing she was at lacrosse practice.

Mentors and mentees also tended to talk about the mentees taking time to open up to the mentor. For example one mentee stated,

> Well, at the beginning of the school year I really didn't tell her much because I really didn't know her, so I didn't tell her much, but then like after I got to know her, I started to tell her a lot more about my family and my life and stuff like that.

The content of discussions for mentees and mentors in the low communication/trust group was similar, but within those interviews the development of the relationship was not emphasized or brought up in interviews as frequently.

Those in the low maternal communication/trust group discussed their initial impressions of each other more than the high communication/trust group. Fifty-five percent of interviewees in the lower communication/trust group (60% of mentees and 50% of mentors) discussed initial impressions as compared to 10% of those in the higher communication/trust group. Of those that talked about initial impressions in the low

communication/trust group, 60% said they were positive, and mentees often described their mentors as "fun" and "nice".

Discussion

Overall, results revealed that mentees who started the program with different levels and types of relationship difficulties with their mothers discussed their mentoring relationships differently. This was also true for their mentors. Mentees who were more alienated from their mothers commonly received support from their mentors regarding their relationships with their mothers. Mentors in this group also took time to develop relationships with their mentees' families. In addition, mentors approached differences between themselves and their mentees as opportunities to learn more about their mentees and develop stronger relationships. On the other hand, mentors and mentees in the less alienated group discussed more barriers to relationship development such as lack of communication, negative relationships between mentors and mentees' families, and a focus on differences as an obstacle to relationship development. For girls experiencing trust and communication issues with their mothers, results revealed that developing trust and making a positive first impression were very important for the mentoring relationship. In addition, for girls in this group it was more difficult for mentors to develop a positive relationship with their mentees' families. These results reflect the idea that early relational experiences, including attachment experiences, shape our approach to later relationships (Meeus, Oosterwgel, Vollebergh, 2002; Stams et al., 2002), and support prior literature suggesting that such experiences may also therefore shape the development of youth's relationships with mentors (Rhodes, Contreras, & Manglesdorf, 1994; Keller & Blakeslee, 2014)

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Bowlby's attachment theory suggests that children develop an internal working model of self and others, which informs their expectations about future relationships (1988). Early adolescent girls who are experiencing challenges in their maternal relationships may have more difficulty with subsequent relationship development with peers and others (Meeus, Oosterwgel, Vollebergh, 2002; Stams et al., 2002). However, a prior study found that there may be nuanced but important differences in the types of attachment that are salient for early adolescent girls in regards to mentoring relationship development (Williamson et al., 2019). Specifically, Williamson and colleagues suggest that maternal trust and communication difficulties may be indicative of foundational relationship issues in the maternal relationship (2019). On the other hand, alienation or disconnection from mothers may be a relationship issue that is developmentally situated for early adolescent girls who are struggling with the task of testing their independence from their mothers (Williamson et al., 2019). The current study explored how these different types of maternal relationship issues impact the development of the mentoring relationship by looking at interviews of mentees with and without maternal relationship difficulties along with interviews of their mentors. Qualitative analysis seems to support this distinction between foundational and developmental maternal relationship issues. Issues with maternal trust and communication appear to spill over into the mentoring relationship. Mentees dealing with these issues emphasized trust in their relationships and seemed to be more wary of developing relationships at first, which was demonstrated through their focus on initial impressions. In contrast, mentees with alienation difficulties did not seem to have issues developing relationships with their mentors. Rather, they were able to capitalize on their mentors as resources to help them in their relationships

with their mothers, supporting the concept that alienation is related to a stage rather than a foundational problem.

Overall, for girls who are experiencing alienation from their mothers, mentors supporting their mentees through difficulties in their maternal relationships and developing positive connections with their mentees' families contributed to the development of satisfying mentoring relationships. For girls experiencing trust and communication issues in their maternal relationships, results suggest that initial impressions and developing trust are very important elements of mentoring relationship development. Relationship difficulties between mentors and mentees' families were commonly discussed as a barrier to relationship development in both groups.

It has been documented that girls are commonly referred to mentoring programs due to difficulties with their mothers (Rhodes, 2008). The results of our current study suggest that for those difficulties that are more developmental in nature (i.e., linked to the developmental tasks of early adolescence), there may be more opportunity for the development of a close mentoring relationship. This may prove more challenging in mentoring relationships with girls who are experiencing foundational relationship issues. Results of this study indicate that the role of the mentor as a bridge between mother and daughter can be conducive for positive mentoring relationships. Within our sample, mentors of mentees who are more alienated from their mothers put in extra effort to connect with their mentees', which seemed to contribute to the success of the mentoring relationship. Additionally, they played an active role in helping mentees understand their mothers' perspectives and also helped their mentees navigate difficult conversations with their mothers. This is in line with other studies that have shown that adult support from people other than parents can help to address adolescent's developmental needs for

increased autonomy as well as continued guidance (Cooper, Grotevant, & Condon, 1983 as cited in Rhodes, Grossman, & Resch, 2000; Hill & Holmbeck, 1986 as cited in Rhodes, Grossman & Resch, 2000). In addition, the Rhodes model of mentoring suggests that improvements for mentored youth in other areas such as academic and behavioral domains are partially due to the mentoring relationship improving mentees' relationships with their parents, which was found to be a primary outcome of mentoring (Rhodes, 2002; Rhodes, Grossman, & Resch, 2000).

In contrast to girls who are experiencing disconnection from their mothers, mentees in our sample who have trust and communication difficulties with their mothers appear to have more difficulty developing a quality mentoring relationship. Almost all of the mentees experiencing maternal communication and trust difficulties emphasized trust when talking about their mentoring relationship, indicating that developing trust was an important element of the relationship development process. Trust was more salient for girls with these difficulties in their maternal relationships, indicating a connection between maternal relationship difficulties and subsequent relationship development. This is supported by another study about natural mentors that found that youth with more negative attachment styles also talked more about trust when discussing their mentoring relationships (Yu, 2018). In addition, this finding is consistent with Bowlby's theory regarding the development of a working model for relationships based on early childhood attachment (1988). Many mentees with trust and communication difficulties in their maternal relationships also emphasized their initial impressions of their mentors when talking about their mentoring relationships. This indicates that mentees who have less security in their maternal relationship may be more vigilant and therefore place more

emphasis on their initial feelings about their mentor. As a result, it will be important for mentors to put mentees at ease early on in the relationship.

Finally, mentors of mentees with trust and communication difficulties in their maternal relationships tended to face challenges in developing relationships with their mentees' families. In contrast, mentors of mentees without these difficulties reported overall positive relationships with their mentees' families. Earlier studies have shown that improvement in maternal relationships is often an outcome of mentoring, but results of the current study suggest that focusing on the maternal relationship throughout the mentoring process is also important for the success of mentoring (Rhodes & DuBois, 2008). This finding is also supported by prior research, which found that family integration in youth programming is one of the essential features of positive youth development (Larson, Eccles, & Gootman, 2004). Given that positive relationships between mentors and mentees' families were also a prominent theme for both groups with better quality mentoring relationships, it seems that this is a critical element for strong mentoring relationship development for early adolescent girls. Prior qualitative research found that collaboration between mentoring programs, mentors, and parents was instrumental in supporting and creating strong mentoring relationships (Spencer & Basualdo-Delmonico, 2014). Conversely, lack of involvement from parents and difficult relationships between mentors and mentees' families may have a negative impact on overall relationship satisfaction. This is consistent with qualitative findings by Spencer and Basualdo-Delmonico that parental involvement can "make or break a match" (2014, p.77). Another study found that poor communication between parents and mentors was one of the most central challenges to sustaining strong mentoring matches (Basualdo-Delmonico & Spencer, 2016). As a result, mentors should focus on developing the

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parental relationship from early on the mentoring relationship, while being prepared to overcome barriers such as communication issues.

Implications for practice

Our results suggest a number of implications for practice that could help mentoring programs support the development of strong mentoring relationships. First, programs should consider modifying mentor training to include discussion and education around the impact that difficult maternal relationships may have on mentoring relationship development. Trainings could include particular factors that mentors can focus on to help them develop strong and quality mentoring relationships. Since mentoring relationships are central to the success of mentoring, focusing on these elements in mentor training could help improve the overall outcomes of mentoring for youth. Specifically, for mentees who are experiencing developmentally related disconnection from their mothers, mentors should focus on helping to bridge the gap between mentees and their mothers. Mentors should work to encourage mentee autonomy and reconnection with their mothers since the development of autonomy was found to be the most beneficial when it occurred within the context of a connected maternal relationship (Allen & Hauser, 1996). Supporting mentees in navigating difficult conversations, while also helping mentees understand their mothers' perspectives can help to create a supportive and satisfying mentoring relationship. For girls with foundational trust and communication challenges in their maternal relationships, mentors should focus on putting mentees at ease early on in the relationship and should work to develop trust with their mentees. Mentors should also be prepared for mentees to have some difficulty developing trust, so they should not get discouraged if the relationship takes some time to develop. Further, developing a relationship with mentees' families is

an important element of the relationship development process. Mentors should take time fostering a connection with their mentees' families by spending time with them. Focusing on these elements in mentor training can help programs to provide more support and better preparation for mentors to develop relationships with mentees who are facing difficulties in their maternal relationships, and ultimately improve outcomes for mentored youth.

Limitations

Although this study has many potential benefits, there are also some limitations. Given the small sample size as well as the focus on early adolescent girls in a group and one-on-one mentoring program, the results of this study have limited generalizability. The factors that were pertinent to this sub-set of mentees and mentors for the development of their mentoring relationships may not apply to other girls experiencing maternal relationship issues. Additionally, due to issues with missing data, some mentees with lower scores on both scales could not be included because they did not have corresponding interviews with their mentors. Had this data been available, the results may have been somewhat different. Finally, since this is a qualitative study, the application of codes and the interpretation of the results are not independent of the subjectivity of the coders and researchers. However, care was taken, in line with qualitative methodological practices, to ensure that such influence was considered and minimized through methods such as blind coding of interviews and seeking peer consultation during the analysis phase (Berger, 2015). Future studies are needed to further examine the differences between foundational and developmental maternal relationship issues in terms of how they operate in the development of mentoring

relationships for early adolescent girls. In addition, future studies should examine how these factors impact the targeted outcomes of mentoring such as academics and behavior.

Conclusions

Despite these limitations, this study contributes to the literature by providing mentoring programs with specific factors to focus on when developing their mentoring relationships with girls facing foundational or developmental maternal relationship issues. Providing mentors with guidance from the start of their relationships will help them to be better equipped to develop a strong and lasting mentoring relationship with mentees that present unique challenges. Results suggest that for girls facing maternal trust and communication issues, trust and positive initial impressions are key in relationship development. For mentees who are experiencing maternal alienation, mentors can serve as a bridge between mentees and their mothers. For all mentoring relationships, developing a positive relationship with mentees' families appears to be an important element for relationship success. Given that girls are often referred to mentoring programs due to issues with their mothers, these results can help programs to be better prepared to address these common problems. These results also help programs understand the mechanisms that may contribute to improvement in parental relationships, which is one of the key outcomes of mentoring (Rhodes, 2002). Overall, results of this study contribute to the understanding of the specific ways in which maternal relationships influence subsequent mentoring relationship development and as such can help improve mentoring relationship quality and overall outcomes for mentored youth.

References

Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child development*, 49-67.

