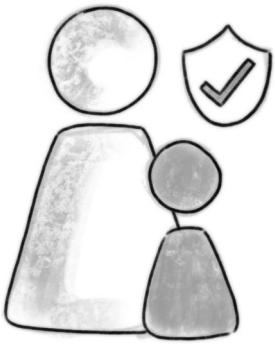

Effects of Parental Control on Adolescent Body Dissatisfaction

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Abstract

Body dissatisfaction is most prevalent in adolescence when boys and girls experience physical changes in their bodies. The aim of the current study was to test the predictive effect of parental pressure and overt control on body dissatisfaction among Singaporean adolescents (N = 155). Self-reported measures designed to assess adolescents' body dissatisfaction, body-related parental pressure, and parental overt control on food intake were administered to adolescents aged 13–20 years (M = 17.22, SD = 1.85). The data were analyzed with a series of hierarchical regression and Pearson correlation tests. Path analyses were performed separately for males (N = 50) and females (N = 100). The results showed that only parental overt control positively predicted body dissatisfaction in adolescent girls. Neither body-related parental pressure nor overt control predicted body dissatisfaction in adolescent boys. Implications of the findings were broadly discussed.

Keywords: **Adolescence, body dissatisfaction, parental pressure, overt control**

Introduction

Body dissatisfaction can be defined as having negative thoughts and feelings toward one's body (Myers & Crowther, 2009). Body dissatisfaction tends to be strongest during adolescence and most salient during the onset of puberty (Santrock, 2019). Similar to Western studies, Singaporean studies have found that adolescent girls were less happy with their bodies than adolescent boys (Lwin & Malik, 2012; Chng & Fassnacht, 2016). This phenomenon could be explained by the physical changes that occur during adolescence and media portrayals of ideal body shapes (Griffiths et al., 2017). During puberty, girls tend to gain more body fat, which draws them further from the thin ideal body shape portrayed in the media. In contrast, boys tend to gain more muscle, which draws them closer to the muscular ideal body shape portrayed in the media.

Studies have mostly looked at the effects of parental influence on body dissatisfaction in terms of parenting styles. Authoritarian parenting, characterized by high parental control and low warmth, was associated with higher risks of disordered eating behaviours in adolescents (Jáuregui Lobera et al., 2011). Research revealed that children with authoritarian parents experienced greater significant amounts of body dissatisfaction and had a higher likelihood of engaging in extreme weight-control behaviours (Enten & Golan, 2009; Zubatsky et al., 2014). Moreover, highly controlling authoritarian parents tended to be psychologically controlling, which can lead to disordered eating (Robertson, 2020; as cited in Reilly et al., 2016). Given that most Singaporean mothers employ authoritarian parenting practices (Cho et al., 2020), which are linked with body dissatisfaction, the present study explored the effects of parental control on body dissatisfaction in Singaporean adolescents.

Parental Control

In parenting literature, *parental control* refers to parents' involvement in making decisions for children (Grolnick & Pomerantz, 2009). There are two dimensions of parental control: *psychological control*, which regulates children's feelings and thoughts, and *behavioural control*, which regulates children's actions and behaviours (Barber, 1996; Barber et al., 2005). Studies have consistently shown that psychological control can lead to internalizing depressive symptoms (Barber, 1996) and negatively impacting the emotional well-being of children (Gray & Steinberg, 1999; Wang, et al., 2007). Based on self-determination theory, satisfying the universal need for autonomy is indispensable for psychological functioning (Deci & Ryan, 1985). Psychological control, which thwarts the need for autonomy in adolescents, has thus been found to be associated with adverse developmental outcomes, such as diminished emotional functioning, depression, and delinquency (Barber et al., 2005; Pomerantz & Wang, 2009). In contrast, behavioural control has been linked to more positive outcomes. For instance, it was found that behavioural control can reduce adolescents' exposure to maladaptive behaviours while increasing adaptive outcomes such as improved academic competence and lower delinquency (Fletcher et al., 2004; Gray & Steinberg, 1999; Grolnick & Pomerantz, 2009; Wang et al., 2007). The aspects of psychological and behavioural control are summarized in Table 1.

