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The Moderating Role of Best Friendships on the Longitudinal Relationship Between Parental Psychological Control and Internalizing Problems, Externalizing Problems, and Identity Exploration in Emerging Adulthood

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The Moderating Role of Best Friendships on the Longitudinal Relationship Between
Parental Psychological Control and Internalizing Problems, Externalizing
Problems, and Identity Exploration in Emerging Adulthood

Lauren Elizabeth Cook

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Science

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ABSTRACT

The Moderating Role of Best Friendships on the Longitudinal Relationship Between Parental Psychological Control and Internalizing Problems, Externalizing Problems, and Identity Exploration in Emerging Adulthood

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Master of Science

Parental psychological control has been linked to numerous negative outcomes among emerging-adult children. Given that emerging adulthood is a time for young people to become autonomous, explore their identities, and begin to feel like an adult, controlling parenting that limits these necessary developmental experiences can be particularly harmful to emerging adults. Given this vulnerability, the current study aimed to understand how parental psychological control affects emerging adults' adjustment (i.e., internalizing problems, externalizing problems, identity exploration), explore a moderating factor (i.e., best friendships) that could help these struggling emerging adults, and examine how these relations could differ by parent and child gender. Participants came from four universities across the United States and completed the READY questionnaire online at two time points, one year apart ($N = 273$, $M_{age} = 20.95$). Results revealed that maternal psychological control positively predicted identity exploration for males and best friendships moderated the relationship between parental psychological control and identity exploration for females. No significant results were found for internalizing and externalizing problems. I then discuss conceptual factors that may play a role in understanding the relation between parental psychological control, best friendships, emerging adult adjustment (i.e., internalizing problems, externalizing problems, identity exploration), and gender.

Keywords: psychological control, best friends, identity, gender

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The Moderating Role of Best Friends on the Longitudinal Relationship Between Parental Psychological Control and Internalizing Problems, Externalizing Problems, and Identity Exploration in Emerging Adulthood

Emerging adulthood is a distinct developmental period when many 18- through 29-year-olds (i.e., emerging adults) typically leave the home, separate themselves from their parents, and enter into adult-like roles following high school (e.g., college, work force). During this time of exploration, transition, and instability, parenting appears to continue to play an important role during the third decade of life (see Padilla-Walker & Nelson, in press, for a review). In general, authoritative parenting in emerging adulthood (e.g., warm, supportive) has been associated with lower levels of internalizing problems (e.g., depression, anxiety) and lower levels of externalizing problems (e.g., impulsivity), whereas controlling parenting, specifically psychological control, has been linked to negative outcomes (e.g., depression, impulsivity, fear of negative evaluation; Nelson, Padilla-Walker, Christensen, Evans, & Carroll, 2011). However, little research has examined potential factors that could buffer the negative effects that emerging-adult children of psychologically controlling parents tend to experience.

Studies suggest that close friends also play a significant role in one's transition to adulthood by offering feelings of worth (Barry, Madsen, Nelson, Carroll, & Badger, 2009) and happiness (Demir, Ozdemir, & Weitekamp, 2007). Close friends can also foster an environment in which emerging adults receive high levels of support and autonomy, and experience low levels of control (Barry, Madsen, & DeGrace, 2015). Young people need to be granted autonomy in order to explore who they are and progress on the path towards adulthood (Arnett, 2000), but psychologically controlling parents typically do not provide high levels of autonomy and support. Thus, friends may be of particular importance during emerging adulthood for those

whose parents are psychologically controlling by offering a developmentally healthy balance of these important aspects (i.e., autonomy, support, control). Therefore, given that high-quality friends provide a safe environment for emerging adults to be granted autonomy, receive support (e.g., affection, intimate disclosure, emotional support) and form identities (Radmacher & Azmitia, 2006), they may have the potential to counteract some of the negative outcomes that emerging adults of psychologically controlling parents tend to encounter. However, no known study has examined the role that best friends play in the relationship between parental psychological control and emerging adult adjustment. Thus, the purpose of this study is to examine how best friends could potentially moderate the negative effects of parental psychological control (i.e., internalizing and externalizing problems, identity problems) on emerging-adult children, and how this relationship may differ by parent and child gender.

Parenting in Emerging Adulthood

Research has indicated that parenting is a salient aspect of emerging adulthood (Padilla-Walker & Nelson, in press). Indeed, even though young people typically leave the home during this time, positive parent-child relationships continue to be a central aspect of flourishing (i.e., positive adjustment) during the transition to adulthood (Padilla-Walker, Memmott-Elison, & Nelson, 2017). During this time of instability, many young people do not feel like they have fully reached adulthood, and their parents tend to feel similarly about their emerging-adult children (Nelson et al., 2007), suggesting that parents may still feel the need to be involved in their emerging adults' lives. Therefore, parents of emerging-adult children have the unique and challenging task of balancing the desire to help their children navigate this period of novelty and uncertainty while still allowing them necessary independence and autonomy.

Theoretically, Bowlby and Ainsworth's Attachment Theory can help illuminate just how salient parenting is in emerging adulthood (Ainsworth & Bowlby, 1991). This theory states that

children develop internal working models of love, trust, and expectations of others based on their relationship with their caregiver during childhood. In emerging adulthood, young individuals may enter a friendship or romantic relationship with certain expectations and scripts for loving and trusting one another that developed from their relationship with their parents (Arnett, 2000; Fraley & Roisman, 2015). Another feature of Attachment Theory is the notion of a secure base. When a child experiences a secure attachment with a parent, the child feels comfortable exploring surroundings, but knows that the parent is still available and can return at any time for comfort or assistance. Similarly, during emerging adulthood, parents can support their child's exploration and mastery of novel environments (e.g., college, work place) while still being available as a source of advice and comfort when needed (Kenny, 1987). Thus, parents continue to play an important role in the lives of emerging adults, even after children have left the home.

Given this importance, it is notable to address what parenting typically looks like during the third decade of life. Research has identified three different parenting dimensions, namely support (e.g., warmth, acceptance), autonomy granting (e.g., offering choices to the child, allowing the child to make decisions), and control (e.g., supervision, reasoning about consequences; Hart, Newell, & Olsen, 2003). These three dimensions can be seen during emerging adulthood, but will look slightly different from the formative years, due to environmental and developmental changes surrounding the parent-child relationship. Additionally, the balance between control, autonomy granting, and support will also change over time. For example, given the typical geographic distance between many emerging adults and their parents, it is expected that parental control would be lower, compared to the formative years, as young people must navigate this period of life on their own (e.g., living with roommates, enrolling in classes, workplace responsibilities). Relatedly, a similar pattern would

be expected for autonomy granting. Indeed, it is more appropriate for parents to restrict autonomy during childhood and adolescence (e.g., enforcing curfews), whereas emerging adults must experience the necessary independence in order to make decisions on their own and form identities. Though this balance of control, autonomy granting, and support significantly changes upon the transition to adulthood, it is not to be concluded that parents therefore matter any less.

In fact, a plethora of empirical work has examined these different parenting dimensions in emerging adulthood and has shown that these aspects of parenting still matter immensely (see Padilla-Walker & Nelson, in press, for a review). In general, authoritative parenting has been associated with the most positive child outcomes, compared to non-authoritative parenting (Padilla-Walker & Nelson, in press). Indeed, research has linked mothers' and fathers' authoritative parenting with higher levels of self-worth (Nelson et al., 2011), identity achievement, emotional adjustment (Dumas, Lawford, Tieu, & Pratt, 2009), and the development of autonomy (Dominguez & Carton, 1997). Additionally, studies have shown that emerging adults who are granted autonomy from their parents are less likely to be depressed and lonely, (Inguglia, Ingoglia, Liga, Coco, & Cricchio, 2015), and more likely to have higher self-esteem, college grades, and attitudes towards college (Lamborn & Groh, 2009). Taken together, authoritative parenting that grants autonomy during emerging adulthood may help emerging adults flourish during this time of life by affording numerous positive outcomes (e.g., resilience, identity achievement, autonomy development).

Additional studies highlight gender differences among the effects of authoritative parenting on young adults. One study found that young women of authoritative mothers were likely to experience lower anxiety and depression (Barton & Kirtley, 2012), while another study found that sons of authoritative mothers were less likely to use drugs (Hock et al., 2016). An

additional study found that authoritative parenting in emerging adulthood was negatively associated with impulsiveness and drinking behavior for fathers and young women, and for mothers and young men, respectively (Patock-Peckham, King, Morgan-Lopez, Ulloa, & Moses, 2011). Overall, warm and supportive parenting that grants autonomy has been shown to be associated with the most positive outcomes for emerging adults transitioning through the third decade of life (Padilla-Walker & Nelson, in press).

Parental Control

Although the majority of emerging adults perceive their parents to be warm and supportive (e.g., authoritative; Alt, 2015; Conrade & Ho, 2001; Nelson et al., 2011) and, therefore, typically experience these types of positive outcomes associated with authoritative parenting, another group of emerging adults encounter challenges that research has shown to be associated with intrusive parenting (e.g., authoritarian, psychological control). During an unfamiliar time of instability and exploration, negative parenting (e.g., authoritarian, psychological control) can be particularly maladaptive for emerging adults. Indeed, young people whose parents exercise negative control tend to exhibit a myriad of both internalizing and externalizing problems during the third decade of life (Padilla-Walker & Nelson, in press). Controlling parenting has been positively associated with maladaptive perfectionism in college students (Soysa & Weiss, 2014), extrinsic motivation (Alt, 2015), anxiety (among Chinese students; Cheung, Cheung, & Wu, 2014), and low self-esteem (Buri, Louiselle, Misukanis, & Mueller, 1988). Research has also suggested that high levels of paternal control is positively associated with feelings of rejection in daughters, which, in turn, has been positively linked to depression (Patock-Peckham & Morgan-Lopez, 2007). Thus, controlling parenting may set emerging-adult children on a path towards floundering (i.e., maladjustment) during this period.

Several types of parental control have been examined in emerging adulthood (e.g., helicopter parenting, behavioral control, psychological control) and all have been associated with emerging-adult maladjustment (e.g., internalizing problems, externalizing problems; Padilla-Walker & Nelson, in press). Helicopter parenting is an excessive and intrusive form of control where parents “hover” over their emerging-adult children by micromanaging their lives and making important decisions for them (e.g., deciding romantic partners, solving arguments with roommates). Distinct from helicopter parenting is behavioral control, characterized by parents exercising control over their emerging adult’s observable behaviors, but this form of control will look different in emerging adulthood compared to childhood or adolescence. For example, behaviorally controlling parents of emerging adults may try to control the classes they take, the jobs they apply for, and how they should spend their money, though this may be more difficult for parents to do, given the typical physical distance between parents and emerging adults once young people have moved out of the house. Thus, other forms of control (i.e., psychological control) may be more utilized by controlling parents during emerging adulthood. Separate from behavioral control and helicopter parenting is psychological control, which research has shown can significantly inhibit a young person from flourishing during the transition to adulthood (Padilla-Walker & Nelson, in press).

