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# Winning at all costs: The etiology of hypercompetitiveness through the indirect influences of parental bonds on anger and verbal/physical aggression

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#### **Abstract**

Hypercompetitiveness reflects the need to compete and win at all costs as a means of maintaining or enhancing one's own self-worth (Horney, 1937; Ryckman, Hammer, Kaczor, & Gold, 1990). This need to win at any cost is linked to expressions of verbal and physical aggression, which may take a toll on important relationships (Hibbard & Buhrmester, 2010). We sought to explore whether parental bonds with mothers and fathers (i.e., care, rejection, autonomy, and overprotection) were indirectly linked to aggression via the mediating mechanisms of hypercompetitiveness and feelings of anger. A sample of 581 university students (316 females; 265 males) were used to examine a multiple-group structural equation model. Tests of structural invariance revealed clear moderation by gender. For instance, the pathway from verbal to physical aggression was stronger for males compared to females. For females only, higher levels of father care were indirectly linked to fewer acts of physical aggression. For both genders, higher levels of mother overprotection were indirectly linked to more acts of physical aggression through increased hypercompetitiveness and, in turn, more feelings of anger. Findings regarding maternal overprotection are consistent with both Evolutionary and Social Learning theories of behavior.

#### **Keywords**

Parental bonds; Overprotection; Evolutionary theory; Social learning theory; Aggression

#### 1. Introduction

In Western, individualistic societies, individuals have been conditioned to compete and do whatever it takes to be successful (Markus & Kitayama, 1991). Hypercompetitiveness reflects the need to compete and win at any cost as a means of maintaining or enhancing one's own self-worth (Homey, 1937; Ryckman, Hammer, Kaczor & Gold, 1990). Previously, hypercompetitive behavior has been defined as being hostile and aggressive towards others,

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and can negatively impact an individual's life. For example, hypercompetitiveness was positively associated with loneliness, depressive symptoms, and interpersonal difficulties (Thornton, Ryckman & Gold, 2011). Thus, understanding the etiology of hypercompetitiveness seems prudent.

Often times, aggression and competition go hand in hand. "Aggression functions to increase one's status or power within existing social hierarchies" (Buss & Shackelford, 1997, p. 610). Evolutionary researchers have reported that males behave aggressively to impress potential mates, especially in the vicinity of other males (Griskevicius et al., 2009). Aggression and competition are a part of human nature and have been identified as being useful in certain contexts (Buss & Shackelford, 1997). However, when the need to win becomes extreme, hypercompetitive tendencies can emerge and pose potential harm to one's well-being and social relationships (Thornton et al., 2011).

Social Learning Theory posits that the most relevant role models are same gender parental figures (Bandura & Walters, 1963), which within the realm of aggression, is consistent with Evolutionary Theory. For instance, it is more normative in male culture to openly express some form of aggression physically (via athleticism; Koss & Gaines, 1993), whereas it is more normative in female culture to indirectly express aggression verbally (via gossip; Fitzgerald & Ketterer, 2011). Moreover, Evolutionary Theory suggests that males who lack independence and authority face social consequences (Griskevicius et al., 2009; Wilson & Daly, 1985) and may feel pressured to overcompensate, especially during peer interactions. These peer interactions sometimes represent shows of independence or dominance.

Reactance Theory also suggests that when individuals perceive threats to their freedom of choice, there may be a discrepancy between how one acts in public and in private. For instance, a child may openly comply with a parent while they are present, despite privately disagreeing with them (Brehm, 1966; Brehm & Brehm, 1981). Presumably, a public loss of independence, such as a job loss, which reduces one's interpersonal freedoms and autonomy to make decisions, reflects poorly on a man's value as a potential mate (Wilson & Daly, 1985). Thus, there are a number of possible theories (i.e. Evolutionary, Social Learning, and Reactance) that may be used to explain hypercompetitiveness that have been largely unexplored. We seek to explore these theoretical standpoints from the viewpoint of examining parental influences such as the bond one has with their same and opposite sex parent.

## 1.1. Parental bonds

Parental bonds (Parker, Tupling & Brown, 1979) are often characterized in the literature by four subtypes: care, rejection, overprotection, and autonomy (Patock-Peckham & Morgan-Lopez, 2007; 2009; 2010). Parental care denotes a warm, affectionate bond between parents and their offspring, whereas parental rejection represents a cold, distant relationship lacking in affection. Moreover, parental overprotection reflects excessive control and intrusiveness as a result of lacking confidence in the ability of their own offspring. Conversely, parental autonomy represents parents who are confident in their offspring's abilities, thus providing more opportunities for them to act independently.

