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Autonomy Restriction as a Predictor of Adolescent Social Difficulties

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Autonomy Restriction as a Predictor of Adolescent Social Difficulties

An Honors College Project Presented to
the Faculty of the Undergraduate
College of Health and Behavioral Studies
James Madison University

by Abigail Rose Carlson

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Abstract

Parental autonomy inhibition and psychological control during early adolescence were investigated as predictors of teens' passive behaviors in later peer and romantic relationships. Furthermore, such passivity was examined as a predictor of social anxiety in early adulthood. Participants (n = 184) were assessed at ages 13, 18, and 22 by multi-reporter surveys and observations. Autonomy inhibition from parents, including psychological control and negative autonomy and relatedness, generally predicted more avoidance behaviors in peer and romantic relationships. Interestingly, effects were more frequently observed from fathers, suggesting paternal roles may have a stronger impact on the level of avoidance their teens display with closest peers and romantic partners. Social anxiety was only significantly predicted by teens' lack of dominance in romantic interactions and was negatively associated with autonomy inhibition from parents. The study's limitations and significance are discussed.

Autonomy Restriction as a Predictor of Adolescent Social Difficulties

The way that parents encourage or discourage their children to enter and explore the world on their own has been shown to have a large impact on their future relationships and mental health as they mature through adolescence. Typically, a healthy level of autonomy from parents is associated with positive feelings of satisfaction in a person's relationships with others. Conversely, too much autonomy restriction from parents, a consistent byproduct of psychological control, can be associated with frustrations in relationships (Inguglia et al, 2018; Romm & Alvis, 2022). Moreover, a lack of success in close relationships may also be associated with the development of anxiety (Kouros et al, 2017). The dynamic harkens back to self-determination theory, underlining the importance of autonomy in a person's engagement with others. Outside forces and control motivating a child's behavior, while sometimes effective, are likely to leave conflicting feelings and anxiety in their wake (Soenens & Vansteenkiste, 2010). However, research has yet to sufficiently consider the processes by which these associations may develop. Specifically, a failure to establish autonomy in relationships with parents during early adolescence may result in an underdeveloped competence in peer relationships, undermining the adolescent/young adult's agency and assertion with others. Such passivity in relationships may in turn be predictive of higher levels of anxiety, as without a voice in relationships, esteem and agency are inhibited which may result in youth placing too much importance on external environmental factors. Indeed, oftentimes people who feel a lack of control in relationships develop anxiety from this unpredictability and feelings of helplessness (Bianchi et al, 2020). Thus, there is potentially a great deal of importance on the early development of autonomy from parents to encourage better interpersonal skills and, perhaps, better mental health outcomes as well.

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Parental Autonomy and Relatedness Inhibition

Parenting behavior has generally been classified by Baumrind as authoritarian, authoritative, and/or permissive. Authoritarian parents are those who use high levels of psychological control and set strict rules for their children; they expect their children to take their word for what the world is. In contrast, authoritative parents encourage and promote autonomy, trying to reason and explain the world to their children with conversation and questions; they encourage the child to be independent. Finally, the permissive parent is one who rarely intervenes and shows less interest to the child overall (Grolnick, 2009). The present study focuses largely on parents who inhibit autonomy and relatedness in raising their children. The psychological control these parents practice typically includes inducing guilt, instilling anxiety, providing conditional love, and making their children insecure in their perspective. Such authoritarian parent-child relationships tend to produce children who feel their parents' love is conditional and contingent on obedience or performative behaviors (Soenens & Byer 2012). Helicopter parenting (a colloquialism for authoritarian parenting) is also associated with low parental attachment (Clark & Ladd, 2000; Fitzgerald, 2015). Research that has probed the patterns of different types of parenting in late-elementary age children found that children of authoritarian parents struggled socially and were very moody (Grolnick, 2009). Additionally, adolescents whose parents did not provide a certain level of autonomy support were more depressed (Van der Giessen, Branje, & Meeus). When investigating a sample of high school students, fathers' inhibition of autonomy and relatedness was associated with lower levels of ego development (Allen, 1994). Such research highlights the powerful nature of these parenting constructs as potential long-term predictors of social and psychological well-being for children. The present inquiry aims to extend previous research in this domain by exploring how varying

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degrees of autonomy and relatedness inhibition from parents are predictive of peer relationship functioning and subsequent anxiety as youth progress through adolescence.

Effects of Parental Autonomy and Relatedness Inhibition on Passivity in Relationships

There are important associations between autonomy inhibition and the failures of youths within peer relationships during adolescence. Specifically, the present study focuses on shortcomings in the assertion/passivity aspect of interpersonal competence. In a Belgium study of adolescents, researchers found evidence supporting the notion of attachment theory, that peer and romantic relationships are echoes of patterned interactions between children and their parents (Van Petegem et al, 2018). Parental autonomy inhibition is suggested to have an important impact on increasing unmitigated communion, or in other words, preoccupation with the people around you. When adolescents focus on others too much, it may result in problems in friendships and interpersonal competence like lack of assertion and depression (Aubé, 2008). Though too much focus on others can be dangerous to the mental well-being of adolescents, balanced and healthy levels of focus on others and ourselves are positively associated with higher ratings on measures of satisfaction of life as well as reports of positive feelings such as being enthusiastic and proud (Aubé, 2008). The negative outcomes of excessive external focus have also been detailed by higher scores of depression and reports of negative feelings such as being 'afraid' and 'nervous' (Aubé, 2008). The extensive focus on others also has a positive predictive relationship with neuroticism, though it is not clear which one precedes the other (Aubé, 2008). When investigating adolescents in Beijing, researchers found that those raised with authoritarian parenting styles were also more likely to have low 'social functioning,' which was defined with social-appropriateness ratings on behaviors the children exhibited in situations mostly in school with peers (Zhou et al, 2004). Overall, then, autonomy inhibition generally has

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a negative impact on adolescents' focus on others and themselves; furthermore, adolescents can come to expect negative outcomes in relationships and mental health (Aubé, 2008; Van Petegem et al, 2018). Researchers within a 2000 study by Clark & Ladd suggested parental psychological control contributed to poor peer interactions in their children as a result of inhibitions and fears of new situations. For children raised in environments of psychological control, studies have found behavioral maladjustment and problems with self-regulation in regard to how a teen handles peer acceptance/rejection and tendencies to victimize themselves, suggesting possible links to mental health outcomes (Moilanen & Manuel, 2017). Though we can only make educated hypotheses about *why* there is a relationship between negative behaviors in relationships and parental psychological control, the present examination hopes to look into and make clearer the predictive relationship, or lack thereof, between psychological autonomy inhibition and relationship struggles via passivity and submission.

