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THE MEDIATING ROLE OF INTERPERSONAL SKILLS IN THE RELATIONSHIP BETWEEN DEPRESSIVE SYMPTOMATOLOGY AND DATING VIOLENCE IN YOUNG MOTHERS

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THE MEDIATING ROLE OF INTERPERSONAL SKILLS IN THE RELATIONSHIP BETWEEN DEPRESSIVE SYMPTOMATOLOGY AND DATING VIOLENCE IN YOUNG MOTHERS

by

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Steven Brunwasser, Ph.D.
Jonathan Lassiter, Ph.D.

Dedication

I dedicate my MA Thesis to my father who is the most loving, kind, and resilient person I have ever known. Without him, I do not know where I would be today. My greatest accomplishment in life is being his daughter. I hope to always make him proud.

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Thank you to my research advisors, Drs. Meredith Jones and DJ Angelone. It is a true honor to work with both of you in the ASSeRT Lab. I value your mentorship and admire how much of a positive impact your research brings to not only the field of psychology but also greater society.

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Abstract

Lauren Catherine Wallace
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Master of Arts in Clinical Psychology

Young mothers are an understudied group at high-risk for dating violence (DV) victimization and perpetration. Psychological distress, such as depression, increases young mothers' risk for DV (Thomas et al., 2019). In turn, depressive symptomology is associated with difficulties in interpersonal competence (Jones et al., 2019), which may increase DV risk (Bonache et al., 2017). In addition, young mothers may have few chances to learn the interpersonal skills associated with healthy adult romantic relationships due to a mismatch in developmental level and parenting status (Herrman et al., 2019; Moore et al., 2007). Using interpersonal stress generation theory (Hammen, 1991, 2006), we hypothesized that young mothers ($N = 238$) with elevated depressive symptomology would report higher rates of DV victimization and perpetration, and that this association would be mediated by self-reported interpersonal competence. We conducted a mediation analysis to examine the average causal mediation and average direct effects. Results demonstrated that interpersonal competency did not mediate the relationship between depressive symptomatology and DV victimization and perpetration. Direct effects were present between depressive symptomatology and DV victimization and perpetration. Although interpersonal competency was not a mediator, both depressive symptomatology and interpersonal competency were independently related to DV. Taken together, these data may inform future DV prevention-interventions for young mothers.

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Introduction

U.S. Dating Violence Prevalence Rates

Dating violence (DV) refers to victimization and/or perpetration of physical, sexual, psychological, or emotional abuse between partners of a romantic relationship. In the United States, 36% of women and 34% of men experience at least one form of DV victimization in their lifetime (Smith et al., 2018). Although anyone can be at risk for experiencing DV victimization, the risk is substantially higher for certain groups of people. For example, individuals between the ages of 18 and 24 years old are at higher risk of DV victimization compared to older individuals (Smith et al., 2018; Truman & Morgan, 2014). Women in this age range report even higher rates of DV victimization compared to their male counterparts (Truman & Morgan, 2014). Finally, twenty-six percent of women and 15% of men disclose that their first experience with DV victimization occurred before the age of 18, highlighting how DV experiences typically occur during adolescence (Smith et al., 2018).

Adolescents experience high rates of DV, with 80% experiencing either some form of DV victimization and perpetration before reaching young adulthood, indicating that DV is a serious, widespread problem in adolescent romantic relationships (Smith et al., 2009). Psychological abuse is the most common form of DV among adolescents with 66% experiencing DV victimization and 62% experiencing perpetration (Taylor & Mumford, 2016). An estimate of 8-20% of adolescents report physical DV victimization and 7-18% report sexual DV victimization in their romantic relationships (Kann et al.,

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2018; Taylor & Mumford, 2016; Wincentak et al., 2016). Moreover, between 12-25% of adolescents report perpetrating physical DV, while 3-12% report perpetrating sexual DV (Taylor & Mumford, 2016; Wincentak et al., 2016). Rates of DV victimization and perpetration, particularly for verbal and physical DV, range from 30 to 35% revealing that a substantial portion of DV among adolescents in romantic relationships is mutual (Fedina et al., 2016; Haynie et al., 2013).