Past research has demonstrated that parental bonds can negatively impact a child's behavior and lead to consequences that persist throughout development (e.g., Diaz, Lizardi, Qian & Liu, 2008). For example, parental rejection (i.e., lack of care) and parental overprotection (i.e., highly intrusive) were linked to depressive symptoms (Avagianou & Zafiropoulou, 2008; Diaz et al., 2008; Nickell, Waudby & Trull, 2002) and low emotional stability and self-esteem (Herz & Gallone, 1999). Interestingly, low self-esteem in adolescence has been linked to increased hypercompetitiveness (Ryckman, Thornton & Butler, 1994). Thus, we predict that hypercompetitiveness may be the result of parental rejection or overprotection.

#### 1.2. Parents and aggression

Aggression and hostility are among the most serious consequences of hypercompetitiveness (Thornton et al., 2011). Aggressive behaviors have been shown to transmit from parents to offspring. For example, marital aggression has been found to lead to externalizing behaviors among offspring (Jouriles, Norwood, McDonald, Vincent & Mahoney, 1996). Parental bonds have also been linked to direct instances of aggression. For example, insecure attachment to fathers has been linked to aggressive behavior among adolescents (Gallarin & Alonso-Arbiol, 2012). Thus, it is important to understand the factors most likely linked to aggression.

Hypercompetitiveness and aggression have been reliably studied using both the Hypercompetitive Attitude Scale (Ryckman et al., 1990) and the Aggression Questionnaire (Buss & Perry, 1992). Prior studies have examined various factors associated with competitiveness, such as personality traits (e.g., excitement-seeking; Fletcher & Nusbaum, 2008) and gender; males are more competitive than females (Hibbard & Buhrmester, 2010). However, the links between parental bonds, hypercompetitiveness, and aggression have yet to be fully explored. For example, research on parental bonds has looked at both parents combined, undermining the importance of examining unique parental contributions from mothers and fathers, separately (e.g., Chassin & Handley, 2006; Patock-Peckham & Morgan-Lopez, 2006).

#### 1.3. Objectives and hypotheses

The current study aims to examine whether a relationship exists between parental bonds and hypercompetitiveness, and whether it can explain verbal or physical aggression outcomes. This study sought to explore whether bonds with one's mother or father (i.e., care, rejection, autonomy, or overprotection) were indirectly linked to verbal and physical expressions of aggression via the mediating mechanisms of hypercompetitiveness and, in turn, anger. Even if parental bonds are linked to hypercompetitive behaviors and aggressive tendencies in both males and females, the specific types of parental bonds that contribute to these behaviors might vary by gender of the parent and the child, respectively (Patock-Peckham & Morgan-Lopez, 2006). Goals of the present study included: (1) to determine whether parental bonds play a role in the development of hypercompetitiveness, and (2) to establish whether hypercompetitiveness mediates the indirect link between parental bonds, anger, and verbal and physical aggression.

Given that parental rejection has been linked to other forms of overcompensation (e.g., drug use; Pires & Jenkins, 2007), higher levels of neuroticism among males (Patock-Peckham & Morgan-Lopez, 2009), and depression among males and females, particularly in the presence of father rejection (Patock-Peckham & Morgan-Lopez, 2007), we predict that negative parental bonds (i.e., rejection and overprotection) will be linked to hypercompetitiveness and aggression. In addition, as a result of the inherent differences in aggression by gender (i.e., males being more aggressive than females), we expect pathways leading from parental bonds to hypercompetitiveness and aggression to be differentiated by gender.

Past research suggests that fathers responding emotionally to their son's misbehaving leads to more externalizing behavioral problems (i.e., acting out) among these sons as they get older (Chaplin, Cole & Zahn-Waxler, 2005). Similarly, attention-seeking behavior, such as acting out, has previously been linked to hypercompetitive tendencies (Ryckman et al., 1994). Consistent with both Evolutionary and Social Learning theories, we predict that the highest levels of aggression will reside in the pathway from fathers to sons. Nevertheless, based on Evolutionary and Reactance theories, we predict that overprotection or rejection from either parent may have the greatest impact on hypercompetitiveness, particularly among males.