Parental Psychological Control in Emerging Adulthood

Psychological control is a distinct form of parental control, characterized by coercive and passive-aggressive behavior that intrudes into the psychological and emotional development of the child (Barber, 1996). Parental psychological control is manifested primarily through covert strategies, such as inducing guilt if the child does not do what the parent wants (i.e., guilt tripping), ignoring the child if their behavior is disagreeable (e.g., withdrawing love), and trying to change or manipulate the child’s thoughts or emotions (e.g., invalidating feelings; Barber,

1996). Although some forms of parental psychological intervention appear to be positive, such as encouraging awareness of others and sensitivity to consequences (Grusec & Goodnow, 1994), psychological control as a parenting dimension has almost exclusively been conceptualized as a negative form of control (Barber, 1996). Specifically, parental psychological control has been associated with numerous internalizing (e.g., depression, anxiety) and externalizing problems (e.g., delinquent behavior) in childhood (Barber, 2002; Nelson & Crick, 2002), adolescence (Albrecht, Galambos, & Jansson, 2007; Barber, 1996; Conger, Conger, & Scaramella, 1997; Pettit, Laird, Dodge, Bates, & Criss, 2001), and, more recently, emerging adulthood (Padilla-Walker & Nelson, in press; Urry, Nelson, & Padilla-Walker, 2011).

Indeed, emerging adulthood appears to be a period of development during which psychological control may be particularly problematic. Emerging adulthood is a period of instability and transition during which many young people do not fully feel like they are adults (Nelson et al., 2007). The criteria emerging adults tend to view as necessary to become an adult center around independence and identity formation (Arnett, 1998; Luyckx, Soenens, Vansteenkiste, Goossens, & Berzonsky, 2007). Therefore, parenting that restricts autonomy and exercises excessive control may inhibit emerging adults from independently making decisions and feeling like an adult, which, in turn, has been linked to higher levels of depression, compared to their counterparts who did perceive themselves as adults (Nelson & Barry, 2005).

Emerging evidence tends to support this notion. Although parental psychological control is not exceedingly common among the majority of emerging adults, those who do receive high levels of parental psychological control appear to experience an array of negative outcomes across numerous domains. For example, parental psychological control has been linked to internalizing problems, including depression (Reed, Ferraro, Lucier-Greer, & Barber, 2015) and

low levels of self-worth (among African American and European American adolescents; Bean, Bush, McKenry, & Wilson, 2003). Parental psychological control has also been associated with externalizing problems among emerging adults, including delinquency (in adolescence, De Kemp, Scholte, Overbeek, & Engels, 2006), alcohol problems (Fischer, Forthun, Pidcock, & Dowd, 2007), and participation in risk behaviors (e.g., use of illegal drugs, drunk driving; Urry et al., 2011). Thus, these negative outcomes put young people of psychologically controlling parents at risk of floundering during an already demanding and challenging time of their lives.

Emerging adulthood is also a time in which young people primarily explore, more so than achieve, several aspects of their identity in regard to work, love, and worldviews (Arnett, 2000), which includes such things as pursuing an education, entering the work force, and developing more intimate and stable relationships. Parental psychological control can impede on all of these developmental tasks that emerging adulthood affords. When psychologically controlling parents limit autonomy and pressure children to align their thoughts and behaviors with their own, emerging adults may not have adequate opportunities to explore and, subsequently, may develop negative beliefs and ideas about themselves and where they fit in the world around them. In fact, one longitudinal study that followed 565 college students over three years found that parental psychological control was negatively associated with dimensions of identity commitment, which in turn has been linked to low levels of well-being (Luyckx, Goossens, Soenens, & Beyers, 2006; Luyckx et al., 2007). Conversely, when parental psychological control is low, it appears that emerging adults see themselves more positively and make strides in committing to who they want to be in regard to work, love, and worldviews. For example, in another longitudinal study, results revealed associations between low levels of paternal psychological control and high levels of education completed, as well as higher perceived educational abilities for young men

(Desjardins & Leadbeater, 2017). Taken together, the work on psychological control and identity development in emerging adulthood is limited but the emerging work appears to suggest that the effects of parental psychological control seem to infiltrate into a core aspect of emerging adulthood (e.g., identity formation) that young people must successfully navigate in order to flourish during a time of instability.

Given these negative effects on emerging adults, scholars have examined whether or not psychological control might impact males and females differently. Currently, the literature on how parental psychological control affects emerging-adult men and women differently has produced mixed findings, with some revealing gender differences (Desjardins & Leadbeater, 2017), and others discovering no such differences (Abaied & Emond, 2013; Manzeske & Stright, 2009). However, a larger body of work has examined gender differences among adolescent children of psychologically controlling parents. Past research suggests that parental psychological control is a stressor (Barber, 1996) and that girls are more likely to respond to stressors with internalizing symptoms compared to boys, who tend to be more vulnerable to externalizing problems. (Baron & MacGillivray, 1989; Rosenfield, Vertefuille, & McAlpine, 2000). Taken together, while males and females might be impacted by psychological control differently, the effects of psychological control appear to be negative for both males and females.

Given the negative outcomes emerging-adult children of psychologically controlling parents tend to experience, a growing body of work has examined potential factors that might mediate, or explain, the link between psychologically controlling parents and emerging-adult adjustment (e.g., perceived autonomy, self-regulation, child-parent disclosure; Inguglia et al., 2016; Moilanen & Manuel, 2017; Urry et al., 2011), but little research has considered potential moderators that might buffer the negative outcomes that emerging adults with psychologically

controlling parents typically experience. Indeed, research on children has found moderating factors in the link between parental psychological control and child outcomes (e.g., emotion dysregulation, sources of parental knowledge, maternal affection, marital conflict; Aunola & Nurmi, 2004; Blossom, Fite, Frazer, Cooley, & Evans, 2016; Coln, 2014; Gaertner et al., 2010), but moderators of parental psychological control in emerging adulthood are much more limited in scope.

One recent study found that temperament (i.e., behavioral activation, behavioral inhibition) significantly moderated the relationship between parental psychological control and emerging-adult children's responses to interpersonal stress (Abaied & Emond, 2013). An additional study revealed that emerging adults' skin conductance level reactivity significantly moderated the link between parental psychological control and relational aggression (Wagner & Abaied, 2016). It is important to note that these studies have examined internal or intrapersonal factors (i.e., differences in physiological factors) that might moderate the relations between psychologically controlling parenting and negative outcomes. However, few studies have examined external, or interpersonal, factors that might serve as moderators in these relationships, or, in other words, help these young adults who may be vulnerable to maladjustment during emerging adulthood (e.g., internalizing, externalizing, and identity problems). Given that emerging adults are typically separated from their families physically, relationships with others play an especially important role throughout emerging adulthood (Barry et al., 2015; Fraley & Davis, 1997). Thus, it may be prudent to examine how relationships with others (e.g., best friends) might mitigate the type and intensity of negative outcomes that young people of psychologically controlling parents are likely to experience.

Friendships in Emerging Adulthood

Individuals may benefit from friendships throughout all phases of life (Hartup & Stevens, 1997). Indeed, friendships are ranked among the things that matter most to children, adolescents, and adults (Klinger, 1977). A friendship is defined as “a voluntary interdependence between two persons over time, which is intended to facilitate the socio-emotional goals of the participants” (Hays, 1988, p. 395). Leading up to and during the third decade of life, young people are immersed in a variety of contexts outside the home (e.g., college campus, work place) and their place of residence commonly changes more than at any other time of life (e.g., moving from a dorm to an off-campus apartment; US Bureau of the Census, 2012). Therefore, emerging adults are exposed to peers in a variety of social environments and the friendships formed and maintained during this time can be vital to an emerging adult’s adjustment.

Indeed, friends appear to play an important role in the lives of emerging adults. Because young people are responsible for making difficult decisions about their future, they often need guidance from others, and many emerging adults turn to their friends, often more so than their parents, for support and advice (Bokhorst, Sumter, & Westenberg, 2010; Buhrmester, 1996; Steinberg & Silverberg, 1986). Emerging adulthood affords numerous goals for young people to reach (e.g., academic success, identity development, starting a career, entering into stable romantic relationships) and friends can provide support to reach these goals during a time of uncertainty (Barry et al., 2015; Furman & Buhrmester, 1992; Tesch, 1983). In fact, having close friendships among emerging adults has been associated with academic achievement (Roisman, Masten, Coatsworth, & Tellegen, 2004), support in career exploration and transition (Conradson & Lathan, 2005; Fischer, Sollie, Sorell, & Green, 1989), and romantic relationship status (Barry et al., 2015) and quality (Sprecher & Felmlee, 1992). Additionally, friendship quality and satisfaction among young people have been associated with fewer negative internalizing

behaviors and higher feelings of self-worth and happiness (Barry, Madsen, Nelson, Carroll, & Badger, 2009; Demir, 2010; Demir & Ozdemir, 2010; Pittman & Richmond, 2008). In contrast, young people who lack friends struggle with emotional maladjustment (Waldo & Fuhriman, 1981) and lower academic achievement (Pace, 1970), compared to young people who have friends. Therefore, friendships appear to have a significant influence on many different facets of emerging adults' lives.

There are several research-grounded explanations as to why friendships are associated with these positive outcomes. Young adults view friendships as a source of intimacy, which involves reciprocally sharing personal information, providing emotional support, and exploring feelings (Radmacher & Azmitia, 2006; Tesch, 1983), and they see discussing hopes, plans, feelings, and worries as a primary activity engaged in by friends (Aries & Johnson, 1983). Consequently, friends influence each other's beliefs and worldviews (Urberg, 1999), especially among best friends where relationship quality is typically high (Berndt, 2002) and interactions are frequent (Barry & Wentzel, 2006). Research suggests that friendships also create an environment in which young people can explore and validate their identities (Barry et al., 2015). Exploring and forming a stable and viable identity has been positively associated with self-esteem, purpose in life, and an internal locus of control (Côté & Schwartz, 2002), which in turn can help guide young people's critical life decisions (e.g., romantic commitments, career choices). Therefore, close friendships offer a range of positive outcomes by influencing several underlying mechanisms (e.g., identity formation, decision-making) that, in turn, help emerging adults flourish during the transition to adulthood.

The Moderating Role of Best Friends

Stemming from theoretical and empirical rationale, best friends may serve a particularly vital purpose for young people with poor parent-child relationships (e.g., psychologically

controlling parents). In theory, best friends could potentially buffer the negative effects typically experienced by emerging-adult children of psychologically controlling parents by fulfilling attachment-related functions (i.e., proximity-seeking, safe haven, secure base; Ainsworth & Bowlby, 1991; Hazan & Zeifman, 1994). Proximity-seeking, defined as when an individual seeks to be physically close to the attachment figure, resists separation, and is distressed when separated (e.g., feelings of sadness when romantic partners are distant from one another), is different from the concept of a safe haven. Though similar to a secure base, where an individual feels comfortable exploring surroundings while knowing an attachment figure is in close proximity, a safe haven involves a threatened or frightened individual seeking an attachment figure for comfort, support, and reassurance (Ainsworth, Blehar, Waters, & Wall, 1978).

Several researchers have examined evidence for the transfer of these attachment-related functions from parents to peers (e.g., best friends, romantic partners) among young adults (Fraley & Davis, 1997; Markiewicz, Lawford, Doyle, & Haggart, 2006; Trinke & Bartholomew, 1997). In a cross-sectional study of 237 young adults, Fraley and Davis (1997) found that the majority of young adults were in the process of transferring attachment-related functions from parents to peers, with the extent of the transfer depending on the duration and quality of the peer relationship (e.g., trust, intimacy, relationship security). For those who did not have a long-term romantic partner, close friends were found to serve as the primary safe haven, while parents, particularly mothers, were found to serve as the primary secure base, suggesting that while friends may not fully take over the role as a secure base, they still fulfill some attachment functions (e.g., safe haven).