Psychological Control: Body-Related Parental Pressure

One aspect of psychological control is body-related parental pressure, which is conceptualized as the perceived demand to modify one's body shape or weight through parents' negative verbal commentary. Existing literature highlights three forms of body-related parental pressure that can affect body dissatisfaction levels: parental

teasing, parental encouragement, and parental criticism (Helfert & Warschburger, 2011; Kluck, 2009).

Parental teasing refers to negative verbal commentary about the adolescent's diet, weight, or body shape, delivered in a playful or light-hearted manner (Helfert & Warschburger, 2011). A systematic meta-analysis has found parental teasing to be positively associated with low self-esteem and body dissatisfaction (Menzel et al., 2010). *Parental encouragement* refers to negative verbal commentary about the adolescent's diet, weight, or body shape that is intended to be encouraging (Helfert & Warschburger, 2011). In a study, parental encouragement to control weight and size was found to be the most robust predictor of body dissatisfaction (Kluck, 2010). *Parental criticism* refers to negative verbal commentary about the adolescent's diet, weight, or body shape delivered in a hostile or harmful manner (Rodgers & Chabrol, 2009). Studies have revealed that female adolescents' self-reported frequency of parental criticism is a strong predictor of body dissatisfaction and disordered eating outcomes (Rodgers & Chabrol, 2009). However, much less is known about the relationship between parental criticism and body dissatisfaction in adolescent boys.

By and large, parental pressure regarding adolescents' body shape and weight has been linked to greater body dissatisfaction (Chng & Fassnacht, 2016). While the underlying mechanism behind this link is not completely understood, research revealed that this link was partially mediated by the internalization of media ideals and appearance comparison (Rodgers, Paxton & Chabrol, 2009). Additionally, a study led by Lwin and Malik (2012) in Singapore indicates a gender difference in the impact of parental pressure, where the negative verbal commentary was more strongly linked with body dissatisfaction in boys than girls in early adolescence. Though hypo-

thetical, the researchers believed that this finding can be attributed to the weight status in their sample, wherein there is a higher percentage of boys (39.5%) who are obese than girls (24.1%). As such, boys might have received greater parental criticism, leading to increased body dissatisfaction amongst boys.

Behavioural Control: Overt Control

Overt control can be defined as children's perception of their parent's actions to regulate their eating practices (Ogden et al., 2006). There are two facets of overt control: parental restriction and parental monitoring. *Parental restriction* comprises the ways in which children perceive that their parent(s) limit their access to certain foods; *parental monitoring* involves the degree to which children perceive that their parent(s) track, check on, and oversee their eating (Birch et al., 2001). Studies have shown that parental restriction of palatable foods was associated with children's poor self-regulation of food consumption and unhealthy eating patterns (Carper et al., 2000; Fisher & Birch, 1999). Research has also found parental monitoring of food intake to be associated with greater overeating behaviour (Kenyon et al., 2009). Taken together, these findings indicate that parental overt control may lead to poorer self-control, which has been linked with higher saturated fat intake and less strenuous exercise in adolescents (Wills et al., 2007). As a result of unhealthy eating and lifestyle, parental control can lead to overeating and obesity (Costanzo & Woody, 1985; Johnson & Birch, 1994). Given that studies have consistently found body mass index (BMI) to be strongly linked with body dissatisfaction in adolescents (Barker & Galambos, 2003; Paxton et al., 2006; Taylor et al., 2012), the negative impact of high parental control on body dissatisfaction becomes evident.

Table 1: *Summary of Psychological Control and Behavioural Control Constructs*

Construct	Definition	Example
Psychological Control		
Parental Teasing	Negative verbal commentary; delivered in a playful or light-hearted manner	"You should watch your weight; you look like a watermelon!" "Please eat more, I don't want you to get blown away by the wind."
Parental Encouragement	Negative verbal commentary; delivered in a motivating manner	"You should eat more; you look like you have lost weight recently." "Exercise will make your body look better; you should do it more often."
Parental Criticism	Negative verbal commentary; delivered in a hostile or harmful manner	"You're a nightmare! Why are you still eating so much when you have put on so much weight lately?" "You are too skinny for your age. You should exercise more and build up some muscles!"
Behavioural Control		
Parental Restriction	Perception that parent(s) limit their access to food	The child notices that their parents do not allow them to eat food high in saturated fat (e.g., fried food).
Parental Monitoring	Perception that parent(s) track, check on, and oversee their consumption	The child notices that their parent does not allow them to eat ice cream more than once per week.