Allen, J. P., & Hauser, S. T. (1996). Autonomy and relatedness in adolescent-family interactions as predictors of young adults states of mind regarding attachment. *Development and Psychopathology,8*(04), 793. doi:10.1017/s0954579400007434

Allen, J. P. & Land, D (1999). Attachment in adolescence. J. Cassidy & P. R. Shaver (Eds.) *Handbook of attachment theory and research and clinical applications*, (pp. 319- 335), New York: Guilford

Allen, J. P., Mcelhaney, K. B., Land, D. J., Kuperminc, G. P., Moore, C. W., Obeirne-Kelly, H., & Kilmer, S. L. (2003). A Secure Base in Adolescence: Markers of Attachment Security in the Mother-Adolescent Relationship. *Child Development,74*(1), 292-307. doi:10.1111/1467-8624.t01-1-00536

Almeida, D. M., Chandler, A., & Wethington, E. (1999). Daily spillover between marital and parent child conflict. Journal of Marriage and the Family, 61, 49–61.

Armsden, G. C. &. Greensburg, M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*(5), 427-454. doi:10.1007/BF02202939

Basualdo-Delmonico, A. M., & Spencer, R. (2016). A parents place: Parents, mentors

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and program staff members expectations for and experiences of parental

involvement in community-based youth mentoring relationships. *Children and*

Youth Services Review,61, 6-14. doi:10.1016/j.childyouth.2015.11.021

Berger, R. (2015). Now I see it, now I don't: researcher's position and reflexivity in

qualitative research. *Qualitative Research, 15(2)*: 219-234.

Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human

development. New York: Basic Books.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative*

Research in Psychology,3(2), 77-101. doi:10.1191/1478088706qp063oa

Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E., & Herrera, C.

(2013). Pathways of influence in school-based mentoring: The mediating role of

parent and teacher relationships. *Journal of School Psychology,51*(1), 129-142.

doi:10.1016/j.jsp.2012.10.001

DuBois, D. L., Holloway, B.E., Valentine, J. C., Cooper, H., (2002). Effectiveness of

mentoring programs for youth: A meta-analytic review. *American Journal of*

Community Psychology, 30 (2), 157-197.

DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N., & Valentine, J.C. (2011).

How effective are mentoring programs for youth: A systematic assessment of

the evidence. *Psychological Science in the Public Interest, 12,* 57-91.

doi: http://dx.doi.org.proxy.its.virginia.edu/10.1177/1529100611414806

Herrera, C., Sipe, C. L., & McClanahan, W. S. (2000). Mentoring school-age

children: Relationship development in community-based and school-based

programs.

Herrara, C., DuBois, D.L., Grossman, J. B., (2013). Role of Risk: mentoring

experience and outcomes for youth with varying risk profiles. New York, NY: A

Public/Private Ventures project distributed by MDRC.

Keller, T. E. & Blakeslee, J. E. (2014). Social networks and mentoring. In D. L. DuBois

& M. J. Karcher (Eds.) *Handbook of youth mentoring 2nd Edition*. Thousand

Oaks, CA: Sage Publications.

Larson, R., Eccles, J., & Gootman, J. A. (2004). Features of positive developmental

settings. *The Prevention Researcher,11*(2), 8-13.

Lawrence, E., Roberts, K., Sovik-Johnston, A., & Thorndike, A. (2009). *Young Women*

Leaders Program Mentor Handbook (6th Edition). Charlottesville, VA: The

Rector and Board of Visitors, University of Virginia.

Leyton-Armakan, J., Lawrence, E. C., Deutsch, N., Williams, J. L., & Henneberger,

A. (2012). Effective youth mentors: The relationship between initial

characteristics of college women mentors and mentee satisfaction and outcome.

Journal of Community Psychology, 40(8), 906-920. DOI: 10.1002/jcop.21491

Meeus, W., Oosterwegel, A., & Vollebergh, W. (2002). Parental and peer attachment

and identity development in adolescence. *Journal of Adolescence,25*(1), 93-106.

doi:10.1006/jado.2001.0451

Rhodes, J. E. (2002). Stand by Me: The Risks and Rewards of Mentoring Today's

Youth. Cambridge, MA: Harvard University Press.

Rhodes, J. E., Contreras, J. M., & Mangelsdorf, S. C. (1994). Natural mentor

relationships among latina adolescent mothers: Psychological adjustment,

moderating processes, and the role of early parental acceptance. *American*

Journal of Community Psychology,22(2), 211-227. doi:10.1007/bf02506863

Rhodes, J.E., DuBois, D. L. (2006). Understanding and facilitating the youth

mentoring movement. *Social Policy Report, XX (III)*, (3-19).

Rhodes, J. E., & DuBois, D. L. (2008). Mentoring relationships and programs for

youth. *Current Directions in Psychological Science*, *17*(4), 254-258.

Rhodes, J., Lowe, S.R., Litchfield, L., Walsh-Samp, K. (2008). The role of gender in

youth mentoring relationship formation and duration. *Journal of Vocational*

Behavior, 72, 183-192.

Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of Change: Pathways

through Which Mentoring Relationships Influence Adolescents Academic

Adjustment. *Child Development,71*(6), 1662-1671. doi:10.1111/1467-8624.00256

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the

facilitation of intrinsic motivation, social development, and well-

being. American Psychologist, 55(1), 68–78. doi:10.1037/0003-066X.55.1.68

Seiving, R. E., McRee, A., McMorris, B. J., Shlafer, R. J., Gower, A. L., Kapa, H. M.,

. . . Resnick, M. D. (2016). Youth–Adult Connectedness: A Key Protective Factor

for Adolescent Health. *American Journal of Preventative Medicine,52*, 275-278.

http://dx.doi.org/10.1016/j.amepre.2016.07.037

Smetana, J. G., & Rote, W. M. (2019). Adolescent–Parent Relationships: Progress,

Processes, and Prospects. *Annual Review of Developmental Psychology , 1*, 41–

68. doi: https://doi.org/10.1146/annurev-devpsych-121318-084903

Spencer, R. (2007). "Its Not What I Expected". *Journal of Adolescent Research,22*(4),

331-354. doi:10.1177/0743558407301915

Spencer, R., & Basualdo-Delmonico, A. (2014). Family involvement in the youth

mentoring process: A focus group study with program staff. *Children and Youth*

Services Review,41, 75-82. doi:10.1016/j.childyouth.2014.03.013

Stams, G. J., Juffer, F., & Ijzendoorn, M. H. (2002). Maternal sensitivity, infant

    attachment, and temperament in early childhood predict adjustment in middle

    childhood: The case of adopted children and their biologically unrelated

    parents. *Developmental Psychology,38*(5), 806-821. doi:10.1037//0012-

    1649.38.5.806

Waters, E., & Bretherton, I. (Eds.). (1985). *Growing points of attachment theory and*

    research. University of Chicago Press for the Society for Research in Child

    Development

Williamson, S., Lawrence, E., Lyons, M.D, Deutsch, N.L. (2019). What mentees bring:

    Relationship characteristics pre-mentoring and mentoring relationship

    satisfaction. *Journal of Early Adolescence.*

    https://doi.org/10.1177/0272431619891251

Yu, M.B., Deutsch, N.L., Futch Ehrlich, V., Arbeit, M., Johnson, H.E., Melton, T., &

    Nagel, N.(2018). "It's like all of his attention is on you": Exploring associations

    between adolescent attachment, supportive adult relationships, and self-esteem.

    Journal of Community Psychology, 47(2).

Table 1. Code List and Example Excerpts.

Code	Sub-Code	Example Quote
Mentor's relationship with Mentee's Family		
	Positive	Interviewer: What was her [Mentor's] relationship like with your family? Interviewee (Mentee): Pretty good, my mom loved her […] and my dad was kind of happy that she was hanging out with me and like it gave me a chance to feel like I actually had a big sister
	Negative	Interviewee (Mentor): Me and her family never became close. When I look at other big sisters and their little sisters they talk to their parents, the parents know them. But with the language barrier it was really hard, so we never really made connection with the family. It was more like I would pick her up, come in, "Hi", and then just take [mentee] out.
Communication		
	Positive/Open	Interviewer: What's your relationship like with your little sister? Interviewee (Mentor): We're pretty close. I wouldn't say we're like best best friends, but we tell each other a lot and she's definitely very open with me and I try to be open with her.
	Negative	"Interviewee (Mentor): So I actually kind of yelled at her a little bit and was like, this isn't okay. I'm really sick I'll find a way for you to go [to the restaurant with another pair] but for you to be bitter about this—I'm not, this is hanging out time, it's not for you to go to a restaurant you want to go to. So those were just little times when it was very—

Code	Sub-Code	Example Quote
		Interviewer: What did she do after you talked to her? Interviewee: She was like oh, and rolled her eyes.
	Absent	Interviewee (Mentor): I can't really hang out with her [Mentee] on the weekends because I can't really get in contact with her.
Development of relationship over time		
	Fast	Interviewer: Do you remember when you were able to—felt like you could tell [your mentor] stuff? Interviewee: It was after like the first or second week. I'm very outgoing.
	Slow	Interviewee (Mentee): At first, we really do nothing, like hang out, nothing. And I ain't use to come. Interviewer: You didn't used to come to group? Interviewee: But now I started coming and we got closer and closer.
Initial impressions		
	Positive	Interviewer: What was your first impression of [your big sister] the first time you saw her? Interviewee (Mentee): I thought that she would be really nice. Interviewer: How could you tell that? Interviewee: I don't know. Just the way she was – when she first said hi to me. She just had this nice sound in her voice or whatever.
	Negative	Interviewer: Do you remember what your first impression of your big sister was? Interviewee (mentee): It was actually bad, not

Code	Sub-Code	Example Quote
		good, but bad
Mentee's relationship with family		
	Positive	"[My mentee] really close with her family, her siblings."
	Negative	[My mentee] lives with her dad and step mom and she is not really like fond of her stepmother and I think that kind of got worse especially because her mom was in the hospital."
Mentee's relationship with friends		
	Positive	Interviewer: Let's see, can you tell me a little bit about your friends? Interviewee (mentee): I'm friends with everybody mostly.
	Negative	Mentor: [My mentee's] group of friends aren't the most positive people. She's kind of like me we both have friends within our organization. Like we both have a diverse group of friends but you just have to know where to place yourself. Because some of her friends weren't the most like I guess they don't exactly make the right decisions I would say

Code	Sub-Code	Example Quote
Mentoring Relationship conflict		I'm not sure but she's like oh whatever it's the end of the year and why does it matter that I'm getting a in gym because I don't have a uniform because it's only 4 weeks in school left or something like that. And I'm like it does matter because it's going to factor into your GPA later but to her it's like oh whatever it's no big deal. You know as long as I'm not flunking out I guess it's okay. So that's kind of the disagreement we had with school most of the time
Time spent together		One day we hung out and [my mentor] took me to her college classes.
Trust		Interviewer: And what helped make you feel like you could talk to [your big sister] about those things? Interviewee (mentee): I guess just the fact that I felt like kinda cool with her because I like knew she wasn't gonna like really say anything back to anybody, so – yeah. Interviewer: Are there things that she did to make you feel like that? Interviewee: I think just like the way – I think it's just like her advice and – I don't know. It just made me think, "Oh, I can really talk to her," and stuff like that. And it's kind of her attitude, the way she like – I don't know, but you can really talk to her. It's easy to talk to her
Advice		I was telling [my mentee] if you don't start to get into good study habits and wanting to do well when it's easy because middle school is a lot easier than high school then how can you expect to do a transformation when you get to high school? You have to develop these study habits and study skills while the work is not that intense because once she gets to high school it's only going to get worse not better.
Criticism of Mentee		And then for [my mentee] there were times when she kind of has this little back talking problem. Sometimes she does not control her

Code	Sub-Code	Example Quote
		mouth.
Similarities between mentor and mentee		Interviewer: In what ways do you think you and your [mentor] are like each other? Interviewee (mentee): We're both really fun.
Differences between mentor and mentee		Mentor: Just like with school it's hard for me to relate to her like struggling with school and being […] in the lower classes and stuff just because I was never, I mean I was always at like the opposite end of that. So it's sort of like been difficult for me to be like, oh, like you – you know like she really does need like a lot of help and um for her getting a C in math is like good. And like it's just you know like a different thing in terms of that.