Researchers have similarly inquired into how parent-adolescent relationship quality may predict aspects of adolescent romantic relationships. This research has found that parents' involvement in their offspring's romantic relationships decreases as their children become adults; therefore, most involvement centers on *adolescent* romantic and peer relationships (Kan et al, 2008). More recent findings have shown that lower levels of psychological control are directly tied to higher levels of self-regulation and therefore romantic competence (Moilanen & Manuel, 2017). Researchers also found that higher levels of psychological control are tied to high emotionality in adolescents and difficulty communicating in the midst of conflict resolution (Moilanen & Manuel, 2017). There is considerably less research that has examined how parental autonomy inhibition may contribute to teen functioning in romantic relationships; however, because romantic relationships are essentially *peer* relationships of primary interest by late

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adolescence, it stands to reason that the same processes that are suspected to occur with same-gendered peers also play out similarly with romantic partners. The present study thus aims to make clearer how autonomy inhibition and control relates to the development of interpersonal competence that is relevant to aspects of both peer and romantic relationships in adolescence, particularly as these constructs have received much less attention in the romantic domain.

Passivity in Relationships and Anxiety

Though the prevalence of anxiety can vary within adolescents, avoidance of social situations and low relationship initiation are associated with higher levels of social anxiety across all adolescents (Bianchi et al, 2020). In a study investigating interpersonal competence in adolescents, self-report data on measurement scales such as the Social Anxiety Scale for Adolescents (SAS-A), The Interpersonal Reactivity Index Scale (IRI), and the Inventory of Parent and Peer Attachment found that the strongest predictors of social anxiety were poor social interactions during adolescence (Bianchi et al, 2020). Generally speaking, we may conclude that worse relationships are associated with higher levels of anxiety. This research also shows that lower levels of peer communication skills and anxiety can work in a cyclic manner where poor relationship initiation, submission, and poor communication can lead to developing anxiety; subsequently, the developed anxiety predicts the worsening of the communication skills which predicts more anxiety (Bianchi et al, 2020). Because there is little research speaking directly to passivity in relationships as a predictor of anxiety, the literature on the inverse of this relationship and insecure attachment can act as a proxy since passivity is often seen in those with insecure attachments. On the subject of passiveness, when examining the relationship between submissive behaviors and anxiety, some research has found that anxiety can in fact predict submissive behaviors from fear of negative evaluation by their peers they perceive as more

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hostile (Trower & Gilbert, 1989). The fear of negative evaluation is sourced in a belief of abandonment or alienation, so anxious people actively avoid this with behaviors like anger suppression (Kidd & Sheffield, 2005). Such passivity has also been found to perpetuate hostile and dominant behaviors which has the individual retreating in the first place, thus worsening symptoms of anxiety (Zimmer, 2016). While considering attachment styles, self-esteem, and symptoms of anxiety and depression, it was found that insecure attachment positively correlated with anxiety symptoms as well as low self-esteem (Lee & Hankin, 2009). Even when controlling for initial symptoms, insecure attachment had a significant predictive relationship with anxiety (Lee & Hankin, 2009). Santiago et al. (2020) also found that insecure attachment was a significant risk factor for symptoms of anxiety. As such, the present inspection supposes passivity in peer and romantic relationships will be linked with anxiety outcomes.

Hypotheses of the Present Study

In this study, data were collected longitudinally from teens and their parents regarding levels of parental autonomy and control, passivity in peer and romantic relationships, and subsequent levels of anxiety. Previous research indicates that parent autonomy support, to a certain extent, is associated with higher levels of relationship initiation and psychological control is associated with submission (Bianchi et al, 2020). Low levels of positive communication as well as increased submission in romantic and peer relationships have been associated with higher levels of social and attachment anxiety respectively (Kouros et al, 2017). This suggests autonomy is beneficial to the mental well-being of adolescents as they grow, and lower levels of passivity may decrease the likelihood of anxieties emerging in the lives of children as they develop. The goal of the current analysis was to further the inspection detailed with previous

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research by following this hypothesized chain of development from adolescence to young adulthood.

From the prior research, it was first hypothesized that parental autonomy inhibition will predict higher levels of passivity in relationships. Second, it was hypothesized that such passivity in friendships and romantic relationships would be predictive of higher future levels of anxiety for participants as they enter young adulthood, after controlling for earlier levels of anxiety. Finally, it was predicted that passivity would mediate the predictive relationship between parental autonomy and relatedness inhibition and anxiety.

Methods

Participants and Procedure

This report is drawn from a larger longitudinal investigation of adolescent social development in both familial and peer contexts. Participants included 184 adolescents (86 males and 98 females), assessed across a 14-year period. The sample was racially/ethnically and socioeconomically diverse; of the participants, 58% identified themselves as Caucasian, 29% as African American, and 13% as being from other or mixed ethnic groups. Adolescents' mothers reported a median family income in the \$40,000 to \$59,999 range during the first year of the study, which was comparable to the national median family income of \$53,350 in 1997, the year of initial data collection (U.S. Bureau of the Census, 2010). Eighteen percent of the sample reported annual family income less than \$20,000, and 33% reported annual family income greater than \$60,000. The sample appeared comparable to the overall population of the school from which it was recruited in terms of racial/ethnic composition (42% non-White in sample vs. ~ 40% non-White in school) and comparable to the socioeconomic status of the larger

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community (mean household income=\$43,618 in sample vs. \$48,000 in the community at large).