Adolescent women who have children or are currently pregnant, collectively referred to as young mothers, are at high risk for DV victimization and perpetration (Harrykissoon et al., 2002; Joly & Connolly, 2016). Rates of both physical and psychological DV are higher for young mothers compared to non-parenting adolescent girls (Herrman et al., 2019; Sue Newman & Campbell, 2011; Wiemann et al., 2005) and older mothers (D'Angelo et al., 2007). Across multiple studies with young mothers, ranging in age from 12 to 21, between 24-59% reported experiencing some form of DV victimization (Jacoby et al., 1999; Kennedy & Bennett, 2006; Madkour et al., 2014). Young mothers also face unique DV experiences, such as reproductive coercion, including pressure to have more children and birth control sabotage (e.g., tampering with birth control, refusal to utilize contraception) (Herrman, 2013; Herrman et al., 2019). Additionally, in the period following their pregnancy, young mothers experience high rates of DV victimization. They are particularly at risk for sexual violence, which includes sexual coercion and sexual assault (Lévesque & Chamberland, 2016), and emotional abuse (e.g., insults directed towards the women's bodies after having a child) (Herrman et al., 2019).

With regard to DV perpetration, young mothers engage in both minor and severe forms of DV, particularly psychological and physical abuse, against their romantic partner (Sue Newman & Campbell, 2011). Common reasons for perpetrating DV include stress, punishment for actions that their romantic partners' committed in the past, or in retaliation due to small or large stressors (e.g., partner changes a diaper poorly or cheats; (Herrman et al., 2019). Other reasons for female perpetration include difficulty with emotion regulation and communication skills as well as previously witnessing interparental violence (Narayan et al., 2014; O'Leary & Slep, 2012; Temple et al., 2013).

Theoretical Framework

A developmental perspective can help explain why young mothers are at higher risk for DV victimization and perpetration. Young mothers are not only in a stage of self-discovery (e.g., developing their identities) but are also tasked with newfound parenting responsibilities such as ensuring their children's basic needs are met (Florsheim et al., 2003; Moore et al., 2007; Osofsky et al., 1988). For young mothers, the stress of adolescence is coupled with parenting stress: for example, according to one young mother who participated in a qualitative study, "you're still learning a lot about yourself and you're trying to teach what you know to the children" (Herrman et al., 2019, p. 283). It can be overwhelming and taxing for young mothers to balance these new responsibilities, especially if they do not have an accepting and loving social support system (Florsheim et al., 2003). In some instances, young mothers may choose to become pregnant to cultivate some sense of identity (Unger et al., 2000) and/or to preserve their romantic relationship (Bekaert & SmithBattle, 2016; Kegler et al., 2001). Additionally, young mothers are often stigmatized for violating the social norms assigned to their

developmental period (e.g., becoming a parent while also considered to be a child themselves) (Wood & Barter, 2015). This mismatch within young mothers' developmental period can hinder their parenting (Emery et al., 2008), the quality of their romantic relationships (Herrman et al., 2019; Sue Newman & Campbell, 2011), and mental health (Moore & Florsheim, 2001).

According to interpersonal stress generation theory, individuals with depressive symptomatology have an active role in generating stressful situations with others which not only increase interpersonal vulnerabilities but also depressive symptoms (Hammen, 1991, 2006). Female adolescents with depressive symptoms, who also experience early onset of puberty), are at higher risk for subsequent interpersonal vulnerabilities compared to later-maturing youth (Conley & Rudolph, 2009; Rudolph, 2008). Furthermore, interpersonal stress partially mediated the relationship between female adolescents' initial and later depressive symptoms (Meiser & Esser, 2019). Similarly, difficulties in social functioning among youth partially mediated the relationship between depressive symptoms and DV victimization (Keenan-Miller et al., 2007). For young mothers between the ages of 15-20, depressive symptoms predicted interpersonal difficulties (Hammen et al., 2011).

Depressive Symptomatology

Another reason for high rates of DV in young mothers is increased psychological distress, particularly symptoms of depression. Young mothers experience high psychological distress nearly twice as often (13%) compared to their non-parenting peers (7%). During the postpartum period, young mothers' mean psychological distress scores

are higher than older mothers by 6% (Mollborn & Morningstar, 2009). Between 16 and 44% of young mothers met criteria for major depressive disorder (Hodgkinson et al., 2014) and half of young mothers under the age of 21 met criteria for clinically significant depressive symptoms during the first two years after childbirth (Easterbrooks et al., 2016). However, it is also important to note that most young mothers with depressive symptoms during pregnancy and/or after childbirth, experienced these symptoms and other psychological distress before and unrelated to their pregnancies (Mollborn & Morningstar, 2009). Further, young mothers who experience mutually violent DV situations, in which both romantic partners perpetrate some form of DV, have higher rates of depression, stress, and hostility, compared to young mothers who do not experience DV or are in a relationship where only one partner perpetrates violence (Lewis et al., 2017; Sue Newman & Campbell, 2011).