Table 2. Summary of Key Results.			
More Alienated *(Higher quality mentoring relationships)*	**Less Alienated** (*Lower quality mentoring relationships*)	**Stronger Communication/Trust** *(Higher quality mentoring relationships)*	**Comunication/Trust Challenges** (*Lower quality mentoring relationships*)
Mentors took initiative to engage with family	Negative relationships between mentors and mentees' families	Positive relationships between mentors and mentees' families	Barriers to communication between mentors and mentees' families
Talked and gave advice about mentees' relationships with their mothers	Lack of communication between mentors and mentees	Few instances of absent communication between mentor and mentee, more discussion of positive/open communication	Frequent discussion of trust, especially by mentees
Kept differences in mind when interacting/ developing relationship with mentee	Focused on differences between mentors and mentees as obsacles to relationship	Slow development of relationship over time	Mentees discussed initital impressions frequently, tended to be positive

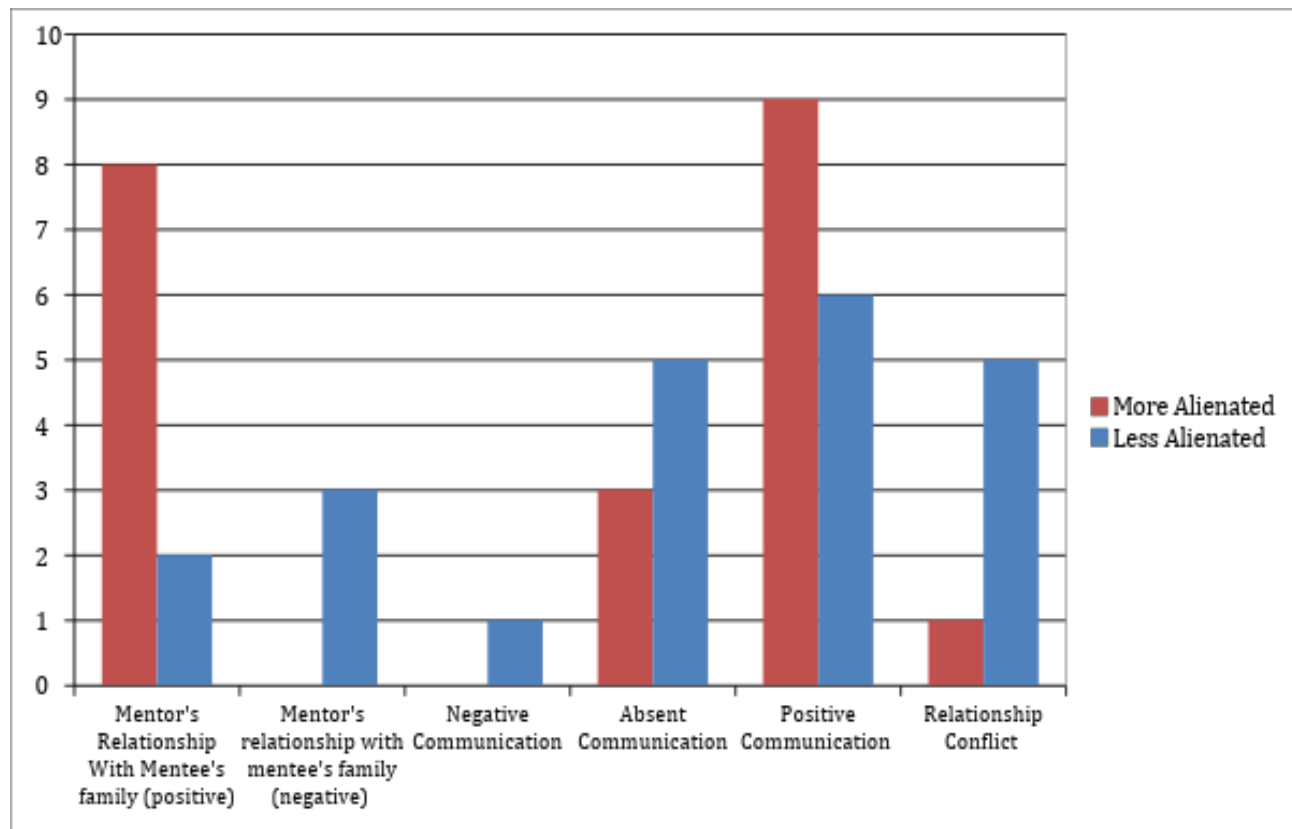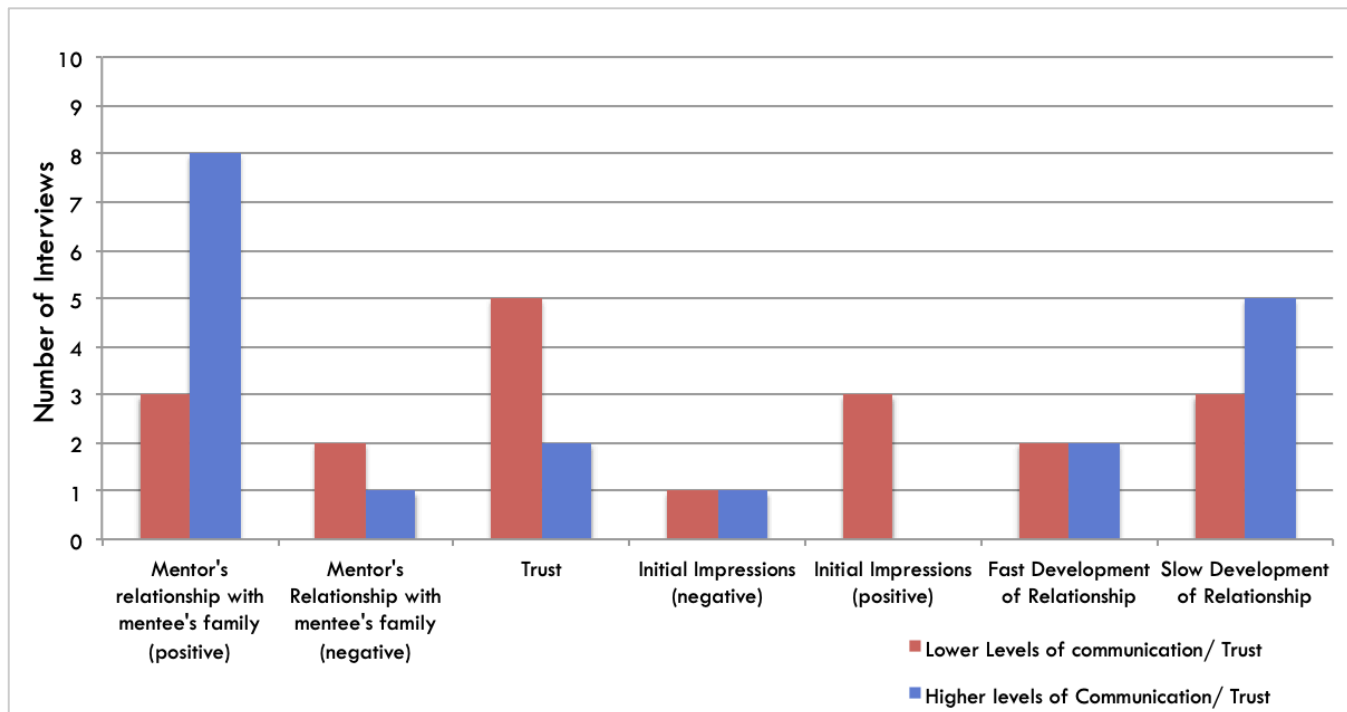Figure 1. Presence of Key Codes for Alienation Groups.

Figure 2. Presence of Key Codes for Communication/Trust Groups

Manuscript Three

Mothers and Mentoring: The Association Between Maternal Relationship Difficulties and

Mentoring Outcomes

Supriya Williamson, Michael D. Lyons, Nancy L. Deutsch, Edith Lawrence

Abstract

Maternal relationship characteristics have been found to have an impact on academic and behavioral outcomes for youth. Not as much is known about how and through what mechanism these characteristics impact outcomes for mentored youth. This study examines this question. Data were drawn from 205 participants in The Young Women Leaders program, a mentoring program that pairs adolescent girls with college women mentors for one year of group and one-on-one mentoring. Mentoring relationship quality is the hypothesized mechanism of change and is included in the analysis as a mediator. Results revealed that maternal relationship characteristics (i.e., maternal communication/trust and maternal alienation) are directly related to academic and behavioral outcomes of mentoring. The relationship between maternal relationship characteristics and behavioral outcomes of mentoring is mediated by mentoring relationship quality. Results suggest that girls with stronger maternal Communication and trust as well as girls who are feeling more alienated from their mothers may benefit more from mentoring. Results can be used to inform mentor training to include a focus on relationship development with girls experiencing a variety of relational difficulties with their mothers in order to help improve outcomes of mentoring.

Introduction

Mentoring is a popular intervention that has been shown to have a variety of positive outcomes for youth including improvements in academics, behavior, and social skills (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). The quality of the mentoring relationship, including strength, length, and closeness, has been found to be critical to the success of mentoring programs (Rhodes, 2002; DuBois et al., 2002; Rhodes et al., 2006; Herrara, DuBois, & Grossman, 2013). According to the Rhodes model of mentoring influence, the essential elements of a successful mentoring relationship are mutuality, trust, and empathy (Rhodes, 2002). Within the context of a trusting and connected mentoring relationship, mentees can express and discuss their feelings and receive input and feedback from mentors, which contributes to mentees' overall development (Rhodes, 2002). In addition to improving social, academic, and behavioral skills, quality mentoring relationships have been found to have an impact on mentees' other relationships as well, such as relationships with peers, parents, and teachers (Chan et al., 2011; Sieving et al., 2016).

Given the centrality of the mentoring relationship to the overall success of mentoring, examining the factors that might influence the development of a strong mentoring relationship is beneficial. Whereas there are a number of factors within mentor-mentee relationships that are important, factors that are external to the day-to-day interactions between mentors and mentees, such as mentees' individual risk factors, age, and gender, can also influence how mentoring relationships develop (Du Bois et. al, 2011; Rhodes, 2002, 2008). In addition, a mentee's prior relationships and experiences can also influence their ability and willingness to form a new mentoring relationship

(Williamson, Lawrence, Lyons & Deutsch, 2019; Schwartz, Rhodes, Chan and Herrerra, 2010).

Adolescent developmental outcomes and youth mentoring

Developmentally, early adolescence is a time of significant growth and development of social and emotional skills (Ross, Kim, Tolan, Jennings, 2019). The development and growth of relationship skills, including creating and maintaining relationships, steadily grow during adolescence, especially for girls (Ross et al., 2019). Relationships with peers become increasingly important during this period, and with this increased importance, the risk of relational aggression and bullying also increase. According to a national survey, 22% of students between 12 and 18 reported being bullied at school (Zhang et al., 2016). Adolescent girls are at particular risk for relational difficulties; a higher percentage of females than males reported instances of verbal and relational aggression such as being called names, made fun of, insulted, and being the subject of rumors (Zhang et al., 2016). When girls bully others they are more likely than boys to use social and relational aggression (Pellegrini, 2002).