Indeed, best friends, can offer a safe place to self-disclose and receive emotional support when distressed young people are not only exploring the challenging terrain that is emerging

adulthood, but also doing so without fully receiving parental emotional support, and even with added distress induced by psychologically controlling parents. Research has shown that close friendships create a secure environment or “comfort zone” in which young people can explore and validate their identities (Radmacher & Azmitia, 2006). Thus, the emotional support and safe environment that high quality friends can theoretically offer may allow struggling emerging adults to explore identities, express emotions, and seek advice that may help to mitigate the negative outcomes that emerging adults of psychologically controlling parents are likely to experience.

Close friends may also conceptually help to buffer the negative effects of psychologically controlling parenting by providing an appropriate balance of overall support, control, and autonomy support. Because psychologically controlling parents exercise a considerable amount of control and offer little autonomy and overall support, emerging adults may benefit from receiving an appropriate balance of these dimensions from other sources, particularly close friends. Friendships that are high in quality are typically characterized by high levels of prosocial behavior (e.g., low levels of control), intimate disclosure, and self-esteem support (Berndt, 2002). Close friends can also provide autonomy support in which young people feel free to explore identities and express emotions without feeling pressured to think or feel a certain way, an environment that psychologically controlling parents do not typically provide (Barber, 1996). Indeed, one study examined 124 close-friend dyads who were undergraduate students at the time, and found that perceived autonomy support from their close friend was linked to emotional reliance, psychological need satisfaction, and overall psychological well-being (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006). Thus, close friends may be able to compensate for the

lack of autonomy and overall support from psychologically controlling parents by creating a safe and supportive environment.

In addition to theoretical and conceptual rationale, past empirical research has also shown that supportive friends can help compensate for vulnerabilities and stressors that are associated with negative family environments, though most of this research has focused on children and adolescents. For example, among children, reported peer support buffered against the negative effect of marital discord on behavior problems (Wasserstein & La Greca, 1996) and of low parental support on internalizing symptoms (Rodgers & Rose, 2002). Similarly, in adolescence, research has found that friendship quality moderated the link between negative parenting (e.g., high on discipline, low on awareness and supervision) and externalizing behavior problems (Lansford, Criss, Pettit, Dodge, & Bates, 2003), as well as the link between chronic maltreatment in the family and adolescent self-esteem (Bolger, Patterson, & Kupersmidt, 1998). Additionally, one longitudinal study of 138 families found that low cohesion and low adaptability in the family was significantly related to lower levels of adolescents' self-worth, but was not significantly related when the adolescents had high-quality best friendships (Gauze, Bukowski, Aquan-Assee, & Sippola, 1996). Thus, it appears that friends can have a positive effect on children and adolescents who experience negative parenting.

Given the impact of friends on individuals who experience negative parenting that appears to be influential throughout the formative years, a similar effect would be expected in emerging adulthood. During this time, peers start to play a particularly important role in the lives of young people, primarily due to the physical separation of young people from their parents. (Fraley & Davis, 1997). Specifically, given that best friendships tend to be higher in quality compared to other friendships (Mendelson & Kay, 2003) and that best friendships are reciprocal

relationships known to offer intimacy, emotional support and affection (Mendelson & Aboud, 1999; Zabatany, Conley, & Pepper, 2004), it would be noteworthy to examine the role of best friends in the lives of emerging adults who experience adverse parenting, specifically psychological control.

Given that friendships seem to play an important role in the presence of negative parenting during emerging adulthood, it may also be noteworthy to see if this importance is different based on gender. Research shows that girls tend to exhibit a stronger need for affiliation, placing a greater importance on relationships than do boys (Cyranowski, Frank, Young, & Shear, 2000; Furman & Buhrmester, 1992), and female friendships tend to encompass higher levels of attachment, self-disclosure, and emotional support compared to male friendships (Ma & Huebner, 2008; Maccoby, 1990). Given the importance that women place on peer relationships, they may be more likely than men to benefit from friendships as a protective factor against psychologically controlling parenting. However, there is currently a dearth of research examining the role best friends play in the lives of emerging adults who experience psychologically controlling parenting, as well as how that role may differ based on gender. Therefore, the aim of the current study was to examine the moderating role of best friendships in the longitudinal relationship between psychologically controlling parents and emerging-adult adjustment (i.e., internalizing problems, externalizing problems, identity exploration) and likewise examine the possible role gender may play.

Current Study

During a time of transition and instability, psychologically controlling parenting can have a negative effect on emerging adults across numerous domains. Therefore, the first purpose of this study was to examine the relationship between parental psychological control and internalizing problems, externalizing problems, and identity exploration among emerging adults.

In line with current research, it was hypothesized that parental psychological control will be linked to high levels of internalizing (i.e., depression, low self-worth) and externalizing problems (i.e., risk behaviors), and low levels of identity exploration. These hypotheses were made based on emerging work, albeit it limited, suggesting that emerging adults who have psychologically controlling parents typically experience internalizing problems (i.e., depression, self-worth; Bean et al., 2003; Elliot & Thrash, 2004; Reed et al., 2015), externalizing problems (e.g., alcohol use, delinquency; Fischer et al., 2007; drunk driving and illegal drug use; Urry et al., 2011), and problems related to identity development (Luyckx et al., 2007). However, these studies, apart from Luyckx and colleagues (2007), employed a cross-sectional design, warranting caution in the interpretation of causality. Though their contributions to the current field of psychological control are notable, longitudinal designs are ideal because they can more fully capture the dynamic and changing relationship between parental psychological control and emerging adult adjustment. Therefore, the current study will examine the relation between parental psychological control and internalizing, externalizing, and identity problems among emerging adults longitudinally.

The second purpose of this study is to examine the moderating role that best friendships (e.g., intimate disclosure, affection, satisfaction, emotional support) may play in the relations between parental psychological control and negative outcomes (i.e., internalizing and externalizing problems, low identity exploration) in emerging adulthood. High quality friendships, characterized by prosocial behavior and overall support, can provide an environment wherein young adults will not feel pressured to think or feel a certain way. Emerging-adult children of psychologically controlling parents can also explore identities in a friendship where they feel supported in their autonomy, a climate that is not typically present among children and

their psychologically controlling parents. Thus, it is hypothesized that best friendships will moderate, or buffer, the negative effects that emerging-adult children of psychologically controlling parents tend to experience. Specifically, it is expected that best friendship quality (made up of intimate disclosure, affection, satisfaction, emotional support), respectively, will moderate the link between parental psychological control and internalizing, externalizing, and identity problems during emerging adulthood.

The third purpose of this study is to assess how the relations between parental psychological control and emerging adult outcomes (i.e., internalizing and externalizing problems, identity exploration) might differ by parent and child gender, respectively. Given that past research has shown that parent-child relationships can differ by gender (e.g., quality of parent-child interactions, parental expectations, closeness; Fagot, 1995; Hosley & Montemayor, 1997; Lamb, Hwang, Ketterlinus, & Fracasso, 1999), the gender of both the parent and child should be taken into account. Although the current literature on psychological control and gender differences appears to be mixed, gender differences may indeed exist. As previously stated, given that parental psychological control is a stressor (Barber, 1996) and that females are more likely to respond to stressors with internalizing symptoms compared to males (Baron & MacGillivray, 1989; Rosenfield et al., 2000), who tend to be more vulnerable to externalizing problems, (Ge, Conger, Lorenz, Shanahan, & Elder, 1995; Nolen-Hoeksema & Girgus, 1994; Scaramella, Conger, & Simons, 1999) it is expected that emerging-adult males of psychologically controlling parents would experience more externalizing problems and females would experience more internalizing problems. In regard to identity exploration, due to the lack of existing work upon which to build hypotheses, no specific hypothesis was made but was deemed important to explore.

According to past research findings on gender differences among parenting and peer relationships, there is evidence to believe that the influence of best friends on parenting outcomes may differ by child gender. Given the importance that women seem to place on peer relationships (Cyranski et al., 2000), they may be more likely than men to benefit from friendships as a protective factor against parental psychological control. Thus, it is expected that best friendships would buffer against a greater number of negative outcomes associated with parental psychological control (e.g., internalizing and externalizing problems, identity problems) for women than men. In regards to parents, much of the research on parental psychological control, though sparse among emerging adults, has assessed only maternal psychological control or a combined maternal and paternal psychological control measure. The current study will examine maternal and paternal psychological control separately in attempt to better understand the processes that may be occurring for mothers and fathers, respectively. Some work suggests that psychological control tends to function very similarly for mothers and fathers (Barber, 1996; Barber, 2002), while others have found distinct differences among parents (Desjardins & Leadbeater, 2017; Leondari & Kiossoiglou, 2002; Soenens, Vansteenkiste, & Luyten, 2010). Therefore, additional work is warranted to understand how psychological control impacts emerging-adult adjustment in the context of mothers and fathers, respectively. Due to the explorative nature of these analyses and current mixed findings, as well as the limited findings in regards to paternal psychological control, on how emerging adult adjustment is affected by maternal and paternal psychological control separately, no specific hypothesis was formed regarding the processes that may exist given the gender of the parent.

Method

Participants

Participants for the current study (M age = 20.95, SD = 2.08, range = 18-29) included 285 undergraduate students sampled from four universities across the United States at two time points, one year apart (52% retention rate). All participants were currently enrolled at the time of the study. A comparison of those who did and did not participate at Time 2 revealed that there were no significant differences on any of the Time 1 variables. The sample was primarily Caucasian (61%), female (60.73%), and freshmen (35%). Emerging-adult participants lived in co-ed housing (31.4%), an apartment or house with same-sex roommates (26%), same-sex college housing (11.25%), or at their parents' home (11%). Thirty-eight percent of participants were in a committed romantic relationship, with 36% not dating at all, 19% casually dating, 4% engaged to marry (n = 21), and 2% married (n = 12). The majority of emerging-adult participants reported an income of less than \$15,000 (95%). For father's level of education attained, 29% had graduated from college with a Bachelor's degree, 22% had earned a graduate or professional degree, 21% had completed some college, and 20% had earned either a high school diploma or its equivalency (GED). For mother's, 28% had completed a Bachelor's degree, 21.3% had completed some college, 18.2% had completed a graduate or professional degree, and 19.3% earned either a high school diploma or its equivalency (GED).

Procedure

Participants completed the Project READY questionnaire via the Internet (see <http://www.projectready.net>). The use of an online data collection protocol facilitated unified data collection across multiple university sites and allowed for the survey to be administered to emerging adults and their parents who were living in separate locations throughout the country (parent data were not used in this study). Participants were recruited through the faculty's

announcement of the study in undergraduate and graduate courses. Professors at the various universities were provided with a handout to give to their students that had a brief explanation of the study and directions for accessing the online survey. Interested students then accessed the study Web site with a location-specific recruitment code. Informed consent was obtained online, and only after consent was given could the participants begin the questionnaires. Each participant was asked to complete a survey battery of 448 items. Sections of the survey addressed topic areas such as background information, family-of-origin experiences, self-perceptions, personality traits, values, risk behaviors, dating behaviors, prosocial behaviors, and religiosity. At Time 2, participants were contacted via e-mail and given a link to the same survey questions administered at Time 1. Participants were given a \$50 Amazon gift code for their participation at Time 2.

Measures

Given the limited sample size of the current study, and, in turn, limited power to estimate a large number of parameters, latent variables were not used. Items were instead averaged to form the following measures.