Participants were recruited via an initial mailing to all parents of students in the 7th and 8th grades of middle school along with follow-up contact efforts at school lunches. Adolescents who indicated they were interested, were contacted by telephone. Of all students eligible for participation, 63% agreed to participate either as target participants or as peers providing collateral information. Adolescents provided informed assent, and their parents provided informed consent before each assessment (until participants were old enough to provide informed consent). Interviews took place in private offices within a university academic building. Adolescents were all paid for their participation. Participants' data were protected by a Confidentiality Certificate issued by the U.S. Department of Health and Human Services, which further protects information from subpoena by federal, state, and local courts. If necessary, transportation and childcare were provided to participants.

The current study used four waves of measurement, observing participants performing tasks centered around topics of disagreement with their parents as well as separately completing questionnaires about their parents' behaviors and attitudes toward the participants when they were approximately 13. At age 18 participants, as well as their closest friends (chosen by the participant), and romantic partners responded to questionnaires and participated in interaction tasks concerning passivity in friendship and romantic relationships. Finally, at age 22, participants completed questionnaires regarding their social anxiety.

Measures

Autonomy and Relatedness

Autonomy and Relatedness (AR)

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At age 13, participants engaged in an 8-minute revealed differences task (recorded on video) in which they conversed about a family/relationship issue that they indicated disagreement on, for example, grades, friends, money, and household rules with an individual parent. This study was interested in behaviors inhibiting autonomy and relatedness, with indicators including pressuring the other to agree, placating the other, and over personalizing disagreements, as well as ignoring or devaluing the other. After trained coders watched the video and read the transcript of the teens and their individual parents, they coded the interactions based on the autonomy and relatedness coding system manual to determine the outcomes in the subscales (Allen, Hauser, Bell, Boykin, & Tate, 1996). Higher scores on each scale indicated greater levels of the observed behavior. The scales are valid and reliable based on scrutiny including reassessment of the same subjects after a length of time as well as Spearman-Brown correlations determining reliability between raters (Allen, Hauser, Bell, & O'Connor, 1994). The intraclass correlation coefficient between coders for interactions was .77 for fathers and .69 for mothers.

Childhood Report of Parenting Behavior (CRPBI)

At age 13, participants and their parents were asked to answer a number of questions about their individual parent's attitude and behavior towards the child (with different forms for different parents). The CRPBI examines concepts related to the three subscales regarding psychological control vs. psychological autonomy, parental acceptance vs. rejection, and firm vs. relaxed control (Schludermann & Schludermann, 1988). On the subscale of control vs. autonomy, participants were given statements like "I tell my daughter all the things I have done for her" and "I only keep rules when it suits me," where high agreement with statements indicated more control. The acceptance vs. rejection subscale contained statements like "I smile

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at my daughter often” and “I am easy to talk to,” where higher agreement ratings indicated more acceptance. The firm vs. relaxed control subscale had statements like “I let my daughter off easy when she does something wrong” (coded reversely) and “I am very strict with my daughter” (coded normally). Higher scores on this subscale signified more firm parents. Statements had altered perspectives for the children. Each measure was a three-point scale including 1 = ‘not like’, 2 = ‘somewhat like,’ and 3 = ‘a lot like’ (Collins, 1990; Schludermann & Schludermann, 1970). Internal consistency for this measure was good for teen about mom (alpha = .82), teen about dad (alpha = .82), mom about self (alpha = .79), and dad about self (alpha = .74)

Passivity in Relationships

Peer and Romantic Relationships: Autonomy and Relatedness Coding System (AR)

Participants aged 18 engaged in a separate 8 minute revealed differences task (recorded on video) with both their best friend, and (if applicable) romantic partner wherein they conversed over multiple topics of disagreement determined before the interaction. For the purpose of the investigation, the focus within this measure was placed on the dyadic codes specific to teen dominance and avoidance in the interaction. After trained coders watched the video and read the transcript of the teens and their romantic partners, they coded the interactions based on the autonomy and relatedness coding system manual for adolescent peer and romantic partner dyads to determine the outcomes in the dominance and avoidance subscales (Allen, Hauser, Bell, Boykin, & Tate, 1996). Higher scores on each scale indicated more of the behavior. The scales are valid and reliable based on investigation including reassessment of the same subjects after a length of time as well as Spearman-Brown correlations determining reliability between raters (Allen, Hauser, Bell, & O’Connor, 1994). For our evaluation, dominance will be reverse-coded to serve as a measure of passivity in interactions with peers and romantic partners. The

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intraclass correlation coefficient between coders was for .51 avoidant behaviors with peers and .81 for dominant behaviors with peers. It was .72 for avoidant behaviors with romantic partners and .68 for dominant behaviors with romantic partners.

Pupil Evaluation Inventory (PEIP)

At age 18, participants along with their closest peer completed a questionnaire containing 35 items assessing how much withdrawal, aggression, and likeability were present for the adolescent (Pekarik et al, 1976). The subscale observed at this wave of measurement was the withdrawal scale containing 9 items such as “[She] is too shy to make friends easily,” and “[She] is upset when called on to answer questions in class.” Subjects rated each statement on a three-point Likert scale from 0 = not true to 2 = very often or often true. Higher scores indicated more withdrawal in the adolescents’ behaviors. It was successfully tested for validity and test-retest reliability (Weintraub et al, 1978). Internal consistency for this measure was good ($\alpha = .72$).

Multi-Item Measure of Adult Romantic Attachment (MAR)

At age 18, participants were given a list of 36 items sourced from previous measures of touch, sex, social behavior, attachment, and personality (Brennan, 1998). The data was self-reported and measured on a scale of 1 = disagree strongly, to 4 = neutral/mixed, to 7 = agree strongly. Some items were reverse coded so participants wouldn't reduce participant bias. The scale of interest for the present study is avoidance in romantic relationships. The measure is reliable and valid as indicated by a factor analysis finding that the measure does indeed reveal the two distinct factors of avoidance and anxiety. Furthermore, a cluster analysis found correlations between items detailing four distinct descriptions within romantic attachment of preoccupied, dismissing, secure, and fearful (Bartholomew, 1990). Internal consistency of the avoidance scale was very good ($\alpha = .91$).