One way to address relational aggression and support early adolescent girls during this stage is through the use of mentors. Mentors of early adolescent girls have the opportunity to help their mentees develop relational skills, such as assertiveness and conflict resolution, which can help girls reduce bullying behavior and address bullying in others. In addition, social support has been found to be a protective factor for early adolescents against becoming involved in bullying as a victim or bully as well as against anxiety and depression in victims of bullies (Holt & Espelage, 2006). This suggests that a mentor as an additional social support could be beneficial in protecting against the relational difficulties experienced by early adolescent girls. In fact, a prior study of the

Young Women Leaders program found that girls reported that their mentors helped them improve their relational skills and development, such as increasing their ability to trust people (Deutsch et al., 2016). Another study of a school-based mentoring program found that better mentoring relationship quality was associated with improvement in social skills post-mentoring (Schenk et al., 2020). In addition, strong mentoring relationships were found to be associated with improvement in youths' other relationships such as with parents and teachers as well as an improvement in social skills and behaviors (Chan et al., 2011; Sieving et al., 2016). Given that mentoring programs often target and are reportedly successful in improving relational and behavioral skills, it is important to include these as key targeted outcomes of mentoring.

Academic challenges are also an important factor during early adolescence, when academic engagement and achievement often declines (Eccles et al. 1993; Barber & Olsen, 2004). Academic challenges are also a reason for which adolescents are referred to mentoring programs. While some mentoring programs target academics directly through activities such as tutoring, relationally focused mentoring programs can also have an impact on academics. For example, a prior qualitative study of the Young Women Leaders Program found that mentees reported positive academic changes as a result of participating in the program (Deutsch et al., 2016). In this study, girls commonly reported that their mentoring relationships helped them make connections between their career and life goals and their current academic success (Deutsch et al., 2016). This demonstrates the impact that mentoring can have on academics, even when not focusing on the development of specific academic skills. On a larger scale, a recent meta-analysis including 70 studies on outcomes of mentoring programs, revealed significant positive effects of mentoring on youth in all domains, including academics (Raposa et al., 2019).

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Of note, this study excluded programs focused specifically on academic skills, such as tutoring programs, and instead included only relationship focused programs, again demonstrating the impact that mentoring can have on academic success (Raposa et al., 2019).

External factors influencing mentoring outcomes

Within the broad category of factors which are external to the mentoring relationship but which may influence their development and outcomes, there are multiple specific factors that have been found to influence the process or outcomes of mentoring. One meta-analysis found that mentoring programs had the most impact on outcomes for mentees who had a combination of both environmental (e.g., socio-economic status, family makeup) and individual (e.g., mental health status, behavioral difficulties) risk factors (DuBois, Holloway, Valentine, & Cooper, 2002). Another study found an association between both mentees' age and gender and outcomes of mentoring (Karcher, 2008). Specifically, elementary aged boys and high school girls benefited the most from mentoring and showed more social and emotional gains than others (Karcher, 2008).

In a prior study focused on at-risk early adolescent girls in a mentoring program, Williamson and colleagues (Williamson et al., 2019) found that maternal relationship characteristics (i.e., maternal communication/trust and alienation) impacted the quality of the mentoring relationship. Specifically, girls who were experiencing communication and trust challenges in their maternal relationships were more likely to report lower quality mentoring relationships (Williamson et al., 2019). On the other hand, girls who were experiencing feelings of alienation and detachment from their mothers seemed more open to mentor help, and were more likely to report higher quality mentoring relationships (Williamson et al., 2019).

**Maternal relationship characteristics, mentoring, and youth outcomes**

Mentee maternal relationship characteristics, which we are defining as a mentee's feelings about and perceptions of her relationship with her mother, are conceptually linked to maternal attachment. Based on Bowlby's attachment theory, the persistent presence of a mother is critical in developing a secure-base from which a young person can explore (1988). While maternal attachment has been shown to impact the development of future relationships, attachment can also impact academic and behavioral outcomes. For example, Jacobson & Hoffman (1997) found that secure attachment in childhood was predictive of GPA and attention and participation in middle school. Further, Vries and colleagues (Vries, Hoeve, Stams, & Asscher, 2015) found an association between maternal attachment and externalizing as well as delinquent behaviors. These studies demonstrate the long-term impact that maternal attachment has on outcomes for youth.

However, not as much is known about how and through what mechanism these maternal relationship characteristics impact academic and behavioral outcomes of mentoring. Understanding this relationship could help explain the mixed outcomes of mentoring. In addition, this could inform mentor training regarding areas to focus on when developing relationships with mentees who have maternal relationship challenges in order to optimize the effects of mentoring. Given that maternal attachment influences academics as well as relational and behavioral outcomes for the general population, it follows to examine similar outcomes when looking at the impact of maternal relationship characteristics in mentored youth. In addition, adolescents are often referred to mentoring programs due to academic and behavioral risk providing further support for a focus on these outcomes (DuBois, Holloway, Valentine, Cooper, 2002).

Quality mentoring relationships, maternal relationship characteristics, and

youth outcomes: Building a mediated model

Since maternal relationships characteristics have been found to impact the quality of the mentoring relationship (Williamson et al., 2019), and quality mentoring relationships are associated with behavioral and academic outcomes of mentoring (Raposa et al., 2019; Deutsch et al., 2016; Sieving et al., 2016; Schenk et al., 2019), it follows that the association between maternal relationship characteristics and behavioral and academic outcomes could be mediated by the quality of the mentoring relationship (see Figure 1). Previous research by Schenk and colleagues (2019) supports this hypothesis. In that study, mentoring relationship quality mediated the relationship between pre- and post- intervention social skills for mentees under 13.

Figure 1: Mediation Model
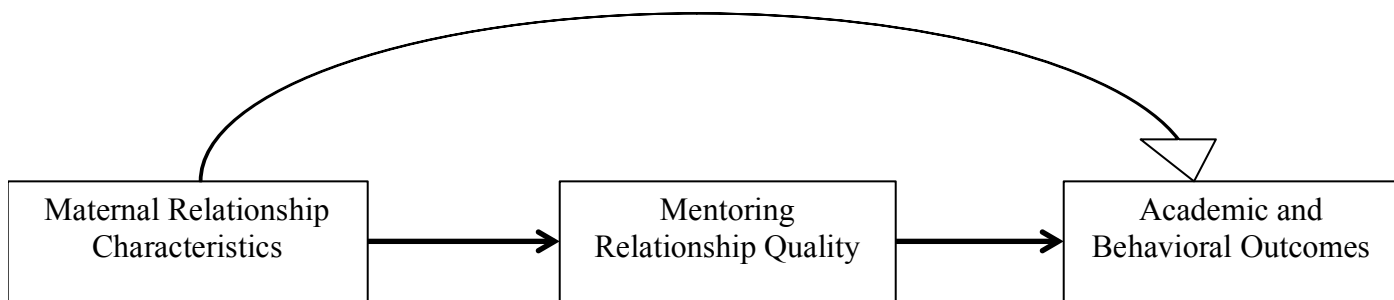
Given that mentoring is a relational intervention, it may be particularly important to separately assess the different elements of the parental relationship as measured by the Inventory of Peer and Parent Attachment (IPPA), as different aspects of the parent-youth relationship (i.e., trust, communication, alienation) may have differential effects on a youth's abilities, and desires, to form a close mentoring relationship and, thus, on the outcomes from that mentoring relationship. In fact, results of a prior study revealed that

while communication and trust challenges in the maternal relationship negatively

impacted the quality of the mentoring relationship, mentees who reported feeling

alienated from their mothers reported higher quality mentoring relationships (Williamson

et al., 2019). These results lend support to the hypothesis that different types of

challenges in the maternal relationship impact the quality of the mentoring relationship in

different ways. Results of this prior study also revealed that for this population, the

communication and trust sub-scales of the IPPA were highly correlated, resulting in these

scales being combined into one communication/trust sub-scale, while the alienation sub-

scale remained separate (Williamson et al., 2019). As a result, it is important to examine

elements of the maternal relationship (as measured by the IPPA) separately rather than as

one composite score.

Current study

Building from results of a prior study, which found an association between

maternal communication/trust and alienation (as measured by the IPPA) and mentoring

relationship quality, the current study aims to explore if these characteristics have an

impact on outcomes of mentoring. Specifically, the proposed study addresses the

following questions: (1) Amongst early adolescent girls referred to a mentoring program,

is there an association between maternal relationship characteristics (communication/trust

and alienation) and academic and behavioral outcomes? (2) If so, does the quality of the

mentoring relationship mediate this association?

By examining the association between maternal relationship characteristics of the

mentees and the outcomes of mentoring, we can gain a better understanding of the impact

that these characteristics have on the overall effectiveness of mentoring for early

adolescent girls. Mentoring relationship quality is included as a mediator as this is the

hypothesized mechanism of change through which relationally based mentee characteristics may influence overall outcomes of mentoring. Results of this study can be utilized by programs that target early adolescent girls to modify mentor training to include a focus on issues that girls may be dealing with in their maternal relationships. Understanding how maternal relationship issues may influence academic and behavioral outcomes of mentoring can help programs to ensure that mentors are prepared to develop strong relationships with girls experiencing maternal relationship difficulties in order to improve the effectiveness of programs and benefit more youth.

Method

This study used data collected as part of a larger five-year follow-up study of the Young Women Leaders Program (YWLP), a gender-specific mentoring program focused on fostering early adolescent girls' competence, connection, and autonomy (Lawrence et al., 2009). This study used pre-mentoring data about mentees' maternal relationship characteristics and data collected immediately after the mentoring relationship ended about mentees' academic and behavioral outcomes and satisfaction with their mentoring relationship, which was used as a proxy for the quality of the mentoring relationship.

The Young Women Leaders Program

All study participants were enrolled in the YWLP between 2007 and 2010. The YWLP is a school-based mentoring program that pairs middle school girls with college women for the academic year. The pairs meet after school once a week with five to seven other mentoring pairs for two-hour group mentoring sessions that follow a semi-structured curriculum, which is based on self-determination theory (Ryan & Deci, 2000) and therefore focuses on supporting girls' competence, connection, and autonomy (Lawrence et al., 2009). Pairs also meet one-on-one throughout the year for four hours

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per month. Graduate students or experienced undergraduate students serve as facilitators for the mentoring groups. Facilitators and mentors take a class dedicated to adolescent development and issues pertaining to mentoring adolescent girls. The college women also receive ongoing training and support throughout the year. In addition to competence, connection, and autonomy, the curriculum also addresses a number of issues pertinent to adolescent girls such as positive body image, leadership skills, and interpersonal aggression, and is designed to promote positive youth development both within the group mentoring and during one-on-one time (Leyton-Armakan, Lawrence, Deutsch, Williams, & Henneberger, 2012).

Participants & Procedures

The sample includes four cohorts of girls (n=205) who participated in YWLP between 2007 and 2010 at four middle schools located in the Southeastern United States. School counselors from the four middle schools identified girls as being at risk for social, emotional, and/or academic problems and referred them to YWLP. Their ages ranged from 11-14 at the start of the study (when they entered YWLP). The mean age was 12.2. Among those that reported race (n=166), 41.6% identified as African American, 26.5% identified as Caucasian 6.6% identified as Hispanic, 24.1% identified as mixed-race or other, and 1.1% identified as Asian. The majority (64.5%) qualified for free or reduced lunch at school. The study is part of an ongoing, IRB-approved research protocol. A parent or guardian of each middle school girl provided informed consent prior to participation in the study. The middle school girls also assented to participate in the study at the start of the YWLP programming. Pre-intervention data were collected through self-report questionnaires that included demographic information as well as assessments of participants' emotional, social, and academic characteristics. Self-report questionnaires

were also administered to the study participants immediately after the conclusion of the program in the spring, which included questions regarding behavior and also asked students to evaluate their mentoring relationship. Mentees self-reported academic outcomes (i.e., grades in the four core subjects) at the end of the academic year.