The Present Study

Existing literature suggests that both the psychological aspect (i.e., body-related parental pressure) and behavioural aspect (i.e., overt control) of parental control can have undesirable outcomes on body dissatisfaction. In the context of this paper, body dissatisfaction is defined as the negative perception of one's body, weight, and appearance. While some studies suggest that overt control can lead to slightly more positive outcomes in other areas of development (Pomerantz & Wang, 2009; Grolnick & Pomerantz, 2009), there is a paucity of research on the effects of parental overt control on body dissatisfaction in adolescents. Therefore, the present study aims to fill this lacuna by investigating whether psychological and behavioural control are significant predictors of body dissatisfaction in thirteen- to twenty-year-old female and male Singaporeans. The following were hypothesized:

1. Body-related parental pressure would positively and significantly predict adolescents' body dissatisfaction above and beyond overt control;
2. Overt control would positively and significantly predict adolescents' body dissatisfaction above and beyond body-related parental pressure.

Methods

Participants

A total of 182 participants were recruited via online invitations sent through social media platforms like Whatsapp and Telegram. Convenience sampling was employed in this study due to the short data collection period lasting about 2 weeks. Participants were required to meet the following criteria: 1) must be Singaporean, 2) must current-

ly live with at least one parent, 3) must be aged between 13 to 20 years old. 27 responses that did not meet these criteria were excluded from data analysis. The final sample consisted of 155 participants (Age: M = 17.22, SD = 1.85; BMI: M = 21.12, SD = 3.71) with 100 females, 50 males, and 5 who did not specify their gender. The ethnic composition of the sample was 91.6% Chinese, 3.2% Indian, 2.6% Malay, and 2.5% who selected "other" or did not specify.

Procedure

The study was conducted as part of the Adolescent Psychology laboratory module at the National University of Singapore, where the researchers were enrolled in. Online invitations were sent to the social media contacts of the researchers. After responding to the online invitation participants would read through a brief of the study (Appendix A) and informed consent (Appendix B). Consenting participants would then complete an e-survey containing the set of questionnaires (Appendix D). Upon completing the study, participants would read a final debrief (Appendix C).

Materials

Body-Related Parental Pressure

Body-Related Parental Pressure was operationalized as negative verbal comments about the adolescent's body weight or shape. This was measured with the 18-item Body-Related Parental Pressure Scale (BPPS), which was an original scale developed for the purpose of this study due to a lack of existing scales that met the study's criteria. The scale was comprised of three subscales, namely parental teasing, parental encouragement, and parental criticism. Participants responded on a 5-point Likert scale, ranging from 1 (*Never*) to 5 (*Every time*). The Cronbach alpha of the scale (α = .87) indicated a high internal consistency in the present sample. A composite score for each partic-

ipant was derived by summing the mean scores of each subscale, with a higher composite score indicating greater body-related parental pressure.

Parental Teasing. The Parental Teasing subscale was used to measure the frequency of negative jokes about the adolescent's diet, weight, or body shape. This subscale consists of 6 items adapted from the Weight-Related Teasing subscale (Thompson et al., 1995). Similar to a previous study (Pötzsch et. al., 2018), the word "people" was replaced with "parents" in all items of the Weight-Related Teasing Subscale to specifically measure perceived parental pressure via teasing. The items have also been altered to evaluate parental teasing on body -image-related concerns in general, and not just among adolescents who are considered heavy or overweight. One such modification was changing "People made fun of you because you were heavy" to "My parent(s) make fun of me because of my body shape or weight."

Parental Encouragement. The Parental Encouragement subscale was used to measure how often the adolescent receives negative messages about one's body shape or weight from one's parents which are intended to be encouraging (Helfert & Warschburger, 2011). Due to a lack of access to relevant scales in existing literature, this subscale was self-constructed. An example item is "My parent(s) praise me when I eat more/less."

Parental Criticism. The Parental Criticism subscale was used to measure how often an adolescent receives negative verbal messages about one's body shape or weight delivered by one's parents in a harmful way (Rodgers & Chabrol, 2009). Six items measuring the frequency of negative parental messages about eating and weight were adapted from the Parental Eating and Weight Messages Survey (Rivero, 2021). An example item is "My parent(s) reprimand me for being too skinny/fat."