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Anxiety

Social Anxiety Scale for Adolescents (SAS).

At age 22 participants completed the SAS for Adolescents measuring on different subscales: social avoidance and distress in new situations, fear of negative evaluation, and general social avoidance and distress (LaGreca, 1998). The scale is valid as indicated from the ability to predict trait anxiety and depression with behaviorally disturbed children (Gonzalez, Field, Lasko, LaGreca, & Lahey, 1996). Reliability was determined by factor loadings which indicated that items on each scale are related to and correlated with one another within their subscales (Gonzalez, Field, Lasko, LaGreca, & Lahey, 1996). Internal consistency was very good ($\alpha = .94$).

Results

Preliminary Analyses

General trends were initially examined between all variables using simple correlations. Results of correlational analyses can be seen in Table 2. To put the scores from descriptive statistical analyses represented in Table 1 into context, the autonomy inhibition variables (AR scale) ranged from 0 (no autonomy inhibition from the parent) to 4 (a great deal of inhibition from the parent). The scores of measures for psychological control (CRPBI) as reported by teens and the parents themselves were summations of ratings on each item of the subscale ranging from 11 (not much psychological control) to 33 (a lot of psychological control). Scores for passivity measured by coded dominance and avoidance in the AR coding manual for peers and romantic partners, a numeric value representing a categorical interpretation of the prevalent behaviors, ranged from 0 (no avoidance/dominance demonstrated by the teen) to 4 (a great deal of avoidance/dominance demonstrated by the teen). Avoidance from the self-report data (MAR)

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used summation scores from each item on the subscale, ranging from scores of 18 (almost no avoidance) to 126 (a lot of avoidant tendencies). Withdrawal scores (PEIP) averaged the ratings from the 9 items and extended from 0 (little-to-no no teen withdrawal) to 2 (much withdrawal). Finally, the social anxiety scale scores come from the sum of 18 items ranked on a scale of 5, so scores ranged from 18 (no/very little social anxiety symptoms) to 90 (many social anxiety symptoms).

Primary Analyses

Hypothesis 1. *Parental autonomy inhibition will predict higher levels of passivity in relationships.*

Mothers' Autonomy Inhibition

Simple correlations were calculated between the mothers' autonomy-inhibiting behaviors as well as the measures of passive behaviors in adolescents' peer and romantic relationships to determine which relationships required further investigation in regression analysis. Observed and coded negative autonomy (AR scale) negatively correlated with teens' dominance ($r = -.23, p < .01$) in their peer relationships such that more autonomy inhibition predicted less dominance. Maternal psychological control as reported by the adolescents in the CRPBI significantly correlated with teens' avoidance ($r = .34, p \leq .01$) in peer relationships (AR scale) such that more control from the mother predicted more avoidance with their peers, and this positive relationship reappeared with the same variables but consisting of data provided by the mothers themselves ($r = .21, p \leq .05$). More psychological control as reported by the teens in the CRPBI ($r = .22, p \leq .05$) was also correlated with more avoidance in their *romantic* relationships (AR scale), but this significant effect was not seen with the mothers' reported data.

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Regression analyses included gender and income covariates due to the documented associations with the other variables included in this study. Results demonstrated a significant negative relationship between maternal negative AR at 13 and teen dominance ($\beta = -.27, p < .01$) such that more autonomy inhibition predicted less dominance (both using the AR scale). Regressions also supported a significant relationship between more psychological control reported by both mothers and teens on the CRPBI and greater avoidance in peer interactions coded with the AR coding manual ($\beta = .19, p < .05$). When examining romantic relationships, there were no significant effects between the teen reports of maternal psychological control at age 13 and observed avoidance. However, when examining interactions coded by the AR coding manual for autonomy inhibition at age 13, mothers' autonomy inhibition significantly predicted less demonstrations of adolescents' avoidance ($\beta = -.28, p < .05$) in romantic relationships. In contrast to peer relationships, no significant effects were found between teen dominance in romantic relationships and autonomy inhibition from their mothers (both coded on the AR scale).

Fathers' Autonomy Inhibition

Similar to analyses done with the mothers, correlations were found between the same autonomy-inhibiting behaviors from fathers and the measures of passivity. In peer relationships, more psychological control as reported by the teens on the CRPBI predicted more avoidant behaviors observed from teens ($r = .50, p < .01$) and less dominance ($r = -.21, p \leq .05$) in their coded interactions (with the AR scale). This effect did not present itself in the data of psychological control provided by the fathers on the CRPBI. Higher levels of psychological control as reported by both fathers ($r = .33, p \leq .05$) and adolescents ($r = .28, p \leq .05$) on the CRPBI were positively correlated with avoidant tendencies in romantic relationships coded with the AR coding manual, such that more control predicted more avoidance with their teens'

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romantic partners. From father-reported data on the CRPBI, there was also a positive correlation between their perceived psychological control and the teen-reported avoidant behaviors ($r = .33$, $p \leq .01$) with their RPs such that more control predicted more avoidance. Autonomy inhibition with the AR scale observed from the fathers significantly correlated with teens' self-reports of avoidance in romantic relationships such that more inhibition predicted more avoidance with the teens' RPs coded with the AR coding manual ($r = .33$, $p \leq .01$).

Regression analyses revealed fathers' psychological control as reported by teens on the CRPBI significantly predicted fewer dominant actions ($\beta = -.20$, $p < .05$) carried out by the teens in peer interactions and significantly predicted more avoidance both coded on the AR scale ($\beta = .48$, $p < .01$). There were no significant effects between paternal autonomy inhibition and adolescents' withdrawal in peer relationships. Data analysis also found significant relationships between autonomy inhibition on the AR scale from their fathers and teens' self-report of avoidance in romantic relationships on the MAR ($\beta = .34$, $p < .01$), such that more negative autonomy predicted more avoidance. Similarly, higher paternal psychological control reported by both fathers ($\beta = .34$, $p < .05$) and teens ($\beta = .26$, $p < .05$) on the CPRBI significantly predicted more observed avoidance in teens' romantic relationships coded with the AR coding manual. There were no significant effects observed between teen dominance in romantic relationships and autonomy inhibition from the father. See Figure 1.