Measures

For the purposes of this study, pre-program measures assessing characteristics of the mentees' relationship with their mother were selected from the original set of study measures. Control measures included socio-economic status and race. Outcome measures were chosen from the post-program data that assessed academic and behavioral outcomes. Mentoring relationship quality, as assessed by the mentees' satisfaction with their mentoring relationship at the end of the program, was used as a mediator.

Maternal Relationship. To evaluate participants' feelings of connection and bonding with their mother or maternal figure, the Inventory of Peer and Parent Attachment (IPPA) scale developed by Armsden & Greensburg (1987) was administered. The IPPA was developed for adolescents and its design is based on attachment theory's formulations regarding the nature of feelings towards attachment figures. The original measure included three sub-scales, Trust, Communication, and Alienation, and asks participants to rate how true each item is for them on a scale of 1 (*not true*) to 4 (*almost always true)*. However, for our sample the Communication and Trust subscales were highly correlated, which led us to combine these scales to create a composite subscale (see Williamson, et al, 2019 for details). The wording of the scale was adjusted to ask about mothers and/or maternal figures. The Communication/ Trust subscale captures themes of maternal understanding and respect as well as mutual trust, and the extent and quality of maternal communication (e.g., "She accepts me as I am", "I trust her", "She

can tell when I'm upset" and "She cares about how I am."). For our sample this subscale appeared to capture foundational relationship issues between mothers and daughters. The Alienation subscale captures instances of emotional and behavioral withdrawal from maternal figures due to dissatisfaction with their help (e.g., "I feel alone or apart when I'm with her" and "I feel angry with her."). For our sample, this scale appeared to measure developmentally situated disconnection from mothers and was indicative of a stage rather than a stable or pervasive relational difficulty (see Williamson et al, 2019 for discussion). Items were not reverse coded, so higher scores on the communication/trust subscale indicate greater levels of communication/trust, i.e., more positive feelings. Higher scores on the alienation subscale, however, indicate greater levels of alienation, i.e., more negative feelings. This measure showed strong internal reliability in each subscale for our sample ($\alpha_{Communication/\ Trust}$=.95, and $\alpha_{Alienation}$= .83).

Socio-Economic Status. Receiving free or reduced lunch and parental level of education were used as a proxy for socio-economic status (SES). These measures were chosen to evaluate SES because they capture two of the three main types of capital identified to be essential for optimal development: financial capital and human capital (Coleman, 1988). Free/reduced lunch status is used to evaluate financial capital, as eligibility for the school lunch program is based on family income at or below 1.3 times federal poverty guidelines (USDA). Parental education has been suggested as an accurate measure of human capital (Entwisle & Astone, 1994). Study participants self-reported this information on the pre-program survey. These two variables were each controlled for separately in the regression model.

Race. Participants were asked to report their race in the pre-program survey. Options included Caucasian, African American, Asian, Hispanic, and Other. This variable was included as a control in the regression model.

Mentoring Relationship Satisfaction. Rhodes' measure of mentoring relationship satisfaction (Rhodes, Reddy, Roffman, & Grossman, 2005) was used to evaluate mentees' perception of their one-on-one mentoring relationship at the end of the mentoring program. The 15-item questionnaire consists of four subscales: helpfulness, meeting expectations, negative emotions, and closeness and has been shown to have good internal reliability (Rhodes et al., 2005). The wording was changed for the purposes of this study from "Mentor" to "Big Sister" in order to reflect the language used in YWLP. Responses were provided on a 4-point scale of 1 (*not true at all)* to 4 (*very true)* and included positive and negative questions such as: "My big sister has lots of good ideas about how to solve problems;" "When I am with my big sister I feel ignored;" "My big sister helps me take my mind off things by doing something with me." For our sample, the Cronbach's Alpha for this scale was .93.

Academics. An overall average of mentees' grades in the four core subjects (science, social studies, English, and math), self-reported at the end of the program year, were used to evaluate mentee's academic achievement at the end of 7th grade. Mentees' self-reported grades from the beginning of 7th grade were used as a control variable.

Bullying Behavior. The Bullying Behavior scale (adapted from Mynard & Joseph, 2000) which asked mentees about their participation in bullying of others over the last month, was used as the first behavioral outcome measure. At the end of the program year, mentees were asked five questions and rated how frequently they engaged in various bullying behaviors on a four-point scale ranging from "never" to "almost every

day". Sample statements include, "Made fun of someone for some reason" and "Made other people not talk to someone." The Cronbach's alpha for our sample was .78.

Conflict Resolution. The Conflict Resolution scale (Buhrmester, Furman, Wittenberg, & Reiss, 1988) was used as the second behavioral outcome measure. This 5-question scale was collected at the end of the program year, and evaluated mentees' ability to resolve conflicts amicably and asked mentees to rate how good they were at various elements of conflict resolution using a 5-point scale ranging from "poor" to "extremely good". Sample questions include, "Resolving disagreements in ways so neither person feels hurt or resentful?" and "Backing down in a disagreement once it becomes clear that you are wrong?" The Cronbach's Alpha for our sample was .83.

Data Analysis

To assess whether mentoring relationship quality mediates the association between maternal relationship characteristics and academic and behavioral outcomes, a mediator model was estimated with maternal communication/trust and alienation at time one predicting time two grades, bullying behavior, and conflict resolution, mediated by time two mentoring relationship quality. Analyses were run in a structural equation modeling framework using RStudio V 1.1.463 with the package lavaan (Rossel, 2012) Descriptive statistics are presented in Table 1.

Table 1. *Descriptive Statistics for all Key Measures.*

	N	Minimum	Maximum	Mean	Std. Deviation
Maternal Communication/Trust Composite	172	1.05	4.00	3.20	.71
Maternal Alienation	170	1.00	4.00	2.70	.83
Mentoring Relationship Quality	156	1.13	4.00	3.30	.69
Grades	144	1.25	4.00	3.18	.64
Bullying Behavior	167	1.00	4.00	3.43	.57
Conflict Resolution	161	1.00	5.00	3.08	1.01

Three paths were simultaneously estimated within each model. The "A path" estimated the effect of the predictors on the mediator, the "B path" estimated the effect of the mediator and predictors on the outcomes, and the "AB Path" estimated the mediation effects. Missing data was addressed using Full Information Maximum Likelihood as this was found to be more robust against violations of assumptions such as data missing not at random and is generally considered to be a preferable method over older methods such as Listwise Deletion (Peugh & Enders, 2004, Graham, 2009). The A, B, and AB paths were estimated three times with different dependent variables (i.e., grades, bullying behavior, and conflict resolution). The models used to estimate the paths are described in more detail below.

Relations of predictors to mediator (A path). To assess the effect of the predictors on the mediator, a multivariate regression equation was specified with initial levels of maternal communication/trust and alienation predicting mentoring relationship quality reported at the end of the mentoring year. Race, free/reduced lunch status and maternal education were included as control variables. This path was the same in each of the three models.

Mentoring RQ$= \beta_0 + \beta_1 \times (QCT) + \beta_2 \times (Alienation) + \beta_3 \times (Race) +$

$\beta_4 \times (Lunch) + \beta_5 \times (Maternal\ Ed)$

   Relations of mediator and predictors to outcomes (B path). To assess the

effect of the mediator and the predictors on the dependent variables (i.e., grades, bullying

behavior, and conflict resolution), three multivariate regression equations were specified

(one in each model) with mentoring relationship quality, maternal communication/trust

and maternal alienation predicting the dependent variables at the end of the mentoring

year. Race, free/reduced lunch status and maternal education were included as control

variables.

Grades $= \beta_0 + \beta_1 \times (Mentoring\ Relationship\ Quality) \times \beta_2 \times (QCT) +$

$\beta_3 \times (Alienation) + \beta_4 \times (Race) + \beta_5 \times (Lunch) + \beta_6 \times (Maternal\ Ed)$

Bullying Behavior $= \beta_0 + \beta_1 \times (Mentoring\ Relationship\ Quality) \times \beta_2 (QCT) +$

$\beta_3 \times (Alienation) + \beta_4 \times (Race) + \beta_5 \times (Lunch) + \beta_6 \times (Maternal\ Ed)$

Conflict Resolution $= \beta_0 + \beta_1 \times (Mentoring\ Relationship\ Quality) \times \beta_2 (QCT) +$

$\beta_3 \times (Alienation) + \beta_4 \times (Race) + \beta_5 \times (Lunch) + \beta_6 \times (Maternal\ Ed)$

Mediated pathway (AB path). The product of the beta coefficients from the "A" and

"B" paths was calculated to estimate the full mediation effect for each model. Because

the product of these beta coefficients follows an asymmetric distribution, confidence

intervals for the indirect effects were constructed from 1,000 bootstrapped datasets.

Compared to other methods of testing indirect effects (e.g., Sobel standard errors),

bootstrapped confidence intervals provide a more powerful test of the indirect effects by

accounting for the asymmetry observed in the distributions of the estimates for the A- and

B-paths.

Results

Model 1: Grades

A visual of the path model for the first mediation model in which maternal communication/trust and alienation predicted grades is provided in figure 2 below.

Figure 2. Path Model of Relations between Predictors and Grades
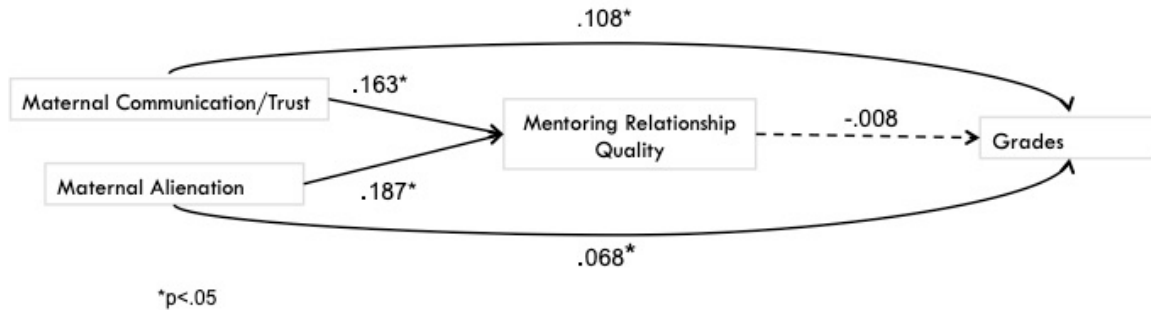
*p<.05

The effects of the predictors on the mediator were assessed using initial levels of maternal communication/trust and alienation to predict mentoring relationship quality reported at the end of the mentoring year (i.e., A-path). Race, free/reduced lunch status and maternal education were included as control variables. These variables explained a small amount of the variance in mentoring relationship quality (R^2=.093). The parameter estimate between alienation and mentoring relationship quality was statistically significant (β_1=.19, $p<.001$). The parameter estimate between maternal communication and mentoring relationship quality was also statistically significant (β_1=.16, $p<.001$).