Overt Control. The Overt Control Scale (OCS) was adapted from the Child Feeding Questionnaire (CFQ) (Birch et al., 2001) to measure adolescent-reported, instead of parent-reported, imposed restrictions and monitoring on food intake by parents. The OCS of the present study borrowed 11 items from two subscales of CFQ: Parental Restriction and Parental Monitoring. Prior research which adapted CFQ to assess adolescents' reports achieved a high internal consistency, α = .82 (Farrow, 2012). The OCS in the present sample achieved high internal reliability (α = .90). A composite overt control score for each participant was derived by summing the mean scores of the subscales, with a larger score indicating greater overt control.

Parental Restriction assessed the extent to which adolescents perceive their parents limiting their access to food. It was comprised of 8 items which participants rated on a 5-point Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). An example item is "My parent(s) intentionally keep some foods out of my reach." The internal consistency of the subscale was high in the sample (α = .88).

Parental Monitoring assessed the extent to which adolescents perceive their parents overseeing their eating. It was comprised of 8 items that participants rated on a 5-point frequency scale, ranging from 1 (Never) to 5 (Every time). An example item is, "How often does your parent(s) keep track of the high-fat foods that you eat?" The internal consistency of the subscale was satisfactory (α = .75).

Body Dissatisfaction

Body Dissatisfaction was measured with a modified version of the 23 -item Body Esteem Scale for Adolescents and Adults (BESAA), which involved positive and negative judgements of one's body weight and appearance. Prior research found that Cronbach's alphas of all three subscales were 0.90 and above (Cragun et al., 2013). However, 5

items on external attributions were excluded as they were irrelevant to the study. The original BESAA was a 5-point Likert scale, ranging from 0 (*Never*) to 4 (*Always*). To standardize the values across all the scales, the BESAA scale was modified such that the lowest score is 1 (*Never*) and the highest score is 5 (*Always*). Negatively worded items were reverse coded, with a higher score indicating a more negative body evaluation. The internal consistency of the subscale was high in the sample ($\alpha = .94$).

The BE-Weight subscale evaluated one's thoughts about one's own weight. An example item of the 6-item subscale is "I am satisfied with my weight." The internal consistency of the subscale was high ($\alpha = .91$).

The BE-Appearance subscale measured feelings about one's general appearance. An example item of the 12-item subscale is "I wish I looked better." The internal consistency of the subscale was high ($\alpha = .93$).

Data Analysis

All statistical analyses were performed on SPSS 27.0, except Confirmatory Factor Analysis (CFA), which was performed on JASP 14.0. In the preliminary analyses, CFA was conducted to examine the factorial validity of the Body-Related Parental Pressure original scale (BPPS). Goodness-of-fit was evaluated using the $\chi 2$ test of model fit, the comparative fit index (CFI), and the root mean square error of approximation (RMSEA). Following Hu and Bentler (1999), CFI greater than 0.90 indicated a good fit to the data, and a cut-off value close to .06 for RMSEA is deemed to be a relatively good fit.

Tests for internal consistency reliability were run on SPSS to determine the reliability of the scales used in this study. The Cronbach's alphas obtained were used to determine internal consistency reliability (poor: $\alpha \leq .50$, acceptable: $\alpha \geq .70$, excellent: α

≥ .90). The two independent variables in this study, Body-Related Parental Pressure and Overt Control, are continuous and unnested within each other. Hence, a series of hierarchical multiple regression tests were conducted to determine the unique contribution of body-related parental pressure and overt control to body dissatisfaction among female and male adolescents. The first hierarchical multiple regression analysis was performed by including Overt Control in the first block and Body-Related Parental Pressure in the second. This tested if Body-Related Parental Pressure could predict Body Dissatisfaction after controlling for Overt Control, thus answering the first hypothesis. The second hierarchical multiple regression analysis was performed by including Body-Related Parental Pressure in the first block and Overt Control in the second. This would test if Overt Control could predict Body Dissatisfaction after accounting for Body-Related Parental Pressure, thus answering the second hypothesis.

Additionally, a series of independent samples t-tests were performed to determine if there were significant gender and age group (i.e., secondary versus post-secondary) differences in body dissatisfaction, body-related parental pressure, and overt control. Bonferroni corrections were not performed due to the limitations of the analysis software used. However, this would have little impact on the outcome of the study as the t-tests are additional analyses that do not directly answer the research question. If differences were to be found, follow-up analyses would include performing the hierarchical multiple regression and correlational analyses separately for male and female responses using SPSS.