Utilizing an intersectional framework to understand psychopathology, young mothers tend to have greater rates of depression due to a host of overlapping systemic issues such as racism, sexism, and classism (Hodgkinson et al., 2014; Oh et al., 2018). For example, rates of major depressive episodes remained steady at about 11% for young mothers living in impoverished conditions (primarily individuals between the ages of 18-25, had more than one child, and less likely to have college education or health insurance) (Oh et al., 2018). Thus, young mothers, who are more likely to identify as members of historically marginalized groups (Hodgkinson et al., 2014; Oh et al., 2018), tend to have higher rates of depressive symptoms which can potentially directly and indirectly increase their risk of DV victimization and perpetration.

The relationship between depressive symptomatology and DV is complex. Some research indicates that DV is a predictor of depressive symptomatology (Ackard et al., 2007; Brown et al., 2009; Haynie et al., 2013; Lindhorst & Oxford, 2008), while other studies suggest that depressive symptomatology predicts DV (DiClemente et al., 2001; Exner-Cortens et al., 2013; Foshee et al., 2010). Depressive symptomatology in female adolescents is associated with increased DV victimization and perpetration, especially physical violence (Collibee et al., 2018). Likewise, depressive symptomatology is related to unhealthy relationship norms as well as perceived loss of control in female adolescents' romantic relationships (DiClemente et al., 2001). Existing research with young women also shows that depressive symptomatology is a predictor of DV victimization (Rao et al., 1999) and perpetration (Capaldi & Crosby, 1997). Although minimal research on depressive symptomatology and DV has been conducted with young mothers, the existing research is consistent with the literature focusing more generally on female adolescents and young women, in that depressive symptomatology is related to DV (Lewis et al., 2017; Silverman et al., 2006; Thomas et al., 2019). Despite research linking depressive symptomatology to DV experiences, the specific mechanisms influencing this relationship with young mothers remain elusive.

Elevated symptoms of depression can interfere with social functioning resulting in greater DV experiences (Collibee et al., 2018). Impaired social cognition has been recognized as a crucial component to major depressive disorder, particularly due to issues with verbal communication and interpersonal skills (Jones et al., 2019; Weightman et al., 2019). Individuals with depression often interpret social situations negatively due to cognitive distortions (e.g., overgeneralization, catastrophizing, rumination) and learned

negative schemas about relationships (Craighead et al., 2013). These depressive

symptoms can then lead to increased social isolation and feeling withdrawn from others,

as well as increased irritability (Craighead et al., 2013). Likewise, individuals' view of

themselves can be modified due to social disruptions, or negative life events in their

environment, which could result in negative, or maladaptive, social functioning skills

(Oatley & Bolton, 1985).

Interpersonal Competency

Interpersonal skills help to create healthy foundations for romantic relationships

and are considered a significant life skill to acquire in the transition between adolescence

and adulthood (Scales et al., 2016). According to Buhrmester and colleagues (1988),

there are five interpersonal skills that comprise interpersonal competency: 1) initiation (of

interactions and relationships), 2) assertiveness (of personal rights and displeasure with

others), 3) self-disclosure (of personal information), 4) conflict management (of conflicts

that arise in close relationships), and 5) emotional support (of others). However, most

research has primarily examined the interpersonal skills of assertiveness, conflict

management, and emotional support. Assertiveness, which can also be defined as the

ability to communicate one's needs in a respectful and non-combative way, has been

linked to positive problem-solving skills (Xia et al., 2018) is a protective factor against

DV victimization (Simpson Rowe et al., 2012; Wolfe et al., 2003). Conflict management

is related to both adolescent DV victimization and perpetration (Bonache et al., 2017).

For example, female adolescents who engaged in withdrawing strategies (e.g., becoming

silent, refusing to discuss and/or avoiding conflict) are less likely to experience

psychological and physical violence. In contrast, female adolescents who engage in

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conflict engagement strategies (e.g., criticizing, attacking, and losing self-control) experience higher levels of psychological abuse (Bonache et al., 2017). Similarly, adolescents engaging in poor conflict management (e.g., using aggression to resolve conflict) predicts physical DV perpetration (Cohen et al., 2018). Furthermore, adolescent couples with greater levels of hostility and lower levels of warmth within their romantic relationship experience higher rates of physical DV perpetration and victimization (Moore et al., 2007). While limited research exists demonstrating the link between interpersonal competency and DV, there is a dearth of evidence examining this relationship in young mothers.