#### 2. Method

#### 2.1. Sample

Participants were 581 (316 females, 265 males) university students from a large midwestern university in the United States of America with a mean age of 20 years (SD = 2.52). Out of 581 participants, 55 students (23 females, 32 males) had missing data on at least one variable in the analysis.

## 2.2. Measures

- **2.2.1. Parental bonding instrument**—The Parental Bonding Instrument (Parker et al., 1979) consists of 50 items (25 per parent) concerning bonds with one's own parents: care, rejection, overprotection, and allowance of autonomy. The care dimension includes six items reflecting an affectionate bond with one's parent such as, "My mother/father frequently smiled at me." The rejection dimension consisted of six items reflecting an emotional indifference, including, "My mother/father seemed emotionally cold to me." The overprotection dimension consisted of seven items reflecting a smothering bond such as, "My mother/father tried to control everything I did." The autonomy dimension consisted of six items reflecting trust in one's offspring's abilities such as, "My mother/father gave me as much freedom as I wanted." Alpha reliabilities for the four dimensions were as follows for mother and father, respectively: care (0.87 and 0.89), rejection (0.83 and 0.87), overprotection (0.81 and 0.75), autonomy (0.81 and 0.81).
- **2.2.2.** Hypercompetitive Attitude Scale—The Hypercompetitive Attitude Scale (Ryckman et al., 1990) concerns the need of individuals to compete and win at any cost as a means of maintaining or enhancing self-worth (Horney, 1937; Ryckman et al., 1990). This

26-item measure includes items such as, "It's a dog-eat-dog world. If you don't get the better of others, they will surely get the better of you." The alpha reliability for the Hypercompetitive Attitude Scale was 0.86.

**2.2.3. Aggression questionnaire**—The Aggression Questionnaire (Buss & Perry, 1992) consists of 29 items measuring four well-defined facets of aggression: anger (7 items), hostility (8 items), verbal aggression (5 items), and physical aggression (9 items). The hostility construct was excluded from the present study. Anger reflects being easily irritated and included items such as, "I have trouble controlling my temper." Verbal aggression reflects a willingness to openly argue while communicating with others and includes items such as, "When people annoy me, I may tell them what I think of them." Physical aggression reflects using force to get one's way and includes items such as, "Given enough provocation, I may hit another person." The alpha reliabilities for this sample were as follows: anger (0.81), verbal aggression (0.76), and physical aggression (0.86).

#### 2.3. Statistical analyses

As there are well documented differences in aggression by gender (Wilson & Daly, 1985), a multiple-group structural equation model with Full Maximum Likelihood (FIML) estimation of missing data was used to evaluate our conceptual model shown in Fig. 1. We utilized the ChiSquare Statistic, Root Mean Square Error of Approximation (RMSEA; Brown & Cudeck, 1993; Hu & Bentler, 1998) and Comparative Fit Index (CFI; Bentler, 1990). Both direct and indirect (mediated effects) were examined with the model indirect command in Mplus 8.3 (Muthén & Muthén, 1998-2019) with the bias-corrected bootstrap technique (Efron & Tibshiani, 1993; Manly, 1997). Asymmetric confidence intervals around the estimates were examined for confidence intervals that did not include zero, indicating significant mediating or indirect effects (MacKinnon, Lockwood & Williams, 2004; Tofighi & MacKinnon, 2011). An overall structural invariance test indicated that at least some of the paths were not equivalent for males and females. Accordingly, we determined that some of relationships in the path model were moderated by gender.

## 3. Results

Our overall multiple-group structural equation model yielded excellent fit to the data,  $\chi^2$  (40 df) = 30.317, p = .8662; CFI = 1.00; RMSEA = 0.00 (0.00, 0.022). The means, standard deviations, and correlations among all variables can be found in Table 1. The invariant paths across gender can be found in Table 2.

#### 3.1. Mediated pathways

- **3.1.1. Anger (females)**—Higher levels of mother-autonomy and overprotection were indirectly linked to more anger through increased hypercompetitiveness; [(mother-autonomy indirect-effect = 0.799, Z = 3.251, p = .001; 99% CI (0.217, 1.523)]; [(mother-overprotection indirect-effect = 0.913, Z = 3.643, p = .000; 99% CI (0.367, 1.666)].
- **3.1.2. Anger (males)**—There was only one, two-path mediated effect regarding anger among males. Higher levels of mother-overprotection were indirectly linked to more anger

through increased hypercompetitiveness [indirect-effect = 0.778, Z = 2.328, p = .020; 99% CI (0.069, 1.791)].