Results

Preliminary Analyses

The Confirmatory Factorial Analysis (CFA) revealed that the BPPS model was significant, but it did not fit the data well (CFI = 0.775; RMSEA = 0.144). In other words, the model was not consistent with the data. After identifying and removing 4 misfit items, the adjusted model was found to be a good fit (Appendix F). Hence, all subsequent analyses were run without the misfit items. The internal consistency for the overall BPPS scale (α = 0.87), Encouragement subscale (α = 0.90), Criticism subscale (α = 0.90), and Teasing subscale (α = 0.87) remained high without the misfit items. Descriptive statistics of study variables are presented in Table 2.

Table 2: *Mean and standard deviation for parental pressure, overt control, body dissatisfaction*

Variable	Minimum Possible	Maximum Possible	Minimum Obtained	Maximum Obtained	Mean (SD)
Body-related parental	3	15	3.00	13.87	5.86 (2.27)
Overt control	2	10	2.00	10.00	4.02 (1.75)
Body	2	10	2.00	9.83	5.85 (1.73)

Main Analyses

The first hierarchical multiple regression was conducted with Overt Control entered at Stage 1 and Parental Pressure entered at Stage 2 (Table 2). The results showed that adding Parental Pressure at Stage 2 explained an additional 1.7% of the variance. However, this change was not significant, $F(1, 152) = 2.76$, $p > .05$. This showed that Paren-

Table 3: *Hierarchical Regression Model examining the relationship between Parental Pressure and Body Dissatisfaction after Overt Control was controlled for*

Variable	*B+*	β+	*B (SEB+)*	*t*	R^2	ΔR^2
Model 1					.06	.06
Overt Control	.25	.25	.08	3.18*		
Model 2					.08	.02
Overt Control	.35	.35	.10	3.54***		
Parental Pressure	-.12	-.16	.08	-1.61		

Note. *B+ unstandardized coefficient; β+ = standardized coefficient; SEB+ = standard error; ΔR2 = R Square Change. ***p < .001.*p < .05.*

tal Pressure did not significantly predict Body Dissatisfaction above and beyond Overt Control.

The second hierarchical multiple regression was conducted with Parental Pressure entered at Stage 1 and Overt Control at Stage 2 (Table 3). The results revealed that at Stage 1, BPP did not contribute significantly to the regression model, $F(1, 153) = 0.39$, $p > .05$, and accounted for 0.3% of the variation in BD. Introducing Overt Control at Stage 2 explained an additional 7.6% of the variance, and this change in r^2 was significant, $F(1, 152) = 12.55$, $p < .05$. This showed that Overt Control significantly predicted Body Dissatisfaction above and beyond Parental Pressure .

Independent samples t-tests revealed that there was no significant age group difference between secondary and post-secondary adolescents in any of the study variables. The only significant gender difference was body dissatisfaction, where female adolescents scored

Table 4: *Hierarchical Regression Model examining the relationship between Overt Control and Body Dissatisfaction after Parental Pressure was controlled for*

Variable	*B+*	β+	*B (SEB+)*	*t*	R^2	ΔR^2
Model 1					.003	-.004
Overt Control	.04	-.05	.06	.63		
Model 2					.08	.07
Overt Control	-.13	-.16	.08	-1.66		
Parental Pressure	.35	.35	.10	3.54***		

Note. *B+ unstandardized coefficient; β+ = standardized coefficient; SEB+ = standard error; ΔR2 = R Square Change. ***p < .001.*

higher in body dissatisfaction compared to males, t(148) = -4.24, p < .001. Therefore, further analyses were stratified by gender, but not by age group.

The first hierarchical multiple regression conducted with the female sample had Parental Pressure entered at Stage 1 and Overt Control at Stage 2. The results revealed that at Stage 1, BPP did not contribute significantly to the regression model, $F(1, 98) = 0.44$, $p > .05$, and accounted for 0.4% of the variation in body dissatisfaction. Introducing Overt Control at Stage 2 explained an additional 4.8% of the variance in female body dissatisfaction, and this change in r^2 was significant, $F(2, 97) = 3.50$, $p < .05$. Congruent with the overall analyses, this demonstrated that Overt Control significantly predicted Body Dissatisfaction above and beyond Parental Pressure.