Parental psychological control. Parental psychological control was assessed at Time 1 using eight Likert-scale items taken from the Psychological Control Scale: Youth Self-Report (PCS-YSR) created by Barber (1996). Emerging adults answered questions that ranged from 1 (not at all like him/her) to 3 (a lot like him/her). Sample items include, “He/she is always trying to change how I feel or think about things” and “He/she is less friendly with me if I do not see things his/her way.” Higher scores indicated higher levels of child-reported mother ($\alpha = .87$) and father ($\alpha = .86$) psychological control.

Best friendship quality. Best friendship quality was assessed at Time 1 using an average of four distinct subscales (i.e., intimate disclosure, affection, satisfaction, emotional support)

from the Social Provisions Questionnaire (Carbery & Buhrmester, 1998). Emerging adults answered questions on a 5-point scale ranging from 1 (little or none) to 5 (the most). Sample questions include, “How much do you share secrets and private feelings with this person?” for intimate disclosure (3 items, $\alpha = .89$), “How much does this person like or love you?” for affection (3 items, $\alpha = .84$), “How happy are you with the way things are between you and this person?” for satisfaction (3 items, $\alpha = .93$), and “How often do you turn to this person for support with personal problems?” for emotional support (3 items, $\alpha = .89$). Higher scores indicated higher levels of best friendship quality.

Internalizing problems. Internalizing problems was measured by depression. Depression was assessed at Times 1 and 2 using seven items on a 1 (never) to 3 (most of the time) scale taken from the shortened version of Radloff’s CES-D scale (Radloff, 1977), which were then averaged. Sample items include, “I felt sad” and “I felt everything I did was an effort.” Higher scores indicated higher levels of depression (Time 1, $\alpha = .78$; Time 2, $\alpha = .80$).

Externalizing problems. Externalizing problems was measured at Times 1 and 2 using eight items that were adapted from add health and others written specifically by the Project READY team. Participants responded to items on a 6-point Likert scale ranging from 1 (none) to 6 (every day or almost every day) that were then averaged. Sample questions include, “During the past 12 months, on how many days did you engage in binge drinking?” and, “shoplift or vandalize?” Higher scores indicated higher levels of externalizing problems (Time 1, $\alpha = .87$; Time 2, $\alpha = .76$).

Identity exploration. Identity exploration was measured at Times 1 and 2 using a subscale of the Ego Identity: Dating, Occupation, and Values/Beliefs Subscales (Balistreri & Busch-Rossnagel, 1995). Three items on a 6-point Likert scale were included, ranging from 1

(strongly disagree) to 6 (strongly agree). Sample items include, “I have consistently re-examined many different values in order to find the ones which are best for me” and “I am not sure about what type of dating relationship is best for me.” Higher scores indicated higher levels of identity exploration (Time 1, $\alpha = .66$; Time 2, $\alpha = .60$). Accordingly, this scale should be viewed with some caution. Although the Chronbach’s alpha was slightly under the cut-off point of $\alpha = .70$, the measure was still included, given its conceptual cohesion and prevalent use in the current literature (e.g., Luyckx et al., 2006).

Control variables. Two control variables were included in the current study, given their potential conceptual impact on the hypotheses: place of residence and dating status. Place of residence (e.g., home with parents, on-campus dorm) was taken into account, given that emerging adults may experience parental psychological control differently living at home compared to living separate from their parents. Dating status (i.e., single, casually dating, in a serious relationship, engaged) was also controlled for due to the important and unique roles of parents, best friends, and romantic partners in the lives of emerging-adult adjustment. Both place of residence and dating status were measured at Time 1.

Results

Descriptive Statistics and Gender Differences

Means, standard deviations, and ranges (see Table 1) as well as bivariate correlations (see Table 2) were first explored using SPSS software. Maternal and paternal psychological control were significantly and positively associated with each other for both young men ($r = .50, p < .001$) and young women reports ($r = .36, p < .001$). Maternal psychological control was associated with greater levels of identity exploration ($r = .20, p = .045$) and externalizing problems for young men ($r = .24, p = .016$), while maternal psychological control was associated with greater internalizing problems for young women ($r = .15, p = .042$). Additionally, identity

exploration was associated with greater internalizing problems for young men ($r = .20, p = .04$). Externalizing problems was found to be positively skewed and, therefore, a log transformation was performed to account for the non-normal distribution. An independent samples t-test was run to test for gender differences in the outcome variables among emerging adults. There were no statistically significant gender differences among mean scores of internalizing problems and identity exploration, but males ($M = 1.59, SD = 0.53$) reported higher levels of externalizing problems than females ($M = 1.40, SD = .46$), ($t(192) = 3.08, p = .002$). A second independent samples t-test conducted on the study's predictors revealed no significant gender differences between mean scores of reported maternal and paternal psychological control, but females ($M = 3.82, SD = 0.83$) reported significantly higher levels of best friendship quality than did males ($M = 3.55, SD = .93$), ($t(192) = 3.63, p < .001$).

A Structural Equation Model of Parental Psychological Control

Path analysis using SEM was conducted on the study variables using Analysis of Moments Structure (i.e., AMOS; Arbuckle & Wothke, 1999). Missing data were recoded into a 'missing' variable and was excluded from the analyses, decreasing the sample size by 12. For both mothers and fathers, two different models were tested: (1) the main effects between parental psychological control and the outcome variables, and (2) the moderating effect of best friendship quality on the relationship between parental psychological control and the outcome variables. Place of residence and dating status were included as controls in the models but were non-significant, and are, therefore, not reported for the sake of parsimony.

Maternal Psychological Control

Model 1. To test the first hypothesis of how maternal psychological control might predict internalizing problems, externalizing problems, and identity exploration, a structural model was created to predict the main effects for maternal psychological control measured at Time 1 and the

outcome variables (i.e., internalizing problems, externalizing problems, identity exploration) measured at Time 2. Covariances were added to correlated and conceptually related predictors and modification indices were considered. Internalizing problems, externalizing problems, and identity exploration at time 1 were controlled for and the data fit the model well, with a comparative index figure (CFI) of 0.97 and a root mean square error of approximation (RMSEA) of 0.05 ($\chi^2(15) = 21.43, p = .124$). Model fit for SEM is considered satisfactory if the RMSEA is less than .05 and the CFI is greater than .90. Results revealed no main effects between maternal psychological control and the three outcome variables. To test for any gender differences, a multiple-group analysis was conducted and results indicated that significant gender differences existed within the model ($\chi^2(12) = 28.74, p = .004$). Stability coefficients revealed that internalizing and externalizing problems, respectively, remained fairly stable from Time 1 to Time 2 for both boys ($\beta = .48, p < .001$; $\beta = .85, p < .001$) and girls ($\beta = .44, p < .001$; $\beta = .84, p < .001$). Identity exploration was somewhat stable for girls ($\beta = .41, p < .001$) but less stable for boys ($\beta = .30, p < .001$). After constraining individual pathways to be equal for males and females, the chi-square difference test revealed that maternal psychological control positively predicted a rank-order change in identity exploration for males only ($\chi^2(1) = 6.11, p = .013$; $\beta = .184, p = .043$; see Table 3). Specifically, young men who experienced their mothers as more psychologically controlling at Time 1 were more likely to report higher levels of identity exploration at Time 2, even when controlling for prior levels of identity exploration. No other individual pathways revealed significant gender differences.

Model 2. A second structural model was created to explore the second research question examining the possible moderating effect of best friendship quality on the relationship between maternal psychological control and the outcome variables (i.e., internalizing problems,

externalizing problems, identity exploration). In order to prevent multicollinearity, maternal psychological control and best friendship quality were centered and an interaction term was created. The data fit the model adequately ($X^2(26) = 43.72, p = .016, CFI = .91, RMSEA = .06$), however, the results revealed no significant interactions terms.

To test the hypothesis that findings would differ based on gender, chi square difference tests were analyzed to explore if statistically significant gender differences existed at the model level, as well as across individual pathways. A multiple-group path analysis revealed that there were indeed significant gender differences at the model level ($X^2_{\text{Difference}}(18) = 45.04, p < .001$). After analyzing each pathway separately, statistically significant gender differences were found for the moderating effect of best friendship quality on the longitudinal relationship between maternal psychological control and identity exploration (for females only; $X^2_{\text{Difference}}(1) = 4.12, p = .042; \beta = .17, p = .011$; see Table 3). No other individual pathways revealed significant gender differences.

In order to examine the interaction between maternal psychological control and best friendship quality, simple slopes were plotted. The high and low values chosen for maternal psychological control and best friendship quality were 1 standard deviation above and 1 standard deviation below the mean. Simple slopes were then plotted using the unstandardized coefficients for the predictors and the interaction term, and then tested for significance, using a linear regression t-test. Of the tested slopes, one was found to be significant. Results indicated that, for females, maternal psychological control predicted lower levels of identity exploration at a -1 standard deviation of best friendship quality ($b = -.17, t(52) = 2.23, p = .027$) but had no influence on identity exploration at a +1 standard deviation of best friendship quality ($b = .08, t(52) = 0.98, p = ns$; see Figure 1). That is, female emerging adults who perceived their mothers

as more psychologically controlling were less likely to engage in identity exploration a year later when they experienced low quality best-friendships. However, when females experienced high-quality best friendships, high levels of psychological control had no effect on identity exploration.

Paternal Psychological Control

Model 1. To test the next research question of how paternal psychological control might predict internalizing problems, externalizing problems, and identity exploration, a structural model was created to predict the main effects for paternal psychological control measured at Time 1 and the outcome variables (i.e., internalizing problems, externalizing problems, identity exploration) measured at Time 2. Covariances were added to conceptually correlated predictors and modification indices were considered. The data fit the model well ($X^2(15) = 27.85, p = .023, CFI = .98, RMSEA = .04$). Internalizing problems, externalizing problems, and identity exploration at Time 1 were controlled for and results revealed no main effects between paternal psychological control and the three outcome variables. A multiple-group analysis was conducted and results showed that no significant gender differences existed for the paternal psychological control model ($X^2(12) = 17.11, p = .146$). Furthermore, no individual pathways revealed significant gender differences.

Model 2. The second model for paternal psychological control examined the possible moderating effect of best friendship quality on the relationship between paternal psychological control and internalizing problems, externalizing problems, and identity exploration. Paternal psychological control and best friendship quality were centered and an interaction term was created. The data fit the model well ($X^2(26) = 54.33, p = .001, CFI = .95, RMSEA = .05$), yet results revealed no significant moderating effects.

A multiple-group path analysis was run to test if statistically significant gender differences existed at the model level, as well as across individual pathways. For fathers, the chi-square difference test revealed no significant gender differences at the model level ($X^{2\text{Difference}}(18) = 28.62, p = .058$). However, after examining each pathway separately, results revealed that the moderating effect of best friendship quality on the relationship between paternal psychological control and identity exploration was indeed significant for females ($X^{2\text{Difference}}(1) = 3.95, p = .047$; $\beta = .14, p = .036$; see Table 3). No other individual pathways revealed significant gender differences.

In order to examine the interaction between paternal psychological control and best friendship quality, simple slopes were plotted (see Figure 2). The values chosen for paternal psychological control and best friendships quality were 1 standard deviation above and 1 standard deviation below the mean. Simple slopes were then plotted and tested using the same method described in the previous model for maternal psychological control. Paternal psychological control was significantly related to identity exploration for females at a +1 standard deviation of best friendship quality ($b = .20, t(52) = 2.57, p = .011$) and at a -1 standard deviation of best friendships quality ($b = -.23, t(52) = 3.28, p = .001$). In other words, young women with psychologically controlling fathers were more likely to explore their identity within the context of having a high-quality best friendship, and less likely to explore their identity within the context of having a low-quality best friendship.