To assess the effect of the mediator and predictors on grades, a regression equation was specified, with mentoring relationship quality and predictor variables (maternal communication/trust and alienation) predicting grades (i.e., B-path). These variables explained a moderate amount of the variance in grades ($R^{2Grades}$=.114). The parameter estimate between mentoring relationship quality and grades was not statistically significant. The parameter estimate between communication/trust and grades

equaled .11 and was statistically significant ($p<.001$). The parameter estimate between alienation and grades equaled .07 and was statistically significant ($p<.001$). The indirect effects between maternal communication/trust and alienation and grades through mentoring relationship quality was not statistically significant ($\beta_1=-0.001$, $[-0.004, 0.003]$; $\beta_2=-0.001$, $[-0.005, 0.004]$). Results of this mediation model can be found in Table 2.
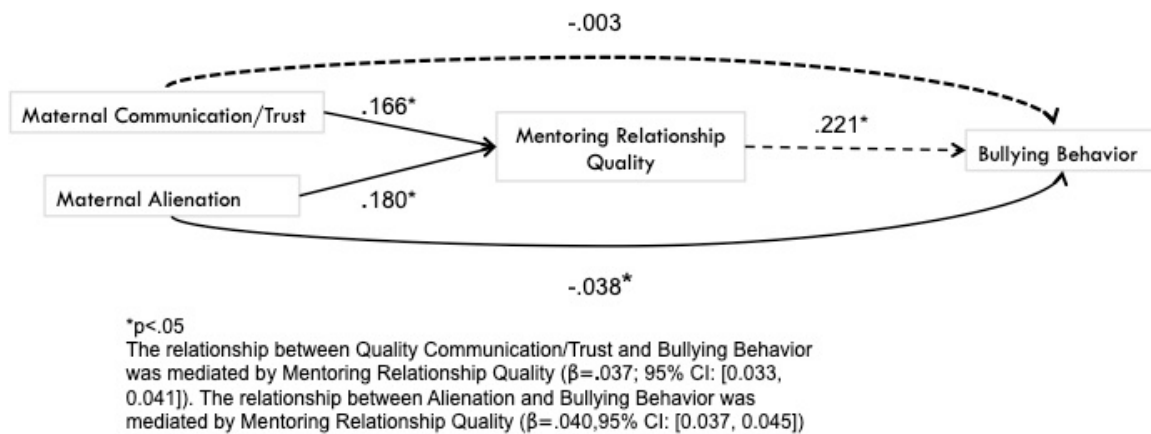
Table 2. Mediation Model for Student Grades.

Model	Predictors	Standardized Estimate (β)	SE	p-Value	R²
Relations to mediator (A-path)					**0.093**
	Maternal Communication/Trust	0.163	0.008	0	
	Maternal Alienation	0.187	0.009	0	
	Race	-0.057	0.012	0	
	Maternal Education	0.001	0.009	0.927	
	Free/Reduced Lunch Status	0.065	0.008	0	
Relations to grades with mediator (B-path)					.114
	Mentoring Relationship Quality	-0.008	0.009	0.412	
	Maternal Communication/Trust	.108	.011	.000	
	Maternal Alienation	.068	.008	.000	
	Race	-.033	.013	.011	
	Maternal Education	.088	.088	.000	
	Free/Reduced Lunch Status	.098	.010	.000	

	β	95% CI
Maternal Communication/Trust	-0.001	[-0.004,0.003]
Maternal Alienation	-0.001	[-0.005, 0.004]

Model 2: Bullying Behavior

A visual of the path model for the second mediation model in which maternal communication/trust and alienation predicted bullying behavior is provided in figure 3 below.

Figure 3. Path Model of Relations between Predictors and Bullying Behavior.

*p<.05
The relationship between Quality Communication/Trust and Bullying Behavior was mediated by Mentoring Relationship Quality (β=.037; 95% CI: [0.033, 0.041]). The relationship between Alienation and Bullying Behavior was mediated by Mentoring Relationship Quality (β=.040,95% CI: [0.037, 0.045])

The effects of the predictors on the mediator were assessed using initial levels of maternal communication/trust and alienation to predict mentoring relationship quality reported at the end of the mentoring year (i.e., A-path). Race, free/reduced lunch status and maternal education were included as control variables. These variables explained a small amount of the variance in mentoring relationship quality (R^2=.091). The parameter estimate between alienation and mentoring relationship quality was statistically significant (β_2=.18, p<.001). The parameter estimate between maternal

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communication/trust and mentoring relationship quality was also statistically significant (β_2=.17, p<.001).

To assess the effect of the mediator on bullying behavior, a regression equation was specified, with mentoring relationship quality and predictor variables (maternal communication/trust and alienation) predicting bullying behavior (i.e., B-path). Race, free/reduced lunch status, and maternal education were included as control variables. Mentoring relationship quality, maternal communication/trust and maternal alienation explained a moderate amount of the variance in bullying behavior (R^{2BB}=.077). The parameter estimate between mentoring relationship quality predicting bullying behavior equaled .22 and was statistically significant (p<.001). The parameter estimate between maternal alienation and bullying behavior equaled -.04 and was statistically significant (p<.001). The parameter estimate between maternal communication/trust and bullying behavior was not statistically significant.

The indirect effects between maternal communication/trust and alienation and bullying behavior through mentoring relationship quality were both statistically significant. The parameter estimate for the pathway between maternal communication/trust and bullying behavior equaled .037, 95% CI [.033, .041], and the pathway between maternal alienation and bullying behavior equaled .040 95%CI [.047, .045]. Results of this mediation model can be found in Table 3.
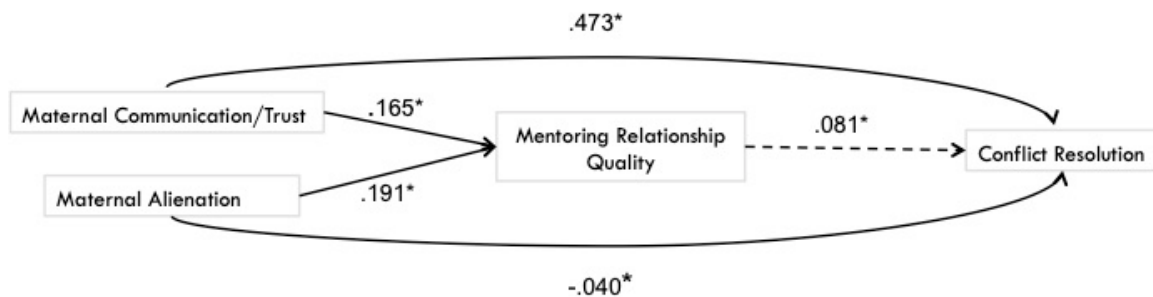
Table 3: Mediation Model for bullying behavior

Model	Predictors	Standardized Estimate (β)	SE	p-Value	R²
Relations to mediator (A-path)					0.091
	Maternal Communication/Trust	0.166	0.006	0	
	Maternal Alienation	0.180	0.008	0	
	Race	-0.054	0.009	0	
	Maternal Education	0.005	0.008	0.583	
	Free/Reduced Lunch Status	0.067	0.007	0	
Relations to bullying behavior with mediator (B-path)					0.077
	Mentoring Relationship Quality	0.221	0.010	0	
	Maternal Communication/Trust	-0.003	0.009	.743	
	Maternal Alienation	-0.038	0.008	0	
	Race	0.037	0.011	0.001	
	Maternal Education	0.016	0.010	0.0129	
	Free/Reduced Lunch Status	0.018	0.010	0.075	
Mediated Pathways: Relations to bullying behavior via Mentoring Relationship Quality (AB-Path)					
		β		95% CI	
	Maternal Communication/Trust	0.037		[0.033, 0.041]	
	Maternal Alienation	-0.001		[0.037, 0.045]	

Model 3: Conflict Resolution

A visual of the path model for the third mediation model in which maternal communication/trust and alienation predicted conflict resolution is provided in figure 4 below.

Figure 4 Path Model of Relations between Predictors and Conflict Resolution

*p<.05
The relationship between Quality Communication/Trust and Bullying Behavior was mediated by Mentoring Relationship Quality (β=.037; 95% CI: [0.033, 0.041]). The relationship between Alienation and Bullying Behavior was mediated by Mentoring Relationship Quality (β=.040, 95% CI: [0.037, 0.045])

The effects of the predictors on the mediator were assessed using initial levels of maternal communication/trust and alienation to predict mentoring relationship quality reported at the end of the mentoring year (i.e., A-path). Race, free/reduced lunch status and maternal education were included as control variables. These variables explained a small amount of the variance in mentoring relationship quality (R^2=.098). The parameter estimate between alienation and mentoring relationship quality was statistically significant (β_3=.19, *p*<.001). The parameter estimate between maternal communication and mentoring relationship quality was also statistically significant (β_3=.17, *p*<.001).

To assess the effect of the mediator on conflict resolution, a regression equation was specified, with mentoring relationship quality and predictor variables (maternal communication/trust and alienation) predicting conflict resolution (i.e., B-path). Race, free/reduced lunch status, and maternal education were included as control variables. These variables explained a moderate amount of the variance in conflict resolution (R^{2CR}=.151). The parameter estimate between mentoring relationship quality predicting conflict resolution equaled .08 and was statistically significant (*p*<.001). The parameter estimate between alienation and conflict resolution equaled -.04 and was statistically significant (*p*<.001). In addition, the parameter estimate between communication/trust and conflict resolution equaled .47 and was also statistically significant (*p*<.001).

The indirect effects (i.e., AB-path) between maternal communication/trust and alienation and conflict resolution through mentoring relationship quality were both statistically significant. The parameter estimate for the mediated pathway between communication/trust and conflict resolution equaled .013, 95% CI [.011, .014], and the pathway between alienation and conflict resolution equaled .016 95% CI [.013, .107]. Results of this mediation model can be found in Table 4.

Table 4: Mediation model for conflict resolution

Model	Predictors	Standardized Estimate (β)	SE	p-Value	R²
Relations to mediator (A-path)					0.098
	Maternal Communication/Trust	0.165	0.004	0	
	Maternal Alienation	0.191	0.005	0	
	Race	-0.056	0.007	0	
	Maternal Education	0.012	0.005	0.011	
	Free/Reduced Lunch Status	0.061	0.004	0	
Relations to conflict resolution with mediator (B-path)					0.151
	Mentoring Relationship Quality	0.081	0.005	0	
	Maternal Communication/Trust	0.473	0.003	0	
	Maternal Alienation	-0.040	0.006	0	
	Race	-0.021	0.007	0.005	
	Maternal Education	0.043	0.005	0	
	Free/Reduced Lunch Status	0.061	0.004	0	
Mediated Pathways: Relations to conflict resolution via Mentoring Relationship Quality (AB-Path)					
		β		95% CI	
	Maternal Communication/Trust	0.013		[0.011,0.014]	
	Maternal Alienation	0.016		[0.013, 0.017]	

Discussion

This study examined the hypothesis that relationship characteristics of early adolescent girls (i.e., maternal communication/trust and alienation) could impact academic and behavioral outcomes of mentoring. Further, we hypothesized that the quality of a youth's mentoring relationship could be one mechanism through which maternal relationship characteristics impact these outcomes for youth in mentoring programs. Results may help explain why some mentees benefit from mentoring more than others.

Overall, participants in our study were highly satisfied with their mentoring relationships. In addition, participants reported high grades ("B" average), low levels of bullying behavior, and strong conflict resolution skills. Further, participants reported generally positive relationships with their mothers, with high levels of

communication/trust and low levels of alienation. Indeed, this study focused only on girls with successful mentoring relationships, as those in early terminating relationships were not included in the study. This suggests that the existing structure, training, and use of college women mentors in YWLP, the program studied here, may be conducive to successful mentoring relationships. The participants' existing strong relationship skills may have also have contributed to the success of the mentoring relationships. However, despite overall positive maternal relationships, results indicated that differing levels of maternal relationship challenges impact mentoring relationship satisfaction as well as academic and behavioral outcomes of mentoring.

Across models, direct effect results indicated that girls who report more communication and trust difficulties with their mothers might have more difficulty developing a quality mentoring relationship. On the other hand, girls who are feeling more alienated from their mothers may be more incentivized to develop a strong mentoring relationship to compensate for a less connected maternal relationship. Effect sizes across models for these associations were small, indicating that maternal relationship challenges only partially account for differences in mentoring relationship quality. These results are consistent with our findings in the previous study and suggest that there could be nuanced differences in types of attachment-related relationship challenges experienced by early adolescent girls (Williamson et al., 2019). We proposed that girls experiencing communication and trust issues with their mothers may have deeper and longer-standing relationship issues that have impacted their working models of relationships, making it harder for these girls to develop a strong mentoring relationship (Williamson et al., 2019). However, early adolescent girls who are more alienated from their mothers may be experiencing relationship difficulties that are

developmentally situated within the task of maintaining connection while developing autonomy that occurs during this developmental period (Williamson et al., 2019). As a result, these girls may develop stronger mentoring relationships, which can serve to bridge the gap between girls and their mothers (Williamson et al., 2019).