Present Study

The present study examines interpersonal competency as a potential mechanism linking depressive symptomatology and DV victimization and perpetration in a sample of young mothers. Since depressive symptoms can interfere with individuals' social functioning (Hammen, 2006; Moore et al., 2007) and because both depressive symptoms (Collibee et al., 2018; Exner-Cortens et al., 2013) and interpersonal skills are related to DV risk (Bonache et al., 2017; Simpson Rowe et al., 2012; Wolfe et al., 2003; Xia et al., 2018), it is plausible that lower interpersonal competency may explain the link between depressive symptoms and young mothers' DV victimization and perpetration.

Hypotheses

Hypothesis 1

Higher depressive symptomatology will be associated with greater DV victimization and perpetration.

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Hypothesis 2

Higher depressive symptomatology will be associated with lower interpersonal competency.

Hypothesis 3

Lower interpersonal competency will be associated with greater DV victimization and perpetration.

Hypothesis 4

Lower interpersonal competency will mediate the relationship between depressive symptomatology and DV victimization and perpetration.

Chapter 2

Method

Participants

This study uses the term "young mothers" to define individuals between the ages of 18 and 21 who gave birth to a child when they were 21 years of age or younger. Young mothers had to be at least 18 years old to participate in the online survey due to Institutional Review Board sentiment. Eligible young mothers also had to live with at least one biological child and be able to speak and read English. Our sample consisted of predominantly white (84%), non-Hispanic/Latina (85%), and female-identifying (98%) young mothers. Self-reported racial identities included 14% Black, 3% Asian, 3% American Indian/Alaskan Native, and .8% Native Hawaiian/Pacific Islander. Ten percent of our sample selected more than one race. The average age of young mothers (N=238) was $M = 19.8$ years (SD=1.0) compared to the age in which young mothers gave birth to their first child, which ranged from 14 to 21 years of age, $M = 18.6$ years (SD=1.6). Eighty-one percent of young mothers were currently or most recently in a romantic relationship with the biological father of their children. The majority of young mothers (81%) had only one child, followed by 15% of young mothers who had two children. Forty-eight percent were high school graduates, 30% had some college education (at least 1 year), and 16% had some high school education (at least 10th or 11th grade). Most young mothers in our sample were currently unemployed (60%), 20% worked full-time, and 19% worked part-time. Forty-nine percent grew up in rural communities and 36%

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grew up in suburban communities, meanwhile, only 4% grew up in either an urban or megalopolis community.

Procedure

Young mothers were recruited nationwide, using social media ads, to complete a series of questionnaires via an online survey. Participants had to provide electronic consent before viewing the questionnaires. Survey response time, on average, was approximately 80 minutes. A $10 gift card was distributed to participants as compensation. This study was approved by the Institutional Review Board of the authors' university.

Measures

Depressive Symptomatology

The Center for Epidemiological Studies Depression Scale-10 (CES-D-10) is a 10-item self-report measure of symptoms of major depressive disorder (Andresen et al., 1994). The measure has been found to be reliable with low-income, single mothers (Carpenter et al., 1998) as well as individuals who identify as Hispanic/Latina (González et al., 2017). Participants were asked to rate their depressive symptoms within the past week on a 4-point Likert scale (0 = *"rarely or none of the time"* to 3 = *"most or all of the time"*). Total summed scores range from 0 to 30, with a cutoff score of 10 or more indicating significant depressive symptoms and marking participants as "at-risk" for depression (Andresen et al., 1994). A total summed score was computed to assess overall depressive symptomatology. Cronbach's α for the CES-D-10 is .85 (Andresen et al., 1994). Within our sample, the Cronbach's α was .89.

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Interpersonal Competency

The Interpersonal Competence Questionnaire (ICQ; Buhrmester et al., 1988) is a 40-item, self-report questionnaire that measures interpersonal skills on five subscales: 1) initiation, 2) negative assertion, 3) disclosure, 4) emotional support, and 5) conflict management. Participants rated their interpersonal competency on a 5-point Likert scale (1 = *"I'm poor at this"* to 5 = *"I'm extremely good at this"*). Mean scores were computed for each subscale and then used to compute an overall total interpersonal competency score. Greater scores indicate stronger interpersonal competency while lower scores indicate a lower interpersonal competency. Although the ICQ has only been normed on college students (Buhrmester et al., 1998), the internal consistency of the ICQ subscales ranged from .77 to .87. Cronbach's α for the ICQ within our sample was .95.