Discussion

The purpose of this study was to gain a clearer understanding of how parental psychological control and best friends function in the lives of emerging adults. This study is the first to examine parental psychological control, best friendships, and internalizing problems,

externalizing problems, and identity exploration together in emerging adulthood. The findings from this study significantly add understanding to the current field of psychological control and acts as a springboard for new directions on psychological control research. The three primary aims of this study were (1) to examine the predictive association between psychological control and internalizing problems, externalizing problems, and identity exploration for mothers and fathers, (2) to determine if best friendship quality buffered the relationship between parental psychological control (mothers and fathers, respectively) and the outcome variables, and (3) to test if any significant differences existed for emerging-adult gender. Overall, a number of important findings were born from the analyses. First, contrary to my predictions, maternal psychological control predicted higher levels of identity exploration for males only. Maternal and paternal psychological control did not directly affect internalizing or externalizing problems among emerging adults. Second, maternal and paternal psychological control predicted emerging-adult identity exploration among females, but was dependent on the quality of the best friendship reported. The third important finding from the current study was that emerging-adult gender played a vital role in understanding how psychological control and best friendships influence identity exploration. Specifically, females experienced higher levels of identity exploration when paternal psychological control was high and best friendship quality was high. Additionally, females experienced lower levels of identity exploration when parental (i.e., both maternal and paternal) psychological control was high and best friendship quality was low. However, best friendships did not seem to matter when it came to the effect that maternal psychological control had on identity exploration for males. Taken together, it appears that the role of parents and peers, in regards to identity exploration, may function very differently for males compared to females. In other words, this study suggests that two different processes may

be occurring when it comes to parental psychological and identity development, one for males and one for females.

Identity Exploration of Young Women

For women, friends do appear to moderate the relationship between parental psychological control (i.e., both mother and father) and identity exploration. In other words, parental psychological control had no effect on identity exploration for young women until examined at high and low levels of best friendship quality. Specifically, for both mothers and fathers, high levels of psychological control, when best friendship quality was low, predicted low levels of identity exploration. For fathers, high levels of psychological control, when best friendship quality was high, predicted high levels of identity exploration.

This finding supports my hypothesis, as well as current literature, that friends indeed matter when emerging adults experience adverse family environments (i.e., parental psychological control; Lansford et al., 2003; Rodgers & Rose, 2002; Wasserstein & La Greca, 1996). It also supports previous work underscoring the role of relationships generally for females who, compared to males, tend to exhibit a stronger need for affiliation, place a greater importance on relationships, and demonstrate higher levels of self-disclosure and emotional support in friendships (Cyranski et al., 2000; Furman & Buhrmester, 1992; Ma & Huebner, 2008; Maccoby, 1990). My original hypothesis stated that there would be a direct negative relationship between parental psychological control and identity exploration, and that best friendship quality would simply buffer, or change the strength, of that relationship. However, this study found that the impact of psychological control on identity development is different depending on the quality of a close peer relationship. As a result, the study makes a significant contribution by demonstrating that peers play a unique role in affecting the ways in which

parental influence (i.e., both mothers and fathers) might impact development in emerging adulthood for young women.

It was somewhat surprising to find that parental psychological control, by itself, did not seem to influence identity exploration directly for young women but it may suggest just how complicated it is for young women trying to navigate relationships with multiple important people in their lives (e.g., parents, friends, romantic partners) as, again, it was not until the moderating role of friends was examined that the impact of psychological control became more visible. Hence, taken together, the study makes a significant contribution by demonstrating that peers play a unique role in affecting the ways in which parental influence might impact development in emerging adulthood.

Indeed, despite not finding a direct link between parental psychological control and young women's identity exploration, parental psychological control still appears to matter in the identity development of emerging-adult women but via what appears to be a much more complex process. The findings illustrate that the impact parental psychological control has on young women may be determined by the extent to which one has healthy relationships with peers. In past work, peers have been found to play an important role in the lives of emerging adults (Barry et al., 2015). For example, friendship quality and satisfaction among young people have been associated with fewer negative internalizing behaviors and higher feelings of self-worth and happiness (Barry et al., 2009; Demir, 2010; Demir & Ozdemir, 2010; Pittman & Richmond, 2008). Additionally, research suggests that friends can fulfill attachment-related functions during emerging adulthood (e.g., safe haven; Fraley & Davis, 1997) and can also create an environment in which young people can explore and validate their identities (Mortimer & Call, 2001; Radmacher & Azmitia, 2006). Hence, if young women have a positive, secure relationship with a

best friend, they may be more willing and better equipped to likewise navigate a relationship with parents, in this case fathers, even in the presence of psychological control, in a way that allows them to successfully and safely explore their identity. This not only supports past research that suggests that close friendships can create a secure environment, or “comfort zone,” in which emerging adults can feel safe in exploring their identities (Mortimer & Call, 2001; Radmacher & Azmitia, 2006), but adds to our understanding of the importance of friends in emerging adulthood by emphasizing that the safe context a close friend can provide is particularly important in the presence of parental, specifically paternal, psychological control.

In contrast, it appears that in the absence of a positive relationship with a friend, it may be difficult for young women to break out of the grip of their parents’ control to explore on their own. Indeed, research has shown that young people who have negative relationships with both parents and peers tend to be vulnerable to low levels of well-being, particularly in times of change (Armsden & Greenberg, 1987). Given that emerging adulthood is a transition period and exploring one’s identity is a significant time of change and instability (Arnett, 2000), these young women may retreat and find the task of breaking away from their parents’ control and exploring their identities on their own too daunting to take on without any support from other relationships (e.g., close friends). In sum, friends play a very important role in how young women explore their identities, particularly in the context of parental psychological control.

Identity Exploration of Young Men

The findings also suggest that the role of parents and peers regarding identity exploration is different for young men than what is seen for young women. For males, the current findings make a number of significant contributions to our understanding of parental psychological control in emerging adulthood and how parents and peers, together, influence the lives of emerging-adult males specifically. First, this study adds to our understanding of the role of

parents in the identity development of their emerging-adult sons. Specifically, contrary to my hypothesis, results revealed that maternal psychological control predicted higher, rather than lower, levels of identity exploration among males. This is the first known study that has found a direct, longitudinal relationship between parental psychological control and exploring identity. Given that identity exploration is a necessary and healthy process that requires autonomy during the transition to adulthood (Arnett, 2000), it is surprising that maternal psychological control would foster something as positive as identity exploration. This finding may suggest that emerging adults of psychologically controlling parents may want to distance themselves from the negative relationship with their parents and use their parents' psychological control as motivation to redefine different aspects of their identity. Indeed, one study found that parent-child conflict and overall non-supportive parenting (i.e., psychological control) were predictive of emerging adults who explored their identity (Luyckx et al., 2006). Therefore, perhaps males have the desire to distance themselves from their mothers, both physically and emotionally, once they have the opportunity to physically do so (e.g., graduate high school, move out of the house), despite attempts of mothers to continue to control them, and one way they strive for this independence is by exploring who they are (and not just who their mothers want them to be). In essence, these young men may be taking advantage of the chance to explore who they are, a chance that they have not had before. Furthermore, to gain independence from their controlling mothers, young men may feel a need to figure out who they are quickly, invoking an expedited process of identity exploration.

The finding that maternal psychological control predicted higher levels of identity exploration among sons also adds to our understanding of exploring identities in the presence of maternal psychological control. The role that controlling mothers play in their sons' identity

exploration may suggest that maternal psychological control is somewhat positive because it fosters identity exploration for males, but caution is warranted in attributing a positive outcome to something as detrimental as psychological control (Abaied & Emond, 2013; Reed et al., 2015; Zimmer-Gembeck, Madsen, & Hanisch, 2011). There are a couple of reasons why this may not be as positive of a finding as it may first appear. First, it is important to remember that young people may feel pressure to explore their identities. When emerging adults attempt to determine what they believe, how they view the world, and where they fit in the world around them, the process can become difficult and confusing at times as emerging adults experience bouts of disequilibrium (Arnett, 2005). Indeed, given that feelings of stress and uncertainty tend to accompany the exploration of different identities, research has shown that emerging adults tend to experience depressive symptoms and may even turn to substance use when exploring identities (Luyckx et al., 2006). Exploring identities in emerging adulthood may be challenging even for those who have strong familial support to lean on and seek guidance from but it may be even more difficult for emerging adults who experience psychologically controlling parenting and lack that important social support for this important process.

A second reason why the link between maternal psychological control and identity exploration may not be entirely positive is because emerging adults' exploration may elicit additional attempts of psychologically controlling mothers to maintain a hold on the lives of their children. Indeed, this exploration may invoke more efforts from mothers to control their sons in response to observing their exploration. Luyckx and colleagues (2007) found that exploring identities actually led to increased levels of parental psychological control. In the present study, I did not look for this bi-directional process but the results of the present study taken together with those of Luyckx and colleagues may point to a rather complex bi-directional relation between

psychologically controlling mothers and their sons' identity exploration in emerging adulthood. In other words, the further emerging adults attempt to become their own persons by exploring their identities, the more the parents may attempt to coerce their sons, creating a vicious cycle of increasing control coming from the parents and increasing desire for distance and exploration coming from the emerging adult. In sum, maternal psychological control plays a role in the identity process of their sons in emerging adulthood, and while it may appear that controlling mothers actually play a positive role in helping young men explore their identity more, it may come at a cost. Future research is needed to better understand if there are any beneficial effects of parental psychological control on emerging adults' identity development or just what the costs of psychological control may be in the process of emerging adults' identity formation. Furthermore, work is needed to understand the mechanisms through which parental psychological control may enhance identity exploration.

Another interesting contribution of the current study for males is that peers do not seem to play a buffering role on the effect psychologically controlling mothers have on their sons. This increases our understanding of how females and males might experience close friendships differently. Research has shown that men and women consider self-disclosure an important component of intimate friendships, but as a result of socialization, men prefer to self-disclose less often than women (Fehr, 2004). Thus, best friends may not have an impact on identity exploration for males because they may simply not communicate intimately enough to understand how psychological control is functioning in the lives of their friends. Given the direct, positive relationship between maternal psychological control and identity exploration among males, friends may perceive that males of psychologically controlling mothers are exploring their identity adequately and do not feel the need to solicit advice. Close friendships

may still have a positive impact on males of psychologically controlling parents by providing warmth and support during times of stress when exploring identity, but its effects on how much young men explore their identity is not indicated by the current study. Overall, the findings indicate that a distinct process exists for males, apart from females, of how parental psychological control and peers function to influence identity exploration.

Internalizing and Externalizing Problems

It is also notable to mention that no significant associations were discovered between parental psychological control and internalizing and externalizing problems for either young men or young women. The lack of a findings regarding psychological control and internalizing and externalizing problems is somewhat surprising given the study's significant bivariate correlations between maternal psychological control and internalizing (for girls; $r = .15, p = .021$) and externalizing problems (for boys; $r = .17, p = .007$), in addition to past empirical work that has found links between psychological control and internalizing and externalizing problems (Abaied & Emond, 2013; Manzeske & Stright, 2009; Reed et al., 2015; Urry et al., 2011). However, there are a few explanations as to why these associations were not found for this particular study. First, as previously stated, the process of exploring one's identity can become confusing and difficult at times, and past studies have linked this exploration with internalizing and externalizing problems (Kidwell, Dunham, Bacho, Pastorino, & Portes, 1995; Luyckx et al., 2006). Therefore, perhaps it is the simple ordering of variables that needs re-examination. Indeed, rather than analyzing internalizing problems, externalizing problems, and identity exploration all as outcome variables, perhaps identity exploration plays a moderating or mediating role. Thus, future work should explore whether psychological control results in internalizing and externalizing problems through identity exploration. Second, results showed that internalizing and externalizing problems were fairly stable across the two time points for both boys and girls. Therefore, perhaps

by the time adolescents enter emerging adulthood, parental psychological control has already done significant damage (i.e., depression, risk behaviors) that would not change much over one year. Thus, it would be beneficial to examine these relations over a longer period of time, potentially starting in adolescence, to adequately predict significant change in these relationships.