- **3.1.3. Verbal aggression (females)**—Higher levels of father-rejection and overprotection were indirectly linked to more verbal-aggression through increased anger [father-rejection indirect-effect = 0.675, Z = 2.759, p = .006; 99% CI (0.037, 1.305)]; [father-overprotection indirect- effect = 0.674, Z = 2.237, p = .025; 95% CI (0.130, 1.311)]. In addition, higher levels of mother-autonomy and overprotection were indirectly linked to more verbal-aggression through increased hypercompetitiveness and more anger [mother-autonomy indirect-effect = 0.427, Z = 3.070, p = .002; 99% CI (0.113, 0.850)]; [mother-overprotection indirect-effect = 0.489, Z = 3.502, p = < 0.001; 99% CI (0.194, 0.943)]. Conversely, higher levels of father-care were indirectly linked to less verbal-aggression through less hypercompetitiveness and, in turn, less anger [(indirect-effect = -0.307, Z = -1.906, p = .057; 95% CI (-0.682, -0.037)].
- **3.1.4. Verbal aggression (males)**—Higher levels of mother-overprotection were indirectly linked to more verbal-aggression through increased hypercompetitiveness [indirect-effect = 0.404, Z = 2.120, p = .034; 99% CI (0.039, 1.026)]. Moreover, higher levels of mother-overprotection were indirectly linked to more verbal-aggression through increased hypercompetitiveness and more anger [indirect-effect = 0.253, Z = 2.206, p = .027; 99% CI (0.028, 0.645)].
- **3.1.5. Physical aggression (females)**—Higher levels of father-rejection and overprotection were indirectly linked to more physical-aggression through increased anger [father-rejection indirect- effect = 0.897, Z = 2.633, p = .008; 99% CI (0.052, 1.835)]; [father-overprotection indirect-effect = 0.896, Z = 2.238, p = .025; 95% CI (0.185, 1.758)]. In addition, higher levels of mother-overprotection were indirectly linked to more physical-aggression through increased hypercompetitiveness [indirect-effect = 0.453, Z = 1.906, p = .057; 95% CI (0.083, 1.026)]. Finally, higher levels of mother-autonomy and overprotection were indirectly linked to more physical-aggression through increased hypercompetitiveness and more anger [mother-autonomy indirect- effect = 0.568, Z = 2.942, p = .003; 99% CI (0.156, 1.199)]; [mother-overprotection indirect- effect = 0.649, Z = 3.300, p = .001; 99% CI (0.254, 1.303)].
- **3.1.6. Physical aggression (males)**—Higher levels of anger were indirectly linked to more physical-aggression through increased verbal-aggression [indirect-effect = 0.214, Z = 4.328, p = .000; 99% CI (0.105, 0.362)]. In addition, higher levels of hypercompetitiveness were indirectly linked to more physical-aggression through increased anger [indirect-effect = 0.071, Z = 3.343, p = .001; 99% CI (0.029, 0.141)]. Further, higher levels of hypercompetitiveness were indirectly linked to more physical-aggression through increased anger and more verbal- aggression [indirect-effect = 0.032, Z = 3.244, p = .001; 99% CI (0.013, 0.068)]. There was only one mediational pathway for males that involved parental bonds. Higher levels of mother-overprotection were indirectly linked to more physical-aggression through increased hyper-competitiveness and more anger [indirect-effect = 0.367, Z = 2.014, p = .044; 99% CI (0.039, 1.018)].

# 4. Discussion

Social Learning Theory suggests that offspring will model the behavior of their parental figures (Bandura & Walters, 1963), such as displays of verbal and physical aggression. Presumably, overprotective mothers may be signaling to their offspring that excessive control over others is a means of getting attention from peers. This excessive control may translate into hypercompetitiveness in the next generation. Mothers exhibiting overprotective tendencies (i.e., helicopter parenting or tiger moms) are often overinvolved in their children's lives, both through protecting and pushing them into activities that will maximize competitiveness out in the real world.

One finding of particular interest to Evolutionary Theory is that mother overprotection was the only variable that predicted hypercompetitive tendencies among both males and females.