Dating Violence

The Conflict in Adolescent Dating Relationships Inventory (CADRI; Wolfe et al., 2001) is a 70-item, self-report questionnaire that assesses both DV perpetration and victimization in adolescent relationships. Young mothers' relationships, similar to adolescents' relationships, tend to be brief, exploratory, and have lower levels of commitment (Cascardi, 2016; Florsheim et al., 2003); thus, we used the CADRI to measure DV experiences in young mothers. This measure has also been deemed appropriate to use with individuals from varying races/ethnicities (Shorey et al., 2019). The CADRI measures a wide range of DV behaviors that are broken down into five subscales: 1) threatening behavior, 2) relational aggression, 3) physical abuse, 4) emotional abuse, and 5) sexual abuse. Participants rated their potential DV experiences

from the past year of their relationship on a 4-point Likert scale (0 = "never" to 3 = "often"). We computed a mean score for each subscale and then summed these means to create total perpetration and victimization scores. Greater scores indicate higher levels of DV perpetration and victimization. Internal consistency of the CADRI subscales ranged from .54 to .83 (Wolfe et al., 2001). Cronbach's α for the CADRI within our sample was .92.

Chapter 3

Results

Analytic Strategy

Our analyses are considered rough confirmatory since we proposed specific hypotheses in advance that have not been previously examined in prior research (Fife & Rodgers, 2021). First, missing data among our primary variables of interest: depressive symptomatology, interpersonal competency, and DV perpetration and victimization was addressed by using the MICE (Multivariate Imputation by Chained Equations in R) package (van Buuren & Groothuis-Oudshoorn, 2011). After comparing the original and imputed data distributions, we concluded that the distributions are similar, allowing us to use the imputed data for further analyses (Alice, 2018).

The univariate distributions of DV perpetration and victimization, our two continuous outcome variables, were positively skewed. A generalized linear model was used to fit our data and answer our research question while meeting the statistical assumptions of normality, linearity, and homoskedasticity was the gamma regression model (Fife, 2020). The mediation R package was used to test study hypotheses (Tingley et al., 2014). Our two proposed gamma mediation models included bootstrapping simulations and an analysis of confidence intervals, the average causal mediation effects (ACME), and the average direct effects (ADE) (Tingley et al., 2014).

Descriptive Statistics

DV among our sample of young mothers was relatively high with 98% engaging in some form of DV perpetration and 98% experiencing some form of DV victimization. Thirty-five percent perpetrated threatening behavior, 39% perpetrated physical abuse, 38% perpetrated sexual abuse, 17% perpetrated relational aggression, and 98% perpetrated emotional abuse. Forty-five percent experienced threatening behavior, 33% experienced physical abuse, 59% experienced sexual abuse, 23% experienced relational aggression, and 97% experienced emotional abuse. Depressive symptomatology was moderately elevated in our sample. Sixty-eight percent of young mothers showed a clinical risk of depression ($M = 13.6$, $SD = 7.3$). Finally, young mothers' total interpersonal competency was moderately strong ($M = 3.6$, $SD = .7$).

We conducted independent-samples t-tests and one-way between subjects ANOVA to determine if there are any differences in our primary outcome variables according to our sample's demographic characteristics. There was a significant difference in DV perpetration for young mothers' who identified as Black ($M = 3.1$, $SD = 2.7$) compared to young mothers' who did not identify as Black ($M = 1.9$, $SD = 1.9$), $t(175)=$ -2.8, $p=.01$. Similarly, there was a significant difference in DV perpetration for young mothers' who identified as white ($M = 2.0$, $SD = 1.9$) compared to young mothers' who did not identify as white ($M = 2.5$, $SD = 2.6$), $t(175)=-1.2$, $p=.01$. Depressive symptomatology scores of young mothers who identified as Black or African American ($M = 12.3$, $SD = 4.9$) were also statistically significant compared to young mothers' who did not identify as Black or African American ($M = 13.8$, $SD = 7.6$), $t(127)=.80$, $p=.05$. Young mothers' who identified as Asian or Asian American had statistically significant