Third, my sample size was rather small and may not have been large enough to detect a relationship between psychological control and internalizing and externalizing problems. Our understanding of how psychological control impacts internalizing problems, externalizing problems, and identity exploration would greatly benefit with a study that employs a larger sample size. Finally, the lack of findings may be attributed to how internalizing and externalizing problems were measured. Internalizing problems was only measured by depression, and externalizing problems was comprised of multiple risk behaviors (e.g., substance use, shoplifting, vandalizing). Other studies on parental psychological control have examined externalizing problems differently by examining one indication of externalizing problems (e.g., substance use; Urry et al., 2011), rather than averaging multiple indices into one measure. It may also be beneficial to examine multiple indices of internalizing problems (e.g., low self-worth, fear of negative evaluation, anxiety) to more fully understand the effect that psychologically controlling parents have on their emerging-adult children. Thus, internalizing and externalizing problems may need to be examined more specifically to reveal the association between psychological control and specific aspects of internalizing and externalizing problems.

Limitations and Future Directions

Despite the contributions of the current study, it is not without limitations. First, mother and father psychological control were analyzed in separate models, which prevented testing significant differences based on parent gender. This was due to a small sample size that would

not have supplied enough power if both parents were analyzed together. Current literature is in need of further disentanglement of maternal and paternal psychological control and how they may function differently. Therefore, future work should employ a larger sample size to measure significant differences between maternal and paternal psychological control within the same model.

Next, this study lacked diversity in a number of ways. First, the sample was primarily female Caucasian college students. Hence, while many of the differences in findings for male and female emerging adults in the study were discussed in terms of differences in the meaning of relationships for girls versus boys, these differences may also simply be due to differences in the number of female participants versus male participants in the study. Given that all of the current findings differed by gender, it would be beneficial for future studies to include a larger and equal number of males to adequately replicate the current findings. Second, the study lacked both cultural and ethnic diversity. It would be worthwhile to explore for differences in ethnic groups within the United States as well as cultural differences outside of the United States, given that various ethnic groups, especially outside of the United States, experience the third decade of life differently (e.g., feelings of reaching adulthood, attitudes towards family; Arnett, 2003). Finally, the entire sample consisted of students who were attending college at the time of the study. Less is known in general about emerging adults who are not college students, as well as their parents, given the convenience of sampling emerging adults from a classroom environment. Therefore, future work should attempt to examine any possible differences that might exist based on the effect that being a student might have on parental psychological control and identity exploration, compared to those who are not students.

Third, the current study only examined identity exploration as an overall exploration measure, comprised of exploration in a variety of domains (i.e., work, love, worldviews). It may be important to examine exploration in specific areas (rather than a composite measure of exploration). For example, given that relationships may be more important to young women than young men, psychological control may have a greater impact for young women than young men in areas of exploration in regard to relationships (e.g., dating, family, romantic partner) while it may impact both men and women in other specific areas (e.g., career). In sum, the impact of psychological control on identity exploration, and the role of friends in that relationship, may vary according to the specific domain of identity exploration. Furthermore, identity exploration is just one aspect of identity. Emerging adults could also differ on the degree to which they explore and commit to different identities (i.e., exploration in breadth, exploration in depth) and the extent to which they may ruminate about their identity development (e.g., Luyckx et al., 2006). Also, this study did not examine identity achievement. Hence, future work on the role of parental psychological control, friendship quality, and identity development should also examine the extent to which they achieve their identity (e.g., identity foreclosure, identity moratorium; Marcia, 1966). In sum, this study examined only one piece of identity development. Future work should explore other measures, aspects, and processes of identity development to capture a better picture of the role of friends in the link between parental psychological and identity development.

Conclusion

The purpose of this study was to gain a clearer understanding of how parental psychological control and best friends function in the lives of emerging adults. The current study found that (1) maternal psychological control predicted increased levels of identity exploration

for young men and (2) both maternal and paternal psychological control predicted different levels of identity exploration only at different levels of best friendship quality. Overall, these findings make significant contributions to our understanding of how parental psychological control and best friendships operate, based on gender, to influence identity exploration. Most notably, this study emphasizes that both psychologically controlling parents and peers play an important role predicting if and how emerging adults explore their identities, but act in unique ways that differ from males to females. For young women, peers appear to play an important moderating role in the link between parental psychological control and identity exploration.

References

- Abaied, J. L., & Emond, C. (2013). Parent psychological control and responses to interpersonal stress in emerging adulthood: Moderating effects of behavioral inhibition and behavioral activation. *Emerging Adulthood, 1*(4), 258-270.
- Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333.
- Albrecht, A. K., Galambos, N. L., & Jansson, S. M. (2007). Adolescents' internalizing and aggressive behaviors and perceptions of parents' psychological control: A panel study examining direction of effects. *Journal of Youth and Adolescence, 36*(5), 673-684.
- Alt, D. (2015). First-year female college students' academic motivation as a function of perceived parenting styles: A contextual perspective. *Journal of Adult Development, 22*(2), 63-75.
- Arbuckle, J., & Wothke, W. (1999). *AMOS 4 user's reference guide*. Chicago: Smallwaters Corporation.
- Aries, E. J., & Johnson, F. L. (1983). Close friendship in adulthood: Conversational content between same-sex friends. *Sex Roles, 9*(12), 1183-1196.
- Armsden, G. C., & Greenberg, 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.

- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development, 41*(5), 295-315.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.
- Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development, 2003*(100), 63-76.
- Arnett, J. J. (2005). The developmental context of substance use in emerging adulthood. *Journal of Drug Issues, 35*(2), 235-254.
- Aunola, K., & Nurmi, J. (2004). Maternal affection moderates the impact of psychological control on a child's mathematical performance. *Developmental Psychology, 40*(6), 965-978.
- Balistreri, E., & Busch-Rossnagel, N. A. (1995). Development and preliminary validation of the ego identity process questionnaire. *Journal of Adolescence, 18*, 179-192.
- Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development, 67*(6), 3296-3319.
- Barber, B. K. (2002). *Intrusive parenting: How psychological control affects children and adolescents*. Washington, DC: American Psychological Association.
- Baron, P., & MacGillivray, R. G. (1989). Depressive symptoms in adolescents as a function of perceived parental behavior. *Journal of Adolescent Research, 4*(1), 50-62.

- Barry, C. M., Madsen, S. D., & DeGrace, A. (2015). Growing up with friends in emerging adulthood. In J. J. Arnett (Ed.), *The Oxford handbook of emerging adulthood*, (pp. 215-229). New York, NY: Oxford University Press.
- Barry, C. M., Madsen, S. D., Nelson, L. J., Carroll, J. S., & Badger, S. (2009). Friendship and romantic relationship qualities in emerging adulthood: Differential associations with identity development and achieved adulthood criteria. *Journal of Adult Development, 16*(4), 209-222.
- Barry, C. M., & Wentzel, K. R. (2006). Friend influence on prosocial behavior: The role of motivational factors and friendship characteristics. *Developmental Psychology, 42*(1), 153-163.
- Barton, A. L., & Kirtley, M. S. (2012). Gender differences in the relationships among parenting styles and college student mental health. *Journal of American College Health, 60*(1), 21-26.
- Bean, R. A., Bush, K. R., McKenry, P. C., & Wilson, S. M. (2003). The impact of parental support, behavioral control, and psychological control on the academic achievement and self-esteem of African American and European American adolescents. *Journal of Adolescent Research, 18*(5), 523-541.
- Berndt, T. J. (2002). Friendship quality and social development. *Current Directions in Psychological Science, 11*(1), 7-10.
- Blossom, J. B., Fite, P. J., Frazer, A. L., Cooley, J. L., & Evans, S. C. (2016). Parental psychological control and aggression in youth: Moderating effect of emotion dysregulation. *Journal of Applied Developmental Psychology, 44*, 12-20.

- Bokhorst, C. L., Sumter, S. R., & Westenberg, P. M. (2010). Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: Who is perceived as most supportive? *Social Development, 19*(2), 417-426.
- Bolger, K. E., Patterson, C. J., & Kupersmidt, J. B. (1998). Peer relationships and self-esteem among children who have been maltreated. *Child Development, 69*(4), 1171–1197.
- Buhrmester, D. (1996). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (eds.), *The company they keep: Friendships in childhood and adolescence*, (pp. 158-185). New York, NY: Cambridge University Press.
- Buri, J. R., Louiselle, P. A., Misukanis, T. M., & Mueller, R. A. (1988). Effects of parental authoritarianism and authoritativeness on self-esteem. *Personality and Social Psychology Bulletin, 14*(2), 271-282.
- Carbery, J., & Buhrmester, D. (1998). Friendship and need fulfillment during three phases of young adulthood. *Journal of Social and Personal Relationships, 15*(3), 393-409.
- Cheung, C. K., Cheung, H. Y., & Wu, J. (2014). Career unreadiness in relation to anxiety and authoritarian parenting among undergraduates. *International Journal of Adolescence and Youth, 19*(3), 336-349.
- Coln, K. L. (2014). *Examining potential moderators of negative parenting practices and children's internalizing and externalizing behavior* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. 3583908).

- Conger, K. J., Conger, R. D., & Scaramella, L. V. (1997). Parents, siblings, psychological control, and adolescent adjustment. *Journal of Adolescent Research, 12*(1), 113-138.
- Conrade, G., & Ho, R. (2001). Differential parenting styles for fathers and mothers. *Australian Journal of Psychology, 53*(1), 29-35.
- Conradson, D., & Latham, A. (2005). Friendship, networks and transnationality in a world city: Antipodean transmigrants in London. *Journal of Ethnic and Migration Studies, 31*(2), 287-305.
- Côté, J. E., & Schwartz, S. J. (2002). Comparing psychological and sociological approaches to identity: Identity status, identity capital, and the individualization process. *Journal of Adolescence, 25*(6), 571-586.
- Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: A theoretical model. *Archives of General Psychiatry, 57*(1), 21-27.
- De Kemp, R. A., Scholte, R. H., Overbeek, G., & Engels, R. C. (2006). Early adolescent delinquency: The role of parents and best friends. *Criminal Justice and Behavior, 33*(4), 488-510.
- Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin, 32*(3), 313-327.
- Demir, M. (2010). Close relationships and happiness among emerging adults. *Journal of Happiness Studies, 11*(3), 293-313.