Hypothesis 2. *Passivity in friendships and romantic relationships would be predictive of higher levels of anxiety for participants as they enter young adulthood.*

Passivity in Friendships

Anxiety had no significant associations with the peer relationship data concerning the adolescents' avoidance, dominance, or withdrawal.

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Passivity in Romantic Relationships

The only significant correlation found when investigating the relationship between passive behaviors in romantic relationships and social anxiety symptoms was such that more teen dominance over their romantic partner coded on the AR scale was correlated with less social anxiety from the SAS ($r = -.25, p \leq .05$). In regression analysis, there was a trend-level effect between dominance and total social anxiety ($\beta = -.24, p = .055$) such that more dominance predicted less anxiety. See Figure 2.

Hypothesis 3. *Passivity will mediate the predictive relationship between parental autonomy and relatedness inhibition and symptoms of anxiety.*

In regression analyses, only maternal self-reported psychological control ($\beta = -.19, p < .05$) and teen-reported paternal psychological control ($\beta = -.27, p < .00$) both from the CRPBI emerged as predictors of social anxiety at age 21 such that more psychological control predicted less social anxiety. Because of these significant negative associations along with the nearly significant association between the observed teens' dominance with their romantic partners and social anxiety, it was decided to complete further analysis on the possible mediating effect teen dominance may have on the relationship between maternal psychological control and social anxiety. Rather than mediate this association, dominance emerged as a second independent predictor, with mothers' psychological control, on presented symptoms of social anxiety ($\beta = -.26, p < .05$).

Discussion

The findings of the present study provide interesting detail to the generally understood dynamics between parents and their children with regard to autonomy inhibition that originally prompted the interest in their examination. The first hypothesis was mainly supported with some

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evidence to suggest that parental autonomy inhibition in early adolescence predicts passivity in both romantic and peer relationships in later adolescence. As hypothesized, more autonomy inhibition, including psychological control and negative AR, generally predicted more avoidant behaviors in peer and romantic relationships no matter the parent. Interestingly, effects were larger from the father thus, suggesting paternal roles may be stronger predecessors to the level of avoidance their teens display with romantic partners and closest peers. Results are aligned with previous research which also divided into questionnaires and observations of autonomy and its effect on romantic relationships; however, the significant relationships were between positive autonomy and less avoidance -- the inverse of our investigated variables' relationship (Scharf & Mayseless, 2008). Some studies have also found that paternal relatedness to children is more strongly tied to relationship quality and duration compared to maternal relatedness (Scharf & Mayseless, 2008). This pattern appears in other research as well, which has indicated that parents' rejection of their children or over-control of them significantly predicted children's unhealthy attachments to others wherein they often retreat from conflict (Hazan & Shaver, 1994; Scharf & Mayseless, 2001). It seemed there was no significant relationship between autonomy inhibition on how dominant teens were with their romantic partner, and this pattern holds true for fathers in other research; however, typically mothers' autonomy and relatedness do play an important role in their children's agency in relationships; therefore, the present study's outcomes do not align with this past finding (Walper & Wendt, 2015). Contrary to romantic relationships, both mothers' and fathers' behaviors impacted teens' dominance in their peer relationships. The measures indicating this significance specifically tie the teens' *perception* of their fathers' psychological control to their dominance with close friends. Since actual observations of

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behavior and the fathers' self-reports did not yield significant results, it would be interesting to further probe why the children's perspectives tended toward indicating more psychological control and furthermore why this perception would predict behaviors related to dominance in their future friendships. Suggestions of the parent-effect model speak to the patterns found by saying that when adolescents perceive supportive relationships with their parents, they perceive the same positivity in their friendships (De Goede et al, 2009). Though the sweep of the current examination does not pursue the following concept at great depth, De Goede et al. (2009) does find that the aforementioned relationship is bidirectional (including a friend-effect model), and as the adolescent ages from early to middle adolescence, the relationships with their parents are receiving more influence from their peer relationships. While fathers' autonomy inhibition only predicted dominance by way of their teens' reports, mothers' actual observed behaviors implementing negative autonomy and relatedness significantly impacted their children's dominance in a negative way with peers. A possible explanation could be that as children progress into adolescence, they venture away from the foundation their parents provide to interact with others securely and confidently. When this foundation is harmed or eroded by negative interactions, the adolescent may hesitate and lack confidence with their peers (Shomaker & Furman, 2009).

The second hypothesis was not substantially supported, as only one out of the six investigated variables measuring passivity only somewhat significantly predicted total social anxiety symptoms: a medium effect from coded dominance in romantic interactions. Findings contradict previous research which established significant relationships between submissive behaviors and social anxiety; however, it should be mentioned that the measures used in the

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present study do not represent passivity as accurately as those in research supporting a significant relationship (e.g., submission as seen through body movements and patterns of speech). In some research, the generally accepted predictive relationships between passivity and anxiety have also been found to vary between boys and girls, where boys' social anxiety is more dependent on the submission/dominance dynamic than it is for girls (Weeks et al, 2011). Though this investigation did not consider gender differences while observing participants with their partners, it may be beneficial to pursue in future research. Those relations that were found were in the predicted direction: less dominant behaviors in romantic interactions were predictive of more anxiety. There is much more research specifically addressing avoidance in peer relationships, but there is a great deal lacking in romantic relationships; furthermore, the dynamic lacking significance in this analysis should be the subject of future research, so there could possibly be an understanding of this behavior between partners. Much research also addresses the reverse of the proposed connection with anxiety as a preceding variable that negatively impacts the later developed romantic relationships. This situation proves to be significant often, so perhaps the role adolescent relationships play in later developed social anxiety cannot be seen when centering questions around only passive behaviors. Strangely, many passivity measures, with the exception of withdrawal on the PEIP, significantly correlated with one another, but only one somewhat-significantly predicted social anxiety. This poses questions as to the lack of mutual significance that could possibly be cleared up with further research in a clinical sample.