For academic outcomes, results indicate that girls who report better communication and trust in their maternal relationships also tend to have higher grades. The effect size of this association is considered small, indicating that maternal relationship challenges only account for one part of the differences in grades at the end of the mentoring year. This result is consistent with a wide body of literature that has identified a link between strong parental relationships and positive academic outcomes for youth. For example, one longitudinal study found that early maternal sensitivity predicted academic success through adolescence and beyond (Raby, Roisman, Fraley, Simpson, 2015). Another study focused on the impact of maternal support and mentoring on academic adjustment found that more maternal support predicted better academic adjustment during mentoring (LaRose et al., 2018). In contrast, we also found that girls who reported higher levels of maternal alienation also reported higher grades. This finding again indicates that maternal alienation is operating differently than maternal communication and trust for this population. This suggests that further studies are needed to evaluate different types of relationship challenges during this developmental stage and how they impact outcomes for youth.

Mentoring relationship quality did not have a significant impact on academic outcomes at the end of the mentoring year. In addition, the non-significant mediation results indicate that the mentoring relationship does not explain the connection between maternal relationship characteristics and academic outcomes. This suggests that there

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may be other factors that can better explain this relationship (Lyons & McQuillin, 2019; Lyons, McQuillin & Henderson, 2019). Since YWLP is not an academically focused program, these results are not entirely unexpected. However, a prior qualitative study of YWLP did show that girls reported an academic impact of the mentoring program (Deutsch et al., 2016). Given the results of the current study, this may mean that the academic impact of YWLP is occurring through means other than the mentoring relationship. This suggests that even without a strong mentoring relationship, instrumental skills can still be developed and improved through mentoring.

Maternal relationship characteristics as well as mentoring relationship quality impacted both bullying behavior and conflict resolution, although effect sizes were small in both models. Specifically, girls who were less alienated from their mothers tended to report less bullying behavior and better conflict resolution skills. Girls who reported better maternal communication and trust also reported better conflict resolution skills. These results are consistent with other studies that have found a connection between strong parental relationships and positive behavioral outcomes for youth. For example, positive parenting practices such as parental support were found to be associated with less depression and higher self-esteem in adolescents (Smokowski, Bacallao, Cotter, & Evans, 2014). Secure parental attachment has been found to be associated with less involvement in bullying and more defending of victims in adolescents, exemplifying the connection between parent relationships and other relational skills (Murphy, Labile, Augustine, 2017).

Additional direct effect results indicated that girls with higher quality mentoring relationships also reported stronger conflict resolution skills and less bullying behavior than girls with lower quality mentoring relationships. The small effect sizes suggest that

there are other factors, in addition to the mentoring relationship quality, that explain the

differences in conflict resolution skills and bullying behavior for mentored girls.

However, these results could be indicative of positive program effects since the YWLP

mentoring curriculum specifically focuses on these types of relational skills through

activities such as "Gossip Guard" and the "ABCs of Problem Solving" (Lawrence et al.,

2009). The group and one-on-one setting of YWLP may also be particularly conducive

for the development of relational and social skills. A previous qualitative study of YWLP

found that 75% of mentees reported positive changes in relationship and social skills as a

result of their participation in YWLP (Deutsch et al., 2016). Specifically, YWLP mentees

developed and deepened their peer relationships both within and outside of their YWLP

group and developed interactional skills such as being nice and caring for others as well

as not gossiping (Deutsch et al., 2016). Further, Deutsch and colleagues (2016) found that

mentees reported that mentors modeled positive social and interactional skills, which

could translate into improved conflict resolution skills for mentored girls. Other studies

have also found that strong mentoring relationships can improve a mentee's other

relationships. In fact, improvement in other relationships is one of the key outcomes

posited in the Rhodes model of mentoring (2005). In support of this model, Craig and

colleagues found that mentored youth who had experienced bullying reported

improvements in peer relationships at the end of the mentoring year (2016).

Alternatively, since mentoring relationship quality, bullying behavior, and conflict

resolution were evaluated at the same time point, these results could be an indicator of

mentees' pre-existing, general relational and social skills. Girls who develop strong

mentoring relationships may already have stronger skills related to respecting others and

resolving conflicts, which could have helped them to foster higher quality mentoring relationships.

Mediation results indicate that the associations between early adolescent girls' relationship characteristics (i.e., maternal communication/trust and alienation) and behavioral outcomes (i.e., bullying behavior and conflict resolution) are mediated by the quality of the mentoring relationship. These results suggest that pre-existing relationship characteristics can affect how much early adolescent girls benefit from mentoring due to their impact on the quality of the mentoring relationship. Girls who report higher levels of alienation from their mothers tend to have stronger mentoring relationships and thus may benefit more from mentoring than girls who are not as in need of the support of a mentor. On the other hand, girls who have communication and trust challenges in their maternal relationships, may have more difficulty developing a strong mentoring relationship, which impacts how much they ultimately benefit from mentoring, particularly in the improvement of relationally based skills. These results expand on several other studies that have found that the quality of the mentoring relationship impacts social and behavioral outcomes for mentored youth (Chan et al., 2011; Sieving et al., 2016; Goldner & Mayselees, 2008; Karcher, 2004). Given these results, mentoring programs should place additional emphasis on supporting mentors in developing strong mentoring relationships, particularly with girls who are referred due to challenging or strained maternal relationships so that they can benefit from the effects of a strong mentoring relationship.

Overall, the results of this study suggest that maternal relationship characteristics are independently related to academic and behavioral outcomes of mentoring. In addition, these particular behavioral outcomes seem to be impacted via mentoring relationship

quality. However, there may be other mechanisms of change that better explain the relationship between maternal relationship characteristics and grades for mentored girls. Results of this study contribute to the literature on mentoring by providing a closer look at how maternal relationship characteristics impact key outcomes of mentoring and expands on previous research by demonstrating that the quality of the mentoring relationship is a primary mechanism of change for mentoring programs. These results also suggest that girls who have strong relational skills and better communication and trust with their mothers may benefit more from a relationally based intervention like mentoring. In addition, these relational skills may also be improved through high quality mentoring relationships. For girls experiencing alienation from their mothers, high quality mentoring relationships may be able to compensate for less than ideal maternal relationships and lead to better outcomes for mentored youth.

Limitations and Future Directions

While this study has many potential contributions to the mentoring literature, there are also some limitations. Pre-intervention surveys relied on self-reported data from the middle school girls and thus may be vulnerable to social desirability bias. An adolescent's mood on that particular day could have impacted how she answered certain questions. Social desirability bias could also impact how participants responded to survey questions. These factors may cause the data to only provide a snapshot of participants' overall perceptions of their maternal relationships and social skills. We were unable to control for mentee risk profile or early termination of relationships due to limited data availability, which is an additional limitation. Finally, since mentoring relationship quality and the academic and behavioral outcomes of mentoring are measured at the same time point, it is difficult to make definitive claims regarding the impact of mentoring

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relationship quality on these outcomes. Future studies could include pre and post measures of the academic and behavioral outcomes in order to determine if there is any change over the course of the mentoring year.

Another limitation is that the sample only includes middle school girls, limiting their generalizability. In addition, the mentoring program in this study, unlike the majority of mentoring programs, includes a group component in addition to one-on-one mentoring. These factors may limit the applicability of these results to other mentoring programs. Missing data also limits our ability to make definitive conclusions from this study. Specifically, Hispanic girls and those from lower socio-economic status were more likely to drop out of the program, which requires further examination. Finally, participant responses on most measures tended to be high, causing data to have limited variability. Future studies should include additional reports of mentee relationship characteristics such as from teachers and parents. Future studies may also include additional measures of mentee relational skills since these skills may impact how much a mentee is able to benefit from a relationship based intervention.

Conclusions

This study provides insight into the impact that the quality of the maternal relationship for early adolescent girls has on mentoring relationship quality and some academic and behavioral outcomes of mentoring. These results are consistent with previous studies that show that strong maternal relationships can help youth be successful academically and behaviorally. Strong maternal relationships can also support youth in engaging in and benefiting from intervention and prevention programs that are relationally based such as mentoring. This information can inform mentoring programs to guide mentors in supporting their mentees' relationships with their mothers. In particular,

for girls who are experiencing feelings of alienation towards their mothers, mentors can serve as a bridge between mothers and daughters and encourage autonomy while also supporting connection. Finally, the non- significant mediation effects for academic outcomes suggest that mentoring can impact youth via other mechanisms apart from strong mentor-mentee relationships, such as through instrumental skill training such as tutoring. This information can be used to encourage mentors that even without an exceptional relationship, mentoring can still have a strong impact on the lives of mentored youth.

References

Armsden, G. C. &. G., M.T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence, 16*(5), 427-454. doi:10.1007/BF02202939

Barber, B. K., & Olsen, J. A. (2004). Assessing the Transitions to Middle and High School. *Journal of Adolescent Research*, *19*(1), 3–30. https://doi.org/10.1177/0743558403258113

Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development. New York: Basic Books.

Buhrmester, D., Furman, W., Wittenberg, M. T., & Reis, H. T. (1988). Five domains of interpersonal competence in peer relationships. Journal of Personality and Social Psychology, 55(6), 991–1008. https://doi.org/10.1037/0022-3514.55.6.991

Chan, C. S., Rhodes, J. E., Howard, W. J., Lowe, S. R., Schwartz, S. E., & Herrera, C. (2013). Pathways of influence in school-based mentoring: The mediating role of parent and teacher relationships. *Journal of School Psychology,51*(1), 129-142. doi:10.1016/j.jsp.2012.10.001

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.

Craig, J. T., Gregus, S. J., Burton, A., Hernandez Rodriguez, J., Blue, M., Faith, M. A., & Cavell, T. A. (2016). Exploring change processes in school-based mentoring for bullied children. *The Journal of Primary Prevention*, *37*(1), 1-9. doi:10.1007/s10935-015-0412-5

Cutrona, C. E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994).

Perceived parental social support and academic achievement: An attachment theory perspective. *Journal of Personality and Social Psychology,66*(2), 369-378. doi:10.1037/0022-3514.66.2.369

Deutsch, N. L., Wiggins, A. Y., Henneberger, A. K., & Lawrence, E. C. (2012). Combining Mentoring With Structured Group Activities. *The Journal of Early Adolescence,33*(1), 44-76. doi:10.1177/0272431612458037

Deutsch, N. L., Reitz-Krueger, C. L., Henneberger, A. K., Ehrlich, V. A., & Lawrence, E. C. (2016). "It Gave Me Ways to Solve Problems and Ways to Talk to People". *Journal of Adolescent Research,32*(3), 291-322. doi:10.1177/0743558416630813

DuBois, D.L., Doolittle, F.,Yates, B.T., Silverthorn, N., & Tebes, J.K. (2006). Research methodology and youth mentoring. *Journal of Community Psychology, 34,* 657-676. doi: 10.1002/jcop.20122

DuBois, D. L., Holloway, B.E., Valentine, J. C., Cooper, H., (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30 (2),* 157-197.

DuBois, D.L., Portillo, N., Rhodes, J.E., Silverthorn, N., & Valentine, J.C. (2011). How effective are mentoring programs for youth: A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12,* 57-91. doi: http://dx.doi.org.proxy.its.virginia.edu/10.1177/1529100611414806

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families.