In fact, mother overprotection was the only parental bond that yielded any significant pathway among males, whereas there were six direct links to parental bonds for females, including both mother and father influences. These findings suggest that females can be influenced by either parent to become more hypercompetitive and therefore, indirectly more aggressive, whereas males seem to be influenced most by the mother's behavior alone. Although past research has suggested that paternal influences were more impactful for displays of aggression among male offspring (Chaplin et al., 2005), our findings appear to be inconsistent when hypercompetitiveness is included as a mediating mechanism. This makes our findings novel (Figs. 2 and 3).

Differences in aggression between males and females can best be understood through an evolutionary perspective. For males, aggression can be used as a tool to assert dominance over other males (Ainsworth & Maner, 2012) and impress potential mates (Griskevicius et al., 2009). Thus, it is reasonable to believe that males would be more sensitive to cues coming from their mothers, using them as guidelines to understand females and potentially attract a mate. However, this mother/son link from overprotectiveness to hypercompetitiveness is not entirely consistent with Social Learning Theory, which would predict a parentoffspring gender match. Regardless, the current study expanded the existing literature by showing that hypercompetitiveness acts as a mediator of maternal overprotection on anger as well as verbal and physical aggression. Further, findings from the current study supported the claim that parental bonds influence the development of hypercompetitiveness (Horney, 1937), which is predictive of anger and aggression among individuals.

Based on Reactance Theory, we had also predicted that parental rejection would be directly linked to hypercompetitiveness. However, this is not what we found. Instead there was a direct link to anger from rejection from both mothers and fathers among females, but not among males. Reactance Theory does postulate that individuals who are vulnerable to a loss of personal freedom, such as conditions with overprotective parents, may be more susceptible to expressions of anger and aggression (Brehm, 1966; Brehm & Brehm, 1981). One possible explanation is that emerging adults with overprotective mothers may develop an excessive need to prove themselves to their peers to overcompensate for the loss of

freedoms at home. The offspring of these parents may feel driven to continually succeed, no matter the cost. These individuals, compensating for the lack of confidence shown by their mothers, may develop a hypercompetitive personality. Nevertheless, the lack of a link between parental rejection from either parent to hypercompetitiveness does suggest that these findings may better fit within a Social Learning or an Evolutionary framework rather than one framed by Reactance Theory. Future studies should be encouraged to further tease apart these competing theoretical perspectives.

In the current study, other important gender differences were also observed. Males, but not females, who were likely to express verbal aggression were also more likely to exhibit physical aggression. The difference in the expression of aggression can also be linked back to Evolutionary Theory, which suggests that direct aggression for males can lead to a higher social status, thus increasing the likelihood that males will display acts of physical aggression in the hopes of attaining a suitable mate (Ainsworth & Maner, 2012; Griskevicius et al., 2009). Other studies have made the argument that not only is aggression beneficial for social status, but in our evolutionary past, it could have helped to increase our fitness and survivability as well (Ellis, 2006; Ellis et al., 2012; Fischer & Mosquera, 2001). Evolutionary psychologists have suggested that it may be beneficial and effective for females to display acts of indirect aggression, because acts of direct aggression would lead others to perceive them as not caring and nurturing, thus hindering their ability to attract a suitable mate (Griskevicius et al., 2009; Vaillancourt, 2013). Taken together, our findings are highly consistent with those of Evolutionary researchers who found that males are more likely to express direct physical aggression, whereas females are more likely to express indirect verbal aggression (i.e., gossip; Fitzgerald & Ketterer, 2011; Vaillancourt, 2013).

Although our findings are novel, the current study is not without limitations. First, the examination of patterns among this group of variables should be considered exploratory in nature. Additional studies teasing apart the specific distinctions among competing theoretical frameworks (e.g., Evolutionary, Social Learning, Reactance) seems warranted given the current findings. While theoretically important, the current findings should be replicated in a longitudinal study following offspring into late adolescence or emerging adulthood. In addition, while this is a large sample of college students, these relationships may be stronger among a larger community population. Further, much of our sample is from families who are either intact or who know both of their parents. It is unclear if a larger sample of single-parent households would yield similar results. Furthermore, we did not include hostility as a variable in this model, which should be examined in future studies.