Regarding the third hypothesis, no passive behaviors seemed to have a significant mediating effect on the relationships between autonomy inhibition and total social anxiety.

Contrary to what researchers believed, correlational analyses seemed to suggest more autonomy

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inhibition, both from observable behavior and self-report data was associated with fewer symptoms of social anxiety. Our findings contradict general patterns upheld by other research that finds more autonomy support predicts less anxiety rather than the reverse (Scharf & Mayseless, 2008).

There are several strengths and limitations of the present study. To begin, the study's biggest strength lies with its longevity. By staying with the same subjects over the span of 14 years, there is a great deal of data including the subjects' parents, friends, and romantic partners. With longevity, it must be considered that there are many confounding variables each individual faces, and the only countermeasure can be to increase sample size. The sample size was somewhat large, but it lacked the diversity necessary to confidently generalize past the scope of the local community in the southeastern United States. With a more representative sample, there would be stronger support to already existing literature about Latin American and Asian populations that demonstrate the effects of hypothesis one and two (Santiago, 2020; Zhou et al, 2004). All things considered, further research could attempt to generalize across variable ethnic communities since the present study mainly sought to if a relationship existed at all not necessarily aiming to generalize said relationship cross-culturally. Since the topics addressed do not allow for ethical experimental manipulation, causal conclusions regarding the data cannot be made. Along with lack of causality, the observational methods could possibly produce the Hawthorne effect, when participants alter their behavior due to being monitored, thus tainting the ecological validity of the observed interactions. When deciding on measures to investigate with, there were attempts to avoid too much self-report data because of the lacking reliability, but considering ethical restrictions, the research has strength in its objective and widely accepted coding manuals for reviewing autonomy and relatedness.

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Another limitation to the study lies with its variable data where multiple data sets were skewed a certain way. A strong example of this would be the data from the social anxiety scale. Most of the participants were skewed to lower ratings on the scale. If data collection had been done with a clinical pool of participants, it is possible researchers may have observed stronger predictive relationships. Since few-to-no participants had diagnosed social anxiety, it was difficult to see any significant predictors within the passivity variables. Speaking to other skewed data, it is possible type-1 errors have occurred, and results should be taken lightly until further replication can substantiate found patterns. Additionally, the data collected with the CRPBI and coded interactions on the AR scale neglects to consider the cognition behind parents' behaviors. Looking only at their behaviors is a great way to operationally define autonomy inhibition, but future research should attempt to understand the motivations behind these behaviors so it can be understood if positive and healthy intentions behind controlling behaviors predict less anxiety while controlling behaviors born out of parents' fear or anxiety would predict more anxiety among their children. This could potentially explain the counterintuitive negative relationship between psychological control and social anxiety found in our analyses.

Prospective research should also consider giving more attention to the unique outcomes of adolescent relationships divided by the sex of the parent and compare data methods to help further our understanding of interpersonal relationships beginning with parents through to friends and romantic partners. Interestingly, the results sometimes varied based on who is reporting the data. Inter-rater reliability between the parent and teen for the measures of psychological control was significant with a correlation of .39 for mothers/teens ($p < .00$) and .23 ($p < .05$) for fathers/teens. The weaker correlation with fathers/teens aligns with the differing relationships observed depending on if the father or teen reported. It could be substantial to social and

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cognitive theory to see how the perceptions compare to one another in addition to the actual observations.

Even though there were certain limitations to the study, its results regarding the first two hypotheses mostly align with the literature around parental autonomy inhibition and passivity in relationships. The relationship between passivity and social anxiety, though significant, was not across many variables, and should be questioned further. For the purposes of a mediation check, correlational analyses revealed results of a counterintuitive relationship between autonomy inhibition and anxiety whose clarity would benefit from replication in the future. Despite a couple unexpected findings, the analysis addressed a subject that remains largely relevant and important to positive child-rearing and mental health outcomes in late adolescence and early adulthood. For parents and adolescents, acknowledging the negative patterns around autonomy inhibition and psychological control could lead to healthier relationships with friends and romantic partners. In some cases, these healthier relationships can be beneficial to the mental health outcomes of the children as they age.

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Table 1. Univariate Statistics

	N	Mean	Std. Dev	Minimum	Maximum
1. Mom's Psych Control v. Autonomy (Teen Rpt, 13)	182	15.59	3.66	10	26
2. Mom's Psych Control v. Autonomy (Mom Rpt, 13)	175	14.14	3.55	10	29
3. Mom's Negative AR to Youth (Coded Interaction, 13)	166	0.72	0.38	0	2.20
4. Dad's Psych Control v. Autonomy (Teen Rpt, 13)	158	14.43	3.80	10	29
5. Dad's Psych Control v. Autonomy (Dad Rpt, 13)	109	13.67	3.12	10	25
6. Dad's Negative AR to Youth (Coded Interaction, 13)	97	0.49	0.33	0	1.50
7. CP Teen Dominance (Coded Interaction, 18)	129	2.10	0.66	.25	3.75
8. CP Teen Avoidance (Coded Interaction, 18)	129	1.34	0.64	0	3.25
9. CP Teen Withdrawal (Peer Rpt, 18)	139	1.33	1.85	0	9
10. RP Teen Dominance (Coded Interaction, 18)	75	2.12	0.53	1	3.75
11. RP Teen Avoidance (Coded Interaction, 18)	75	1.34	0.85	0	3.83
12. MAR Teen Avoidance (Teen Rpt, 18)	97	36.02	15.74	18	79
13. Total Social Anxiety (Teen Rpt, 22)	160	33.91	12.34	18	61.41