American Psychologist, 48(2), 90–101. https://doi.org/10.1037/0003-066X.48.2.90

Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1997). Development during adolescence: The impact of stage–environment fit on young adolescents' experiences in schools and in families (1993). In J. M. Notterman (Ed.), *The evolution of psychology: Fifty years of the American Psychologist* (p. 475–501). American Psychological Association. https://doi-org.proxy01.its.virginia.edu/10.1037/10254-034

Espelage, D. L., Merrin, G. J., Hong, J. S., & Resko, S. M. (2018). Applying Social Cognitive Theory to Explore Relational Aggression across Early Adolescence: A Within- and Between-Person Analysis. *Journal of Youth and Adolescence*, *47*(11), 2401–2413. doi: 10.1007/s10964-018-0910-x

Entwisle, D. R. , & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ ethnicity and socioeconomic status. *Child Development*, 65, 1521-154

Graham, J. W. (2009). Missing Data Analysis: Making It Work in the Real World. *Annual Review of Psychology*, *60*(1), 549–576. doi: 10.1146/annurev.psych.58.110405.085530

Goldner, L., & Mayseless, O. (2008). The Quality of Mentoring Relationships and Mentoring Success. *Journal of Youth and Adolescence,38*(10), 1339-1350. doi:10.1007/s10964-008-9345-0

Grossman, J. B. & Tierney, J.P. (1998). Does mentoring work: An impact study of the Big Sisters Big Brothers Program. *Evaluation Review, 22,* 315-426. doi: 10.1177/0193841X9802200304

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of

    duration in youth mentoring relationships. *PsycEXTRA Dataset,30*(2), 199-219.

    doi:10.1037/e314762004-001

Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis

    with structural equation modeling. *Shanghai Archives of Psychiatry*, *25*(6), 390–

    394. http://doi.org/10.3969/j.issn.1002-0829.2013.06.009

Herrera, C., Sipe, C. L., & McClanahan, W. S. (2000). Mentoring school-age

    children: Relationship development in community-based and school-based

    programs.

Herrara, C., DuBois, D.L., Grossman, J. B., (2013). Role of Risk: mentoring

    experience and outcomes for youth with varying risk profiles. New York, NY: A

    Public/Private Ventures project distributed by MDRC.

Holt, M. K., & Espelage, D. L. (2006). Perceived Social Support among Bullies, Victims,

    and Bully-Victims. *Journal of Youth and Adolescence*, *36*(8), 984–994. doi:

    10.1007/s10964-006-9153-3

Hong, J. S., & Espelage, D. L. (2012). A review of research on bullying and peer

    victimization in school: An ecological system analysis. *Aggression and Violent*

    Behavior, *17*(4), 311–322. doi: 10.1016/j.avb.2012.03.003

Jacobsen, T., & Hofmann, V. (1997). Children's attachment representations: Longitudinal

    relations to school behavior and academic competency in middle childhood and

    adolescence. Developmental Psychology, 33(4), 703–

    710. https://doi.org/10.1037/0012-1649.33.4.703

Karcher, M. J. (2008). The Study of Mentoring in the Learning Environment (SMILE): A

Randomized Evaluation of the Effectiveness of School-based Mentoring.

Prevention Science, 9(2), 99-113. doi:10.1007/s11121-008-0083-

Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental Mentoring Match

Characteristics: Correspondence between Mentors' and Mentees' Assessments of

Relationship Quality. *The Journal of Primary Prevention,26*(2), 93-110.

doi:10.1007/s10935-005-1847-x

Karcher, M. J. (2004). The effects of developmental mentoring and high school mentors

attendance on their younger mentees self-esteem, social skills, and

connectedness. *Psychology in the Schools,42*(1), 65-77. doi:10.1002/pits.20025

Larose, S., Boisclair-Châteauvert, G., Wit, D. J. D., Dubois, D., Erdem, G., & Lipman, E.

L. (2018). How Mentor Support Interacts With Mother and Teacher Support in

Predicting Youth Academic Adjustment: An Investigation Among Youth Exposed

to Big Brothers Big Sisters of Canada Programs. *The Journal of Primary*

Prevention, *39*(3), 205–228. doi: 10.1007/s10935-018-0509-8

Lawrence, E.C., Levy, M., Martin, N., & Strother-Taylor, J. (2008). One-on-one and

group mentoring: An integrated approach. Folsom, CA: Mentoring Resource

Center (p. 1–5). Retrieved from

http://www.edmentoring.org/pubs/ywlp_study.pdf.

Lawrence, E., Roberts, K., Sovik-Johnston, A., & Thorndike, A. (2009). *Young Women*

Leaders Program Mentor Handbook (6th Edition). Charlottesville, VA: The

Rector and Board of Visitors, University of Virginia.

Leyton-Armakan, J., Lawrence, E. C., Deutsch, N., Williams, J. L., & Henneberger,

A. (2012). Effective youth mentors: The relationship between initial

characteristics of college women mentors and mentee satisfaction and outcome.

Journal of Community Psychology, 40(8), 906-920. DOI: 10.1002/jcop.21491

Lyons, M. D., & McQuillin, S. D. (2019). Risks and rewards of school-based mentoring relationships: A reanalysis of the student mentoring program evaluation. *School Psychology, 34*(1), 76–85. https://doi.org/10.1037/spq0000265

Lyons, M.D., McQuillin, S.D. and Henderson, L.J. (2019), Finding the Sweet Spot: Investigating the Effects of Relationship Closeness and Instrumental Activities in School-based Mentoring. Am J Community Psychol, 63: 88-98. doi:10.1002/ajcp.12283

Missotten, L. C., Luyckx, K., Leeuwen, K. V., Klimstra, T., & Branje, S. (2016). Adolescents' Conflict Resolution Styles Toward Mothers: The Role of Parenting and Personality. *Journal of Child and Family Studies*, *25*(8), 2480–2497. doi: 10.1007/s10826-016-0421-x

Murphy, T. P., Laible, D., & Augustine, M. (2017). The influences of parent and peer attachment on bullying. *Journal of Child and Family Studies*, *26*(5), 1388-1397. doi:10.1007/s10826-017-0663-2

Mynard, H. , & Joseph, S. (2000). Development of the Multidimensional Peer Victimization Scale. Aggressive Behavior, 26, 169-178.

Pellegrini, A.D. (2002) Bullying, Victimization, and Sexual Harassment During the Transition to Middle School, Educational Psychologist, 37:3, 151-163, DOI: 10.1207/ S15326985EP3703_2

Peugh, J. L., & Enders, C. K. (2004). Missing Data in Educational Research: A Review of Reporting Practices and Suggestions for Improvement. *Review of Educational Research*, *74*(4), 525–556. doi: 10.3102/00346543074004525

Raby, K. L., Roisman, G. I., Fraley, R. C., & Simpson, J. A. (2015). The enduring

predictive significance of early maternal sensitivity: Social and academic

competence through age 32 years. *Child Development*, *86*(3), 695-708.

doi:10.1111/cdev.12325

Raposa, E. B., Rhodes, J., Stams, G. J. J. M., Card, N., Burton, S., Schwartz, S., …

Hussain, S. (2019). The Effects of Youth Mentoring Programs: A Meta-analysis

of Outcome Studies. *Journal of Youth and Adolescence*, *48*(3), 423–443. doi:

10.1007/s10964-019-00982-8

Rhodes, J. E. (2002). Stand by Me: The Risks and Rewards of Mentoring Today's

Youth. Cambridge, MA: Harvard University Press.

Rhodes, J. E. (2005). A model of youth mentoring. In D. L. DuBois, & M. J. Karcher

(Eds.), Handbook of youth mentoring (pp. 30–43). Thousand Oaks, CA: Sage.

Rhodes, J., (2008). Improving youth mentoring interventions through research-

based practice. *American Journal of Community Psychology, 41,* 35-42. doi:

10.1007/s10464-007-9153-9

Rhodes, J.E., DuBois, D. L. (2006). Understanding and facilitating the youth

mentoring movement. *Social Policy Report, XX (III*), (3-19).

Rhodes, J. E., & DuBois, D. L. (2008). Mentoring relationships and programs for

youth. *Current Directions in Psychological Science*, *17*(4), 254-258.

Rhodes, J., Lowe, S.R., Litchfield, L., Walsh-Samp, K. (2008). The role of gender in

youth mentoring relationship formation and duration. *Journal of Vocational

Behavior, 72, 183-192.*

Rhodes, J. Reddy, R., Roffman, J., Grossman, J.B. (2005). Promoting successful

youth mentoring relationships: A preliminary screening questionnaire. *The

Journal of Primary Prevention,* 26. 147-167.

Doi: http://dx.doi.org.proxy.its.virginia.edu/10.1007/s10935-005-1849-8

Rhodes, J.E., Spencer, R., Keller, T.E., Belle, L., Gill, N. (2006). A model for the influence of mentoring relationships on youth development. *Journal of Community Psychology, 34,* 691-707. DOI: 10.1002/jcop.20124

Ross, K. M., Kim, H., Tolan, P. H., & Jennings, P. A. (2019). An exploration of normative social and emotional skill growth trajectories during adolescence. *Journal of Applied Developmental Psychology*, *62*, 102–115. doi: 10.1016/j.appdev.2019.02.006

Rosseel Y (2012). "lavaan: An R Package for Structural Equation Modeling." *Journal of Statistical Software*, **48**(2), 1–36. http://www.jstatsoft.org/v48/i02/.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68–78. doi:10.1037/0003-066X.55.1.68

Schenk, L., Sentse, M., Lenkens, M., Nagelhout, G. E., Engbersen, G., & Severiens, S. (2020). An Examination of the Role of Mentees' Social Skills and Relationship Quality in a School-Based Mentoring Program. *American Journal of Community Psychology*, *65*(1-2), 149–159. doi: 10.1002/ajcp.12397

Schwartz, S. E. O., Rhodes, J. E., Chan, C. S., & Herrera, C. (2011). The impact of school-based mentoring on youths with different relational profiles. *Developmental Psychology*, *47*(2), 450–462. doi: 10.1037/a0021379

Seiving, R. E., McRee, A., McMorris, B. J., Shlafer, R. J., Gower, A. L., Kapa, H. M., . . . Resnick, M. D. (2016). Youth–Adult Connectedness: A Key Protective Factor for Adolescent Health. *American Journal of Preventative Medicine,52*, 275-278. http://dx.doi.org/10.1016/j.amepre.2016.07.037

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Smokowski, P. R., Bacallao, M. L., Cotter, K. L., & Evans, C. B. (2014). The effects of

    positive and negative parenting practices on adolescent mental health outcomes in

    a multicultural sample of rural youth. *Child Psychiatry & Human*

    Development, *46*(3), 333-345. doi:10.1007/s10578-014-0474-2

Vries, S. L., Hoeve, M., Stams, G. J., & Asscher, J. J. (2015). Adolescent-Parent

    Attachment and Externalizing Behavior: The Mediating Role of Individual and

    Social Factors. *Journal of Abnormal Child Psychology,44*(2), 283-294.

    doi:10.1007/s10802-015-9999-5

Williamson, S., Lawrence, E., Lyons, M.D, Deutsch, N.L. (2019). What mentees bring:

    Relationship characteristics pre-mentoring and mentoring relationship

    satisfaction. *Journal of Early Adolescence.*

    https://doi.org/10.1177/0272431619891251

Zhang, A., Musu-Gillette, L., & Oudekerk, B. A. (2016). Indicators of school crime and

    safety: 2015 (NCES 2016-079/NCJ 249758). Washington, DC: National Center

    for Education Statistics, U.S. Department of Education, and Bureau of Justice

    Statistics, Office of Justice Programs, U.S. Department of Justice.