Despite these limitations, findings from the current study yielded numerous novel and theoretically relevant findings congruent with both Social Learning and Evolutionary Theories. First, although the link from anger to verbal aggression is stronger for females than males, the link from verbal to physical aggression is only significant for males. Highly consistent with Fitzgerald and Ketterer (2011), this suggests that verbal aggression is a more serious indicator of physical aggression among males than among females. Second, our findings are unique in highlighting the importance of overprotective mothers in the development of hypercompetitiveness. Overall, our findings illuminate the importance of

targeting overprotective parental bonds, particularly among mothers, in order to weaken the development of destructive, hypercompetitive drives.

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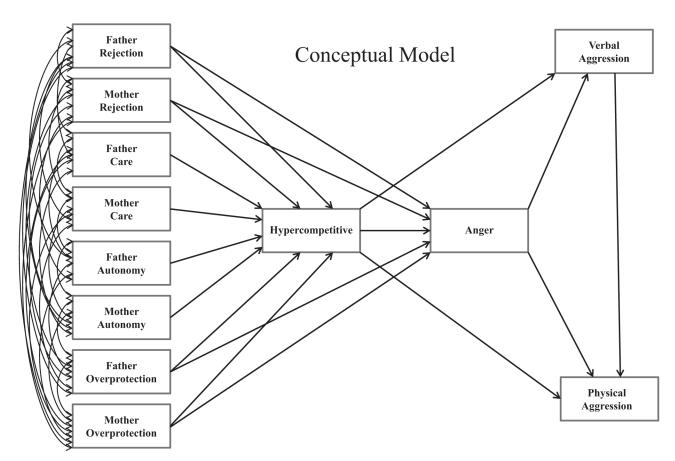
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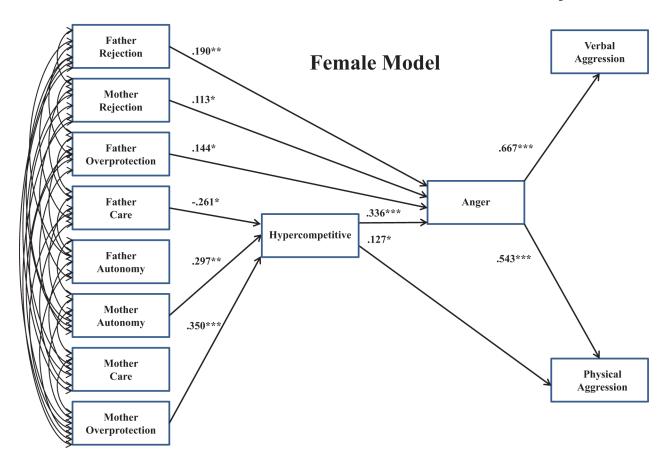
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**Fig. 1.** Conceptual model displays all hypothesized pathways in the multiple-group structural equation model.



**Fig. 2.** Fit model displaying all significant direct pathway (standardized beta coefficients) for females. N=316; \*p<.05; \*\*p<.01; \*\*\*p<.001.

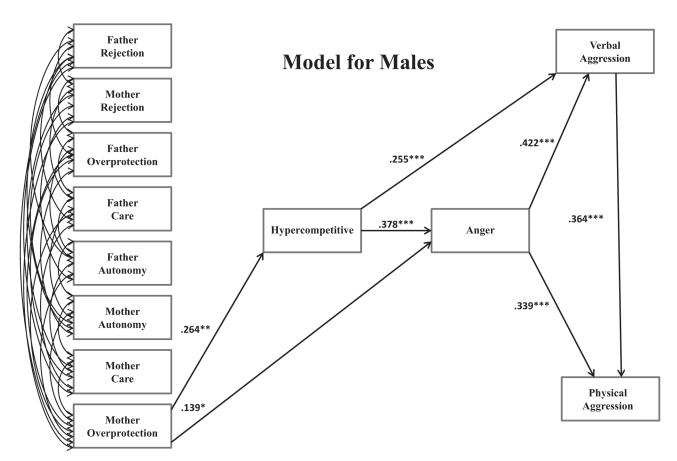


Fig. 3. Fit model displaying all significant direct pathway (standardized beta coefficients) for males. N = 265; \*p < .05; \*\*p < .01; \*\*\*p < .001.

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Table 1

Means, standard deviations, and correlations among all variables.