depressive symptomatology scores (*M* = 4.5, *SD* = 2.4) compared to young mothers' who did not identify as Asian or Asian American (*M* = 13.9, *SD* = 7.2), *t*(127)=2.6, *p*=.05. Moreover, young mothers' who identified as American Indian/Alaskan Native had statistically significant depressive symptomatology scores (*M* = 17.3, *SD* = 2.2) compared to young mothers' who did not identify as American Indian/Alaskan Native (*M* = 13.5, *SD* = 7.3), *t*(127)=-1.0, *p*=.03. Young mothers who identified as Hispanic or Latina had statistically significant depressive symptomatology scores (*M* = 13.43, *SD* = 8.8) compared to young mothers' who did not identify as Hispanic or Latina (*M* = 13.6, *SD* = 7.0), *t*(126)=-.12, *p*=.03. Finally, there was a significant effect of age on depressive symptomatology scores for the four age conditions [F(3, 125) = 2.9, *p*=.04.

Preliminary Analyses

Bivariate Associations Among Primary Variables

Table 1 displays Pearson correlations between our primary variables of interest: depressive symptomatology, interpersonal competency, and DV victimization and perpetration. Depressive symptomatology was positively correlated with DV perpetration (*r* = .23, *p* < .001) and negatively correlated with interpersonal competency (*r* = -.35, *p* < .001). There was a negative correlation between interpersonal competency and DV perpetration (*r* = -.15, *p* < .05). DV victimization and perpetration were positively correlated (*r* = .57, *p* < .001).

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Table 1

Pearson Correlations Among Primary Variables

	2	3	4
1. Depressive Symptomatology	-.35***	.23***	.00
2. Interpersonal Competency	--	-.15*	.05
3. DV Perpetration	--	--	.57***
4. DV Victimization	--	--	--

Note. *p < .05. **p < .01. ***p<.001.

Model Comparisons

A gamma flexplot examined how total interpersonal competency may improve the fit of our two reduced models containing depressive symptomatology and DV experiences (Fife, 2020; Rodgers, 2010). Model fit statistics for the model comparisons, including the AIC, BIC, Bayes factor, and *p*-value, can be found in Tables 2 and 3. All statistics favored the full models which included interpersonal competency as a predictor of DV perpetration and victimization.

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Table 2

DV Perpetration Full Model (With Interpersonal Competency and Depressive Symptoms) Compared to the Reduced Model (With Depressive Symptoms Only)

	AIC	BIC	Bayes Factor	p
Full Model	866.473	880.362	6164.281	<2e-16
Reduced Model	887.398	897.815	0.000	

Table 3

DV Victimization Full Model (With Interpersonal Competency and Depressive Symptoms) Compared to the Reduced Model (With Depressive Symptoms Only)

|	AIC	BIC	Bayes Factor	p
Full Model	992.773	1006.662	7398.317	<2e-16
Reduced Model	1014.063	1024.480	0.000	

Primary Analyses: Mediation

DV Perpetration

Gamma regression models tested each pathway of our proposed mediation model. We evaluated the log of the estimates to determine the ratio of the means among our primary variables. There is a positive relationship between depressive symptomatology and DV perpetration $b_1 = 0.22$, $p < .001$. Greater depressive symptomatology was

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associated with less interpersonal competency, $b_2 = -0.01$, $p < .01$. When controlling for depressive symptomatology, greater interpersonal competency was associated with less DV perpetration, $b_3 = -0.22$, $p < .001$. When interpersonal competency was present in the regression, it reduced the effect of depressive symptomatology, $b_4 = 0.18$, $p < .01$. However, a mediation analysis using nonparametric bootstrapping revealed that the effect of depressive symptomatology on DV perpetration was not mediated by interpersonal competency, ACME = 0.00, CI [-.09, .11], $p = 0.82$. However, there was a direct effect between depressive symptomatology and DV perpetration, ADE = 0.04, CI [.02, .06], $p < .001$; see Figure 1.