- Demir, M., & Özdemir, M. (2010). Friendship, need satisfaction and happiness. *Journal of Happiness Studies, 11*(2), 243-259.
- Demir, M., Özdemir, M., & Weitekamp, L. A. (2007). Looking to happy tomorrows with friends: Best and close friendships as they predict happiness. *Journal of Happiness Studies, 8*(2), 243-271.
- Desjardins, T., & Leadbeater, B. J. (2017). Changes in parental emotional support and psychological control in early adulthood: Direct and indirect associations with educational and occupational adjustment. *Emerging Adulthood, 5*(3), 177-190.
- Dominguez, M. M., & Carton, J. S. (1997). The relationship between self-actualization and parenting style. *Journal of Social Behavior and Personality, 12*(4), 1093.
- Dumas, T. M., Lawford, H., Tieu, T. T., & Pratt, M. W. (2009). Positive parenting in adolescence and its relation to low point narration and identity status in emerging adulthood: A longitudinal analysis. *Developmental Psychology, 45*(6), 1531-1544.
- Elliot, A. J., & Thrash, T. M. (2004). The intergenerational transmission of fear of failure. *Personality and Social Psychology Bulletin, 30*(8), 957-971.
- Fagot, B. I. (1995). Parenting boys and girls. In M. H. Bornstein, (Ed.), *Handbook of parenting: Vol. 1. Children and parenting* (pp. 163–183). Mahwah, NJ: Erlbaum.
- Fehr, B. (2004). Intimacy expectations in same-sex friendships: A prototype interaction-pattern model. *Journal of Personality and Social Psychology, 86*(2), 265-284.

- Fischer, J. L., Forthun, L. F., Pidcock, B. W., & Dowd, D. A. (2007). Parent relationships, emotion regulation, psychosocial maturity and college student alcohol use problems. *Journal of Youth and Adolescence*, *36*(7), 912-926.
- Fischer, J. L., Sollie, D. L., Sorell, G. T., & Green, S. K. (1989). Marital status and career stage influences on social networks of young adults. *Journal of Marriage and the Family*, *51*(2), 521-534.
- Fraley, R., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships*, *4*(2), 131-144.
- Fraley, R. C., & Roisman, G. I. (2015). Early attachment experiences and romantic functioning: Developmental pathways, emerging issues, and future directions. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and research: New directions and emerging themes* (pp. 9-38). New York, NY: Guilford Press.
- Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, *63*(1), 103-115.
- Gaertner, A. E., Rathert, J. L., Fite, P. J., Vitulano, M., Wynn, P. T., & Harber, J. (2010). Sources of parental knowledge as moderators of the relation between parental psychological control and relational and physical/verbal aggression. *Journal of Child and Family Studies*, *19*(5), 607-616.
- Gauze, C., Bukowski, W. M., Aquan-Assee, J., & Sippola, L. K. (1996). Interactions between family environment and friendship and associations with self-perceived well-being during early adolescence. *Child Development*, *67*(5), 2201-2216.

- Ge, X., Conger, R. D., Lorenz, F. O., Shanahan, M., & Elder Jr, G. H. (1995). Mutual influences in parent and adolescent psychological distress. *Developmental Psychology, 31*(3), 406-419.
- Grusec, J. E., & Goodnow, J. J. (1994). Impact of parental discipline methods on the child's internalization of values: A reconceptualization of current points of view. *Developmental Psychology, 30*(1), 4-19.
- Hart, C. H., Newell, L. D., & Olsen, S. F. (2003). Parenting skills and social-communicative competence in childhood. In J. O. Greene & B. R. Burlison (Eds.), *Handbook of communication and social interaction skills* (pp. 753–797). Mahwah, NJ: Erlbaum.
- Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin, 121*(3), 355-370.
- Hays, R. B. (1988). Friendship. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 391-408). New York, NY: John Wiley & Sons.
- Hazan, C., & Zeifman, D. (1994). Sex and the psychological tether. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Attachment processes in adulthood* (pp. 151-178). London, England: Jessica Kingsley Publishers.
- Hock, R. S., Hindin, M. J., Bass, J. K., Surkan, P. J., Bradshaw, C. P., & Mendelson, T. (2016). Parenting styles and emerging adult drug use in Cebu, The Philippines. *International Journal of Culture and Mental Health, 9*(2), 108-119.
- Hosley, C. A., & Montemayor, R. (1997). Fathers and adolescents. In M. E. Lamb (Ed.), *The role of the father in child development* (3rd ed., pp. 162–178). New York: Wiley.

- Inguglia, C., Ingoglia, S., Liga, F., Coco, A. L., & Cricchio, M. G. L. (2015). Autonomy and relatedness in adolescence and emerging adulthood: Relationships with parental support and psychological distress. *Journal of Adult Development, 22*(1), 1-13.
- Inguglia, C., Ingoglia, S., Liga, F., Coco, A. L., Cricchio, M. G. L., Musso, P., ... Lim, H. J. (2016). Parenting dimensions and internalizing difficulties in Italian and US emerging adults: The intervening role of autonomy and relatedness. *Journal of Child and Family Studies, 25*(2), 419-431.
- Kenny, M. E. (1987). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence, 16*(1), 17-29.
- Kidwell, J. S., Dunham, R. M., Bacho, R. A., Pastorino, E., & Portes, P. R. (1995). Adolescent identity exploration: A test of Erikson's theory of transitional crisis. *Adolescence, 30*(120), 785-793.
- Klinger, E. (1977). *Meaning and void: Inner experience and the incentives in people's lives*. Minneapolis, MN: University of Minnesota Press.
- Lamb, M. E., Hwang, C. P., Ketterlinus, R. D., & Fracasso, M. P. (1999). Parent-child relationships: Development in the context of the family. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (pp. 411–450). Mahwah, NJ: Erlbaum.
- Lamborn, S. D., & Groh, K. (2009). A four-part model of autonomy during emerging adulthood: Associations with adjustment. *International Journal of Behavioral Development, 33*(5), 393-401.

- Lansford, J. E., Criss, M. M., Pettit, G. S., Dodge, K. A. & Bates, J. E. (2003). Friendship quality, peer group affiliation, and peer antisocial behavior as moderators of the link between negative parenting and adolescent externalizing behavior. *Journal of Research on Adolescence, 13*(2), 161-184.
- Leondari, A., & Kiosseoglou, G. (2002). Parental psychological control and attachment in late adolescents and young adults. *Psychological Reports, 90*(3), 1015-1030.
- Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of Adolescence, 29*(3), 361-378.
- Luyckx, K., Soenens, B., Vansteenkiste, M., Goossens, L., & Berzonsky, M. D. (2007). Parental psychological control and dimensions of identity formation in emerging adulthood. *Journal of Family Psychology, 21*(3), 546-550.
- Ma, C. Q., & Huebner, E. S. (2008). Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools, 45*(2), 177-190.
- Maccoby, E. E. (1990). Gender and relationships: A developmental account. *American Psychologist, 45*(4), 513-520.
- Manzeske, D. P., & Stright, A. D. (2009). Parenting styles and emotion regulation: The role of behavioral and psychological control during young adulthood. *Journal of Adult Development, 16*(4), 223-229.

- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551-558.
- Markiewicz, D., Lawford, H., Doyle, A. B., & Haggart, N. (2006). Developmental differences in adolescents' and young adults' use of mothers, fathers, best friends, and romantic partners to fulfill attachment needs. *Journal of Youth and Adolescence, 35*(1), 121-134.
- Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults: McGill friendship questionnaires. *Canadian Journal of Behavioural Science, 31*(2), 130-132.
- Mendelson, M. J., & Kay, A. C. (2003). Positive feelings in friendship: Does imbalance in the relationship matter? *Journal of Social and Personal Relationships, 20*(1), 101-116.
- Moilanen, K. L., & Manuel, M. L. (2017). Parenting, self-regulation and social competence with peers and romantic partners. *Journal of Applied Developmental Psychology, 49*, 46-54.
- Mortimer, J. T., & Call, K. T. (2001). *Arenas of comfort in adolescence: A study of adjustment in context*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Nelson, D. A., & Crick, N. R. (2002). Parental psychological control: Implications for childhood physical and relational aggression. In B. K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 161-189). Washington, DC: American Psychological Association.
- Nelson, L. J., & Barry, C. M. (2005). Distinguishing features of emerging adulthood: The role of self-classification as an adult. *Journal of Adolescent Research, 20*(2), 242-262.

- Nelson, L. J., Padilla-Walker, L. M., Carroll, J. S., Madsen, S. D., Barry, C. M., & Badger, S. (2007). "If you want me to treat you like an adult, start acting like one!" Comparing the criteria that emerging adults and their parents have for adulthood. *Journal of Family Psychology, 21*(4), 665-674.
- Nelson, L. J., Padilla-Walker, L. M., Christensen, K. J., Evans, C. A., & Carroll, J. S. (2011). Parenting in emerging adulthood: An examination of parenting clusters and correlates. *Journal of Youth and Adolescence, 40*(6), 730-743.
- Nolen-Hoeksema, S., & Girgus, J. S. (1994). The emergence of gender differences in depression during adolescence. *Psychological Bulletin, 115*(3), 424-443.
- Pace, T. (1970). Roommate dissatisfaction in residence halls. *Journal of College Student Personnel, 11*(2), 144-147.
- Padilla-Walker, L. M., Memmott-Elison, M. K., & Nelson, L. J. (2017). Positive relationships as an indicator of flourishing during emerging adulthood. In L. M. Padilla-Walker & L. J. Nelson (Eds.), *Flourishing in emerging adulthood: Positive development during the third decade of life* (pp. 212-236). New York, NY: Oxford University Press.
- Padilla-Walker, L. M., & Nelson, L. J. (in press). Parenting emerging adults. In M. H. Bornstein (Ed.), *The Handbook of Parenting*.
- Patock-Peckham, J. A., King, K. M., Morgan-Lopez, A. A., Ulloa, E. C., & Moses, J. M. (2011). Gender-specific mediational links between parenting styles, parental monitoring, impulsiveness, drinking control, and alcohol-related problems. *Journal of Studies on Alcohol and Drugs, 72*(2), 247-258.

- Patock-Peckham, J. A., & Morgan-Lopez, A. A. (2007). College drinking behaviors: Mediation links between parenting styles, parental bonds, depression, and alcohol problems. *Psychology of Addictive Behaviors, 21*(3), 297-306.
- Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and behavior-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development, 72*(2), 583-598.
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education, 76*(4), 343-362.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401.
- Radmacher, K., & Azmitia, M. (2006). Are there gendered pathways to intimacy in early adolescents' and emerging adults' friendships? *Journal of Adolescent Research, 21*(4), 415-448.
- Reed, K., Ferraro, A. J., Lucier-Greer, M., & Barber, C. (2015). Adverse family influences on emerging adult depressive symptoms: A stress process approach to identifying intervention points. *Journal of Child and Family Studies, 24*(9), 2710-2720.
- Rodgers, K. B. & Rose, H. A. (2002). Risk and resiliency factors among adolescents who experience marital transitions. *Journal of Marriage and Family, 64*(4), 1024-1037.
- Roisman, G. I., Masten, A. S., Coatsworth, J. D., & Tellegen, A. (2004). Salient and emerging developmental tasks in the transition to adulthood. *Child Development, 75*(1), 123-133.