M	SD	Measure	1	2	3	4	3	9	7	8	6	10	11	12
<b>2.35</b> 2.32	( <b>0.66</b> ) (0.59)	1. Mother Care	1.00	0.26	-0.82	-0.21	-0.22	-0.10	0.39	0.14	-0.13	-0.19	-0.13	-0.17
<b>2.04</b> 1.94	( <b>0.82</b> ) (0.68)	2. Father Care	0.36	1.00	-0.20	-0.83	-0.09	-0.18	0.14	0.37	-0.25	-0.30	-0.23	-0.24
<b>0.6</b> 0.59	( <b>0.66</b> ) (0.55)	3. Mother Rejection	-0.77	-0.37	1.00	0.31	0.26	0.16	-0.32	-0.10	0.14	0.24	0.18	0.21
<b>0.78</b> 0.81	( <b>0.8</b> ) (0.65)	4. Father Rejection	-0.28	-0.76	0.44	1.00	0.15	0.20	-0.09	-0.30	0.22	0.33	0.23	0.26
<b>1.12</b> 1.15	( <b>0.66</b> ) (0.68)	5. Mother Overprotection	-0.25	-0.12	0.30	0.22	1.00	0.38	-0.47	-0.17	0.28	0.18	0.14	0.19
<b>0.95</b> 0.68	( <b>0.6</b> ) (0.55)	6. Father Overprotection	-0.16	-0.16	0.23	0.32	0.38	1.00	-0.18	-0.34	0.18	0.25	0.23	0.13
<b>1.84</b> 1.9	( <b>0.64</b> ) (0.62) Autonomy	7. Mother	0.43	0.10	-0.30	-0.07	-0.44	-0.10	1.00	0.51	0.00	-0.11	-0.08	-0.08
<b>1.83</b> 1.96	( <b>0.66</b> ) (0.6)	8. Father Autonomy	0.17	0.32	-0.12	-0.25	-0.12	-0.31	0.51	1.00	-0.11	-0.19	-0.13	-0.18
<b>70.99</b> 76.46	<b>(13.83)</b> (13.95)	9. Hyper- competitiveness	-0.11	-0.15	0.09	0.10	0.26	0.11	-0.12	-0.07	1.00	0.41	0.37	0.38
<b>14.99</b> 15.31	( <b>5.14</b> ) (5.34)	10. Anger	-0.16	-0.12	0.12	0.12	0.26	0.16	-0.13	-0.15	0.42	1.00	0.70	9.0
<b>12.69</b> 14.34	( <b>4.12</b> ) (4.1)	11. Verbal Aggression	-0.09	-0.12	0.12	0.11	0.18	0.05	-0.08	-0.12	0.43	0.53	1.00	0.51
<b>17.64</b> 23.04	( <b>6.74</b> ) (7.41) Aggression	12. Physical	-0.07	-0.03	0.06	-0.01	0.17	60:0	-0.09	-0.10	0.39	0.57	0.58	1.00

N=581, (316 males, 265 females), Females=top, Males=Bottom.

Table 2

Gender Differences on path coefficients.

W. J.J	***	***
Model Base model (40 df)	X <sup>2</sup> 30.317	$X^2$
Parental Bond to Hypercompetitiveness		
Mother Care	30.330	<1.000
Father Care	30.325	<1.000
Mother Rejection	30.580	<1.000
Father Rejection	30.501	<1.000
Mather Overprotection	31.062	<1.000
Father Overprotection	30.331	<1.000
Mother Autonomy	34.772	4.455*
Father Autonomy	30.807	<1.000
Parental Bond to Anger		
Mother Overprotection	33.750	3.433
Father Overprotection	31.100	<1.000
Mother Rejection	31.116	<1.000
Father Rejection	32.897	2.58
Hypercompetitiveness to Anger	30.701	<1.000
Anger to Verbal Aggression	43.224	12.907 ***
Anger to Physical Aggression	34.521	4.204*
Hypercompetitiveness to Verbal Aggression	34.525	4.208*
Verbal Aggression to Physical Aggression	43.077	12.760 ***
Hypercompetitiveness to Physical Aggression	30.487 0	<1.00

Notes: The Base model was the model originally examined for model fit. Subsequent models were tested in which the indicated effect was constrained to equality across gender. The change in the chi-squared is the difference in chi-square between the base model and the model in which the indicated path was constrained across gender. All comparisons in the table are single-degree-of-freedom chi squared difference tests.

\* p

\*\* <.01

\*\*\* p<.001.