Figure 1

Mediation Analysis for DV Perpetration
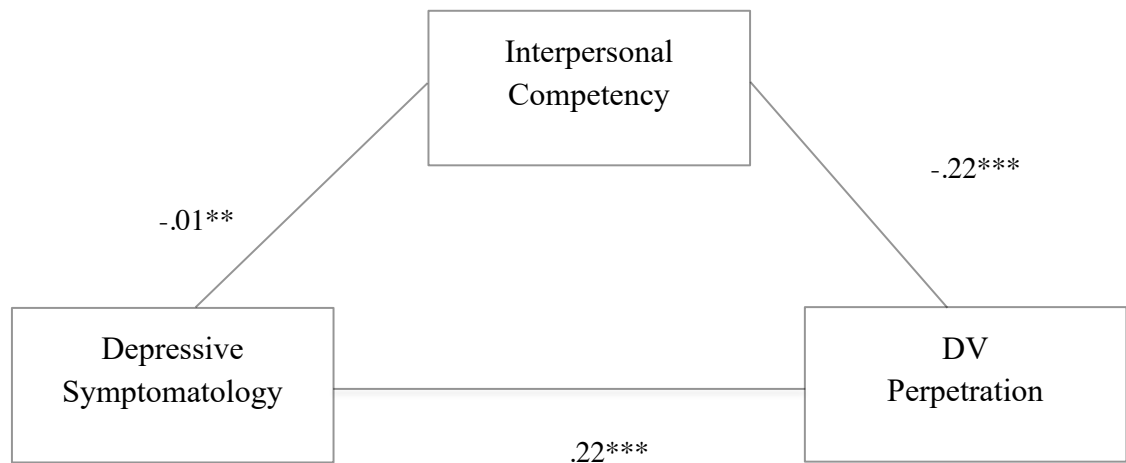
Note. * $p < .05$, ** $p < .01$, *** $p < .001$

ACME = 0.00, CI [-.09, .11], $p = 0.82$. ADE = 0.04, CI [.02, .06], $p < .001$.
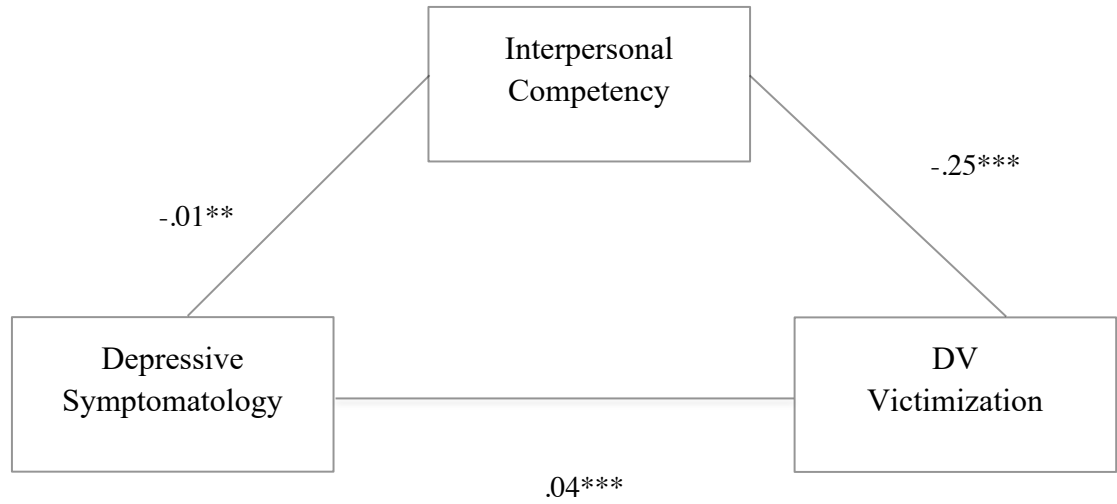
DV Victimization

We used the same procedure as detailed above for a second mediation analysis with DV victimization as the outcome variable. A positive relationship between depressive symptomatology and DV victimization was present, $b_1 = 0.01$, $p < .001$. For every single unit change in depressive symptomatology, the mean of DV victimization increases by 1%. Similarly, greater depressive symptomatology was associated with less interpersonal competency, $b_2 = -0.01$, $p < .01$. Greater interpersonal competency was associated with less DV victimization after controlling for depressive symptomatology, $b_3 = -0.25$, $p < .001$. The effect of depressive symptomatology was reduced when interpersonal competency was present in the regression, $b_4 = 0.03$, $p < .001$.

A mediation analysis using nonparametric bootstrapping revealed that the effect of depressive symptomatology on DV victimization was not mediated by interpersonal competency, ACME = -0.07, CI [-.08, .11], $p = 0.81$. However, there was a direct effect between depressive symptomatology and DV victimization, ADE = 0.08, CI [.05, .10], $p < .001$; see Figure 2.

Figure 2

Mediation Analysis for DV Victimization

*Note. * p < .05, ** p < .01, *** p < .001*

ACME = -0.07, CI [-.08, .11], *p* = 0.81. ADE = 0.08, CI [.05, .10], *p* < .001.