- Rosenfield, S., Vertefuille, J., & McAlpine, D. D. (2000). Gender stratification and mental health: An exploration of dimensions of the self. *Social Psychology Quarterly*, 208-223.
- Scaramella, L. V., Conger, R. D., & Simons, R. L. (1999). Parental protective influences and gender-specific increases in adolescent internalizing and externalizing problems. *Journal of Research on Adolescence*, 9(2), 111-141.
- Soenens, B., Vansteenkiste, M., & Luyten, P. (2010). Toward a domain-specific approach to the study of parental psychological control: Distinguishing between dependency-oriented and achievement-oriented psychological control. *Journal of Personality*, 78(1), 217-256.
- Soysa, C. K., & Weiss, A. (2014). Mediating perceived parenting styles–test anxiety relationships: Academic procrastination and maladaptive perfectionism. *Learning and Individual Differences*, 34, 77-85.
- Sprecher, S., & Felmlee, D. (1992). The influence of parents and friends on the quality and stability of romantic relationships: A three-wave longitudinal investigation. *Journal of Marriage and Family*, 54(4), 888-900.
- Steinberg, L., & Silverberg, S. B. (1986). The vicissitudes of autonomy in early adolescence. *Child Development*, 57(4), 841-851.
- Tesch, S. A. (1983). Review of friendship development across the life span. *Human Development*, 26(5), 266-276.
- Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, 14(5), 603-625.

- Urberg, K. A. (1999). Introduction: Some thoughts about studying the influence of peers on children and adolescents. *Merrill-Palmer Quarterly*, 45(1), 1-12.
- Urry, S. A., Nelson, L. J., & Padilla-Walker, L. M. (2011). Mother knows best: Psychological control, child disclosure, and maternal knowledge in emerging adulthood. *Journal of Family Studies*, 17(2), 157-173.
- US Bureau of the Census. (2012). *General mobility of persons 16 years and over, by sex, age, race, and Hispanic origin, region, and labor force status: 2011 to 2012*. Washington, DC: US Government Printing Office.
- <http://www.census.gov/hhes/migration/data/cps/cps2012.html>
- Wagner, C. R., & Abaied, J. L. (2016). Skin conductance level reactivity moderates the association between parental psychological control and relational aggression in emerging adulthood. *Journal of Youth and Adolescence*, 45(4), 687-700.
- Waldo, M., & Fuhrman, A. (1981). Roommate relationships, communication skills, and psychological adjustment in residence halls. *Journal of College and University Student Housing*, 11(1), 31-35.
- Wasserstein, S. B., & La Greca, A. M. (1996). Can peer support buffer against behavioral consequences of parental discord? *Journal of Clinical Child Psychology*, 25(2), 177-182.
- Zarbatany, L., Conley, R., & Pepper, S. (2004). Personality and gender differences in friendship needs and experiences in preadolescence and young adulthood. *International Journal of Behavioral Development*, 28(4), 299-310.

Zimmer-Gembeck, M. J., Madsen, S. D., & Hanisch, M. (2011). Connecting the intrapersonal to the interpersonal: Autonomy, voice, parents, and romantic relationships in emerging adulthood. *European Journal of Developmental Psychology, 8*(5), 509-525.

Appendix

Table 1. Means, standard deviations, and ranges for all study variables.

Variables	<i>M</i>	<i>SD</i>	Range
Mother PC	1.42	0.47	1-3
Father PC	1.36	0.44	1-3
Best Friendship Quality	3.71	0.89	1-5
Identity Exploration	4.04	0.90	1-6
Internalizing Problems	1.56	0.39	1-3
Externalizing Problems	1.47	0.49	1-6

Table 2. Prospective bivariate correlations between all study variables.

Variables	1.	2.	3.	4.	5.	6.
1. Mother PC	-					
2. Father PC	.50***/.36***	-				
3. BF Quality	.01/-.01	.02/-.06	-			
4. Identity Exploration	.20*/-.04	.14/.06	-.04/.11	-		
5. Internalizing Problems	.04/.15*	.10/.14	-.22*/-.04	.20*/.03	-	
6. Externalizing Problems	.24*/.14	.11/.03	-.13/.03	.10/.06	.08/.09	-

*p < .05; **p < .01; ***p < .001

Note: Correlations are reported for males and females separately (males/females).

Table 3. Standardized beta coefficients for the predictive relationship between maternal psychological control and identity exploration, internalizing problems, and externalizing problems.

Variable	Identity Exploration				Internalizing Problems				Externalizing Problems			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Psychological Control	.18*/-.10	.17/.14	.17/-.09	.17/.13	-.14/.07	.08/.05	-.17/.07	.08/.06	-.02/.06	.08/.04	-.05/.06	.08/.04
BF Quality	-	-	-.03/.06	.08/.08	-	-	-.11/-.03	.04/.03	-	-	-.09/-.03	.04/.02
PC*BF Quality	-	-	-.04/.17*	.17/.16	-	-	-.12/-.02	.08/.06	-	-	-.11/.04	.08/.05
Constant	2.9/2.8		3.4/2.5		2.9/2.8		3.4/2.5		2.9/2.8		3.4/2.5	
R ²	.14/.18		.14/.22		.14/.18		.14/.22		.14/.18		.14/.22	

*p < .05; **p < .01; ***p < .001

Note: male and female coefficients are reported as follows: males/females

Table 4. Standardized beta coefficients for the predictive relationship between paternal psychological control and identity exploration, internalizing problems, and externalizing problems.

Variable	Identity Exploration				Internalizing Problems				Externalizing Problems			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
Psychological Control	.16/-.04	.18/.14	.14/-.02	.18/.14	-.03/.05	.09/.06	-.04/.05	.09/.06	-.03/.03	.09/.04	-.03/.03	.08/.04
BF Quality	-	-	-.02/.07	.08/.08	-	-	-.09/-.03	.04/.03	-	-	-.10/-.04	.04/.02
PC*BF Quality	-	-	-.07/.14*	.20/.16	-	-	-.18/.01	.09/.06	-	-	.01/.03	.09/.05
Constant	2.9/2.7		3.3/2.7		2.9/2.7		3.3/2.7		2.9/2.7		3.3/2.7	
R ²	.14/.17		.14/.19		.14/.17		.14/.19		.14/.17		.14/.19	

*p < .05; **p < .01; ***p < .001

Note: male and female coefficients are reported as follows: males/females

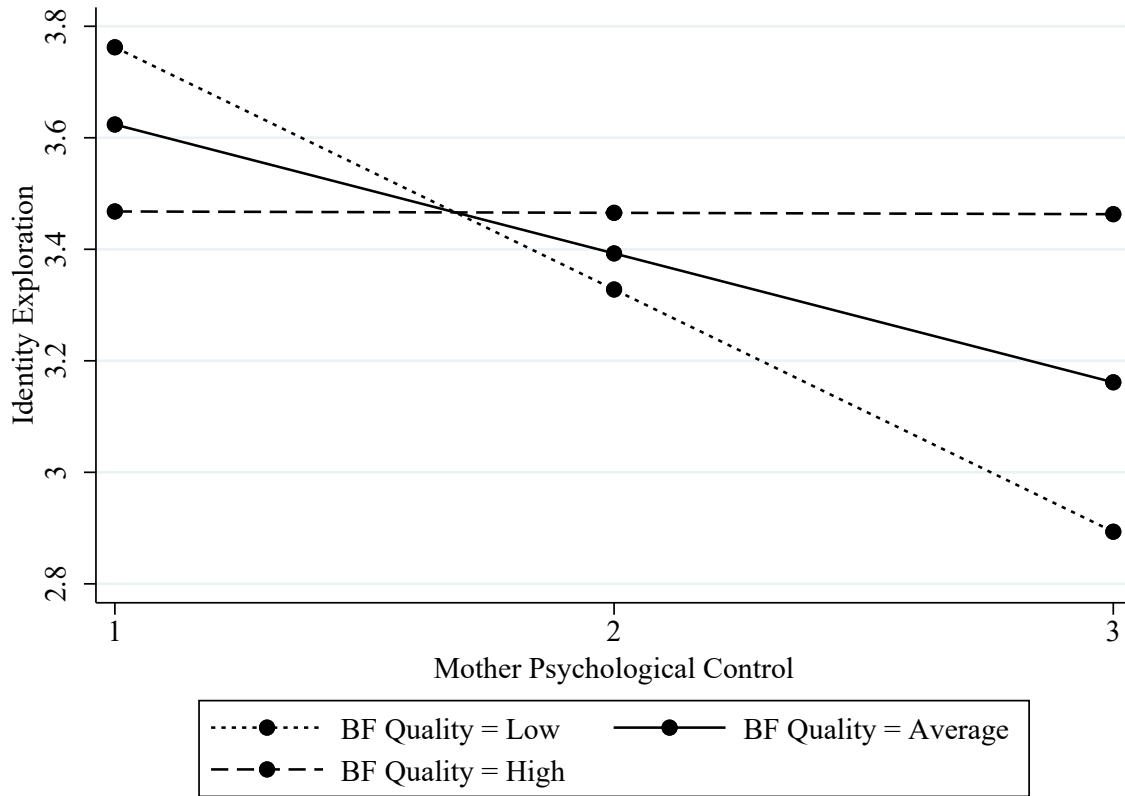


Figure 1. Simple slopes for maternal psychological control predicting identity exploration for females.

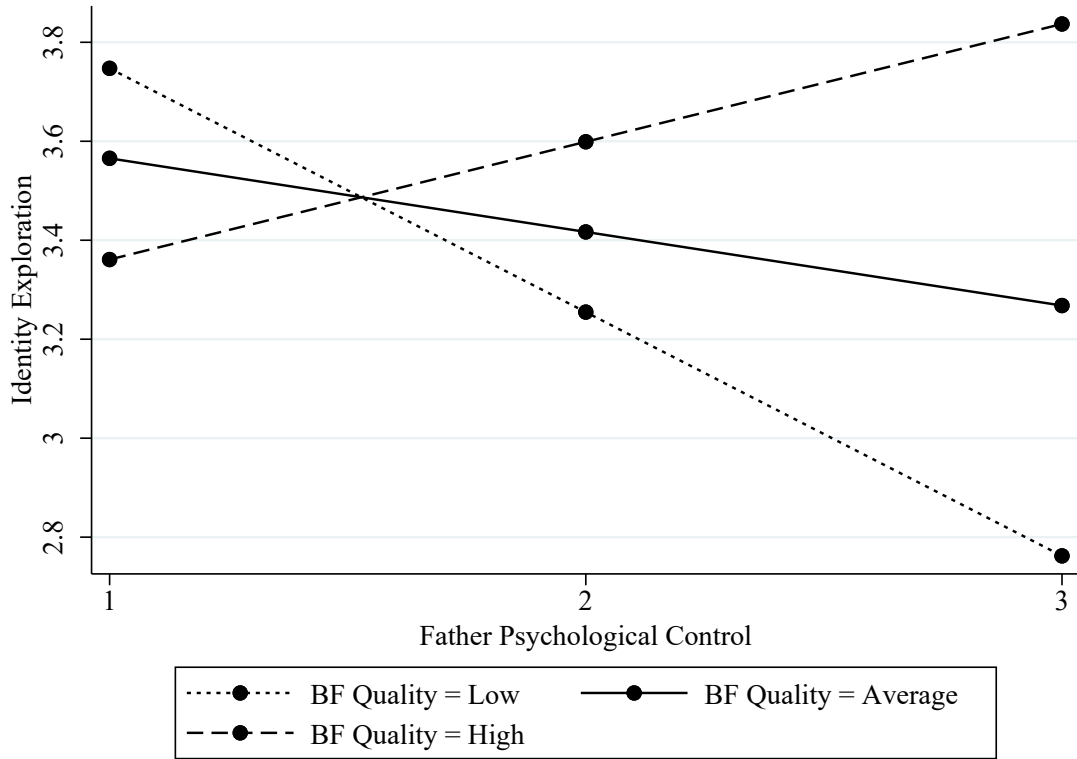


Figure 2. Simple slopes for paternal psychological control predicting identity exploration for females.