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Table 2. Correlations between all study variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Mom's Psych Control v. Autonomy (Teen Rpt, 13)	-	.39***	.12	.68***	.14	.13	-.04	.34***	.08	.14	.22*	.14	-.16*
2. Mom's Psych Control v. Autonomy (Mom Rpt, 13)		-	.07	.30***	.16	.23*	.06	.21*	.07	.03	.21	.10	-.21**
3. Mom's Negative AR to Youth (Coded Interaction, 13)			-	.07	.17	.14	-.23**	.03	.08	.09	-.14	.05	-.12
4. Dad's Psych Control v. Autonomy (Teen Rpt, 13)				-	.23*	.22*	-.21*	.50***	.03	.08	.28*	.05	-.29***
5. Dad's Psych Control v. Autonomy (Dad Rpt, 13)					-	.29**	-.02	-.02	.10	-.25	.33*	.33**	-.16
6. Dad's Negative AR to Youth (Coded Interaction, 13)						-	-.12	-.01	.00	.05	.08	.33*	-.12
7. CP Teen Dominance (Coded Interaction, 18)							-	-.47***	-.08	.47***	-.34**	.02	-.13
8. CP Teen Avoidance (Coded Interaction, 18)								-	.07	-.19	.24	.02	-.12
9. CP Teen Withdrawal (Peer Rpt, 18)									-	-.09	.16	.00	.01
10. RP Teen Dominance (Coded Interaction, 18)										-	-.42***	-.00	.25*
11. RP Teen Avoidance (Coded Interaction, 18)											-	.26*	-.11
12. MAR Teen Avoidance (Teen Rpt, 18)												-	.06
13. Total Social Anxiety (Teen Rpt, 22)													-

* $p \leq .05$, ** $p \leq .01$, *** $p < .00$

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Table 3-5. Significant regression analyses for Hypothesis 1: Maternal autonomy inhibition at age 13 predicting passivity in peer relationships at age 18.

Table 3. Mother-Reported Maternal Autonomy Inhibition & Avoidance in Peer Relationships

	Coded Avoidance in Peer Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.10	-.12		
Income	-.16	-.08		
Step 2.			.03	.06
Self-Reported Maternal Psychological Control (Age 13)	.20*	.20*		

Table 4. Teen-Reported M. Autonomy Inhibition & Avoidance in Peer Relationships

	Coded Avoidance in Peer Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.10	-.10		
Income	-.16	-.04		
Step 2.			.10	.13
Teen-Reported Maternal Psychological Control (Age 13)	.34***	.34***		

Table 5. Coded Interactions of M. Autonomy Inhibition & Dominance in Peer Relationships

	Coded Dominance in Peer Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	.16	.15		
Income	-.02	-.10		
Step 2.			.07	.10
Coded Maternal Negative AR (Age 13)	-.27***	-.27***		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 6-7. Significant regression analyses for Hypothesis 1: Maternal autonomy inhibition at age 13 predicting passivity in romantic relationships at age 18.

Table 6. Teen-Reported M. Autonomy Inhibition & Avoidance in Romantic Relationships

	Coded Avoidance in Romantic Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.02
Gender	-.10	-.12		
Income	-.13	.01		
Step 2.			.04	.06
Teen-Reported Maternal Psychological Control (Age 13)	.20	.20		

Table 6. Coded Interactions of M. Autonomy Inhibition & Avoidance in Romantic Relationships

	Coded Avoidance in Romantic Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.02
Gender	-.10	-.14		
Income	-.13	.21		
Step 2.			.08	.10
Coded Maternal Negative AR (Age 13)	-.28*	-.28*		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 8-9. Significant regression analyses for Hypothesis 1: Paternal autonomy inhibition at age 13 predicting passivity in peer relationships at age 18.

Table 8. Teen-Reported Paternal Autonomy Inhibition & Dominance in Peer Relationships

	Coded Dominance in Peer Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	.16	.15		
Income	-.02	-.04		
Step 2.			.03	.06
Teen-Reported Paternal Psychological Control (Age 13)	-.20*	-.20*		

Table 9. Teen-Reported P. Autonomy Inhibition & Avoidance in Peer Relationships

	Coded Avoidance in Peer Relationships (Age 18)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.10	-.08		
Income	-.16	-.09		
Step 2.			.23	.26
Teen-Reported Paternal Psychological Control (Age 13)	.48***	.48***		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 10-12. Significant regression analyses for Hypothesis 1: Paternal autonomy inhibition at age 13 predicting passivity in romantic relationships at age 18.

Table 10. Father-Reported P. Autonomy Inhibition & Avoidance in Romantic Relationships

	Coded Avoidance in Romantic Relationships (Age 18)			
	β entry	β final	ΔR^2	R ²
Step 1.				.02
Gender	-.10	-.06		
Income	-.13	-.07		
Step 2.			.11	.13
Self-Reported Paternal Psychological Control (Age 13)	.34**	.34**		

Table 11. Teen-Reported P. Autonomy Inhibition & Avoidance in Romantic Relationships

	Coded Avoidance in Romantic Relationships (Age 18)			
	β entry	β final	ΔR^2	R ²
Step 1.				.02
Gender	-.10	-.10		
Income	-.13	-.07		
Step 2.			.07	.09
Teen-Reported Paternal Psychological Control (Age 13)	.26**	.26**		

Table 12. Coded Interactions of P. Autonomy Inhibition & Avoidance in Romantic Relationships

	Self-Report Avoidance in Romantic Relationships (Age 18)			
	β entry	β final	ΔR^2	R ²
Step 1.				.01
Gender	-.08	-.12		
Income	-.06	.01		
Step 2.			.10	.11
Coded Paternal Negative AR (Age 13)	.34**	.34**		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 13. Regression analyses for Hypothesis 2: Passivity in teen romantic relationships at age 18 predicting social anxiety at age 22.

Coded Interactions of Dominance & Teen Social Anxiety

	Self-Reported Total Social Anxiety (Age 22)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.06	.04		
Income	.15	.14		
Step 2.			.05	.08
Coded Dominance in Peer Relationships (Age 18)	-.24*	-.24*		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 14-15. Significant regression analyses and mediation check for Hypothesis 3: Parental autonomy inhibition at age 13 predicting social anxiety at age 22.