<center>**Chapter 4**</center>

<center>**Discussion**</center>

Our first hypothesis, that higher depressive symptomatology is associated with higher DV victimization and perpetration, was supported. This finding extends previous work showing the link between depressive symptomatology and DV in young mothers (Lewis et al., 2017; Silverman et al., 2006; Thomas et al., 2019). Our second hypothesis, that higher depressive symptomatology would be associated with less interpersonal competency, was also supported revealing the presence of this, thereby extending results from the literature (Collibee et al., 2018). Our third hypothesis linking less interpersonal competency to higher DV victimization and perpetration was supported. As with adolescent girls' dating relationships (Bonache et al., 2017; Moore et al., 2007), interpersonal competency is a pertinent construct when examining DV in young mothers. However, hypothesis four, that interpersonal competency mediates the relationship between depressive symptomatology and DV victimization and perpetration, was not supported by our mediation analyses.

Our conceptualization of interpersonal competency as the mediator in our models was influenced by social cognitive theory. Teaching young mothers concrete skills to improve their interpersonal competency may be a more viable and straightforward way to combat depressive symptomatology interfering with social functioning, thus preventing DV experiences. The lack of support for both proposed DV models could have been because young mothers' overall interpersonal competency score was used instead of testing each interpersonal skill (initiation, negative assertion, disclosure, emotional

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support, and conflict management) as a potential mediator between depressive symptomatology and DV experiences. Each interpersonal skill may have a different effect on DV victimization as well as perpetration, and thus, should be separately analyzed to better delineate these pathways. Despite the lack of support for the potential mediation role of interpersonal competency, it is reasonable to note the importance of interpersonal competency in healthy, romantic relationships given that this construct independently relates to young mothers' condom negotiation (Herrman, 2013; Kershaw et al., 2007), sexual risk behaviors (Cox et al., 1999), and DV experiences (Moore et al., 2007).

Another possibility for the lack of support is that the relationship between depressive symptomatology and DV experiences may be mediated by a different mechanism such as cognitive appraisals of previous traumatic experiences (e.g., witnessing domestic violence as a child; Bekaert & SmithBattle, 2016). Cognitive appraisals can include shame, betrayal, alienation, fear, self-blame, and anger and notably, have been associated with trauma-related distress situations such as depression, PTSD, and dissociation after experiencing adverse interpersonal situations (DePrince et al., 2011). Given our theoretical framework of interpersonal stress generation theory, young mothers who endorse depressive symptomatology may also espouse certain cognitive appraisals towards current DV experiences which then can further predict their depressive symptomatology. Relatedly, cognitive distortions such as catastrophizing or black and white thinking, stemming from endorsed depressive symptomatology, may predict current DV experiences as well (Craighead et al., 2013). It is possible that these

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patterns of thinking may distort or influence responses to stressors in romantic relationships which could result in either DV victimization or perpetration.

There were several limitations to this study that are important to consider when interpreting our results. First, a more diverse age range of young mothers, such as 15 to 25, could have uncovered more variability within our primary variables due to developmental level and parenting experience. Relatedly, although some young mothers differed on depressive symptomatology and DV perpetration based on racial/ethnic identity, our sample was overwhelmingly white, limiting the generalizability of our study results to young mothers from other racial/ethnic identity groups. Future recruitment strategies should include nationwide social media ads coupled with outreach to community-based organizations (e.g., OB/GYN and pediatric clinics, non-profit organizations for young mothers) as well as oversampling of young mothers from various backgrounds to increase overall diversity in our sample. Moreover, the young mothers in this sample scored relatively high on the ICQ questionnaire, indicating a higher baseline of interpersonal skills. Thus, separating interpersonal competency into two groups (high vs. low) and testing each has a potential mediator could have been a better fit for our proposed mediation models. Future studies have the ability to extend this line of research by correcting these limitations and investigating the possibility of a different underlying mechanism as the mediator between depressive symptomatology and DV.

These results can inform future DV prevention interventions for young mothers (Laurenzi et al., 2020). Since there was a direct effect present between depressive symptomatology and DV victimization and perpetration, providers working with young mothers may reduce DV experiences by targeting depressive symptomatology (e.g.,

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hopelessness, feeling easily bothered, social isolation) through a trauma-informed, cognitive-behavioral lens. A CBT and skills-based intervention to reduce DV by targeting depressive symptomatology has been shown to be effective for female adolescents with prior DV exposure (Rizzo et al., 2018).

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