Table 14. Mother-Reported M. Autonomy Inhibition & Teen Social Anxiety

	Self-Reported Total Social Anxiety (Age 22)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.06	-.04		
Income	.15	.09		
Step 2.			.03	.06
Self-Reported Maternal Psychological Control (Age 13)	-.19*	-.19*		

Table 15. Teen-Reported P. Autonomy Inhibition & Teen Social Anxiety

	Self-Reported Total Social Anxiety (Age 22)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.06	-.07		
Income	.15	.10		
Step 2.			.07	.10
Teen-Reported Paternal Psychological Control (Age 13)	-.27***	-.27***		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Table 16. Significant regression analyses and mediation check for Hypothesis 3: Maternal autonomy inhibition at age 13 predicting social anxiety at age 22.

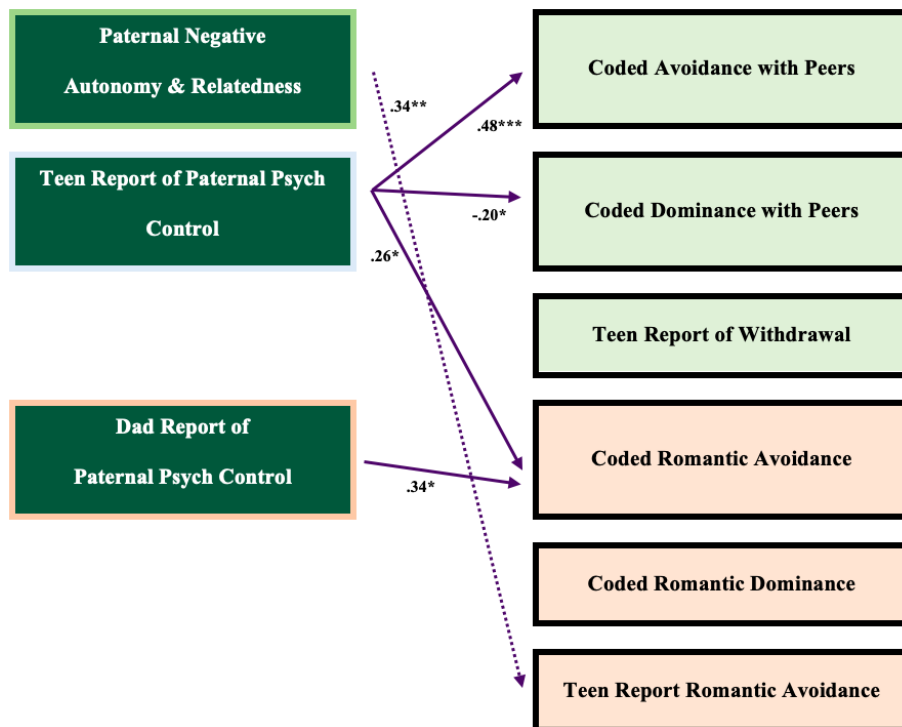
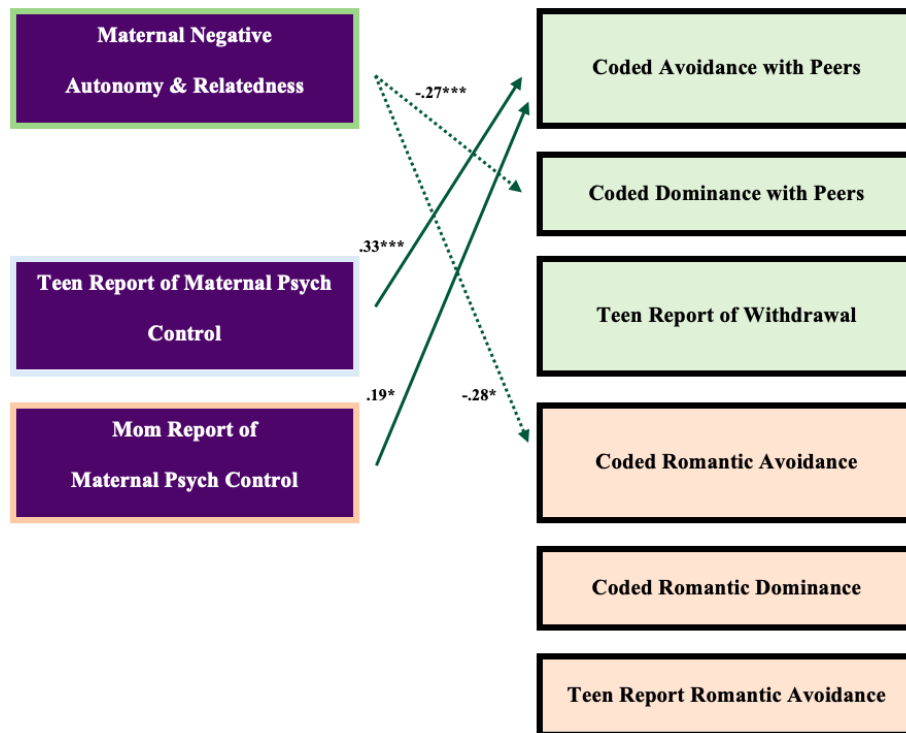
Mediation check for Maternal Psychological Control

	Self-Reported Total Social Anxiety (Age 22)			
	β entry	β final	ΔR^2	R^2
Step 1.				.03
Gender	-.06	-.07		
Income	.15	.10		
Step 2.			.03	.06
Teen-Reported Paternal Psychological Control (Age 13)	-.19*	-.21*		
Step 3.			.06	.12
Coded Dominance in Romantic Relationships (Age 18)	-.26*	-.26*		

Note. * $p < .05$, ** $p < .01$, *** $p < .00$

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Figure 1. Heuristic representation of regression analyses for Hypothesis 1.



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Figure 2. Heuristic representation of regression analyses for Hypothesis 2.