The second hierarchical multiple regression conducted with the female sample had Overt Control entered at Stage 1 and Parental

Pressure at Stage 2. The results revealed that at Stage 1, Overt Control contributed significantly to the regression model, $F(1, 98) = 5.50$, $p < .05$, and accounted for 5.3% of the variation in female body dissatisfaction. Introducing Parental Pressure at Stage 2 explained an additional 1.4% of the variance in female body dissatisfaction. However, this change in r^2 was not significant, $F(2, 97) = 1.48$, $p > .05$. Congruent with the overall analyses, this demonstrated that Overt Control significantly predicted Body Dissatisfaction above and beyond Parental Pressure.

A two-stage hierarchical multiple regression was conducted to determine if Parental Pressure can predict Body Dissatisfaction in males when Overt Control was accounted for. Overt Control was entered at Stage 1 and controlled at Stage 2 where Parental Pressure was entered. The results (Appendix A) revealed that at Stage 1, Overt Control did not contribute significantly to the regression model, $F(1, 48) = 3.21$, $p > .01$, but accounted for 6.3% of the variation in Body Dissatisfaction. Introducing Parental Pressure explained an additional 1.5% of the variation in Body Dissatisfaction and this change in r^2 was not significant, $F(1, 47) = 0.76$, $p > .01$.

A second two-stage hierarchical multiple regression was conducted to determine if Overt Control can predict Body Dissatisfaction in males when Parental Pressure was accounted for. Parental Pressure was entered at Stage 1 and controlled for at Stage 2 where Overt Control was entered. At stage one, Parental Pressure did not contribute significantly to the regression model, $F(1, 48) = .06$, $p > .01$, and accounted for 0.1% of the variation in Body Dissatisfaction. Introducing OC explained an additional 7.6% of the variation in Body Dissatisfaction and this change in R^2 was not significant, $F(1, 47) = 3.89$, $p > .01$. This demonstrated that neither Parental Pressure nor Overt Control uniquely predicted Body Dissatisfaction for

males.

The overall correlational analyses revealed that both subscales of Overt Control were significant and positively correlated with Body Dissatisfaction; only the Teasing subscale of Body-Related Parental Pressure was significantly and positively correlated with Body Dissatisfaction (Appendix G). The same pattern of results was found in female, but not male, samples (Appendix H).

Discussion

The aim of the present study was to examine whether body-related parental pressure and overt control of food intake were both unique and positive predictors of body dissatisfaction in Singaporean adolescents. Contrary to the first hypothesis, the results of this study revealed that body-related parental pressure did not significantly predict body dissatisfaction in adolescents beyond overt control. Correlational analysis showed that parental teasing was significantly and positively linked with body dissatisfaction, which is in line with previous research (e.g., Keery et al., 2005; Yoh, 2018). However, both parental encouragement and criticism were not significantly linked with body dissatisfaction, which is incongruent with the current literature (Biolcati, Mancini & Villano, 2019; Helfert & Warschburger, 2011; Lwin & Malik, 2012; Rodgers & Chabrol, 2009).

The lack of significant effect of parental encouragement and criticism on body dissatisfaction is baffling. A plausible explanation could be that the adolescents in the sample did not perceive parental encouragement negatively. As some researchers suggest, parental encouragement may not be a unidimensional construct: it can have a negative and a positive valence (Yeatts, Martin & Farren, 2021). A longitudinal study revealed that the perceived father's encouragement for physical activity is positively related to adolescents' body satisfaction a year later (Savage, M DiNallo & Downs, 2009). This

indicates that it is possible for parental encouragement to be positively received by adolescents. Similarly, parental criticism may be perceived positively by adolescents. Though speculative, the lack of effect for parental criticism may be attributed to the difference between the scale used in previous research and the current study. Specifically, prior studies tended to measure parental criticism by explicitly asking participants whether their parents "criticized" their bodies (e.g., Biolcati, Mancini & Villano, 2020; Kluck, 2010; Lwin & Malik, 2012). In contrast, the scale items used here provided examples related to parental criticism, such as "My parent(s) rebuke me for eating too much or too little food." Accordingly, adolescents may view parental criticism positively or less negatively, as they might perceive parental scolding as a form of parental concern for their health or physical well-being. However, this would require future research to verify whether parental criticism and encouragement can have both positive and negative valence.

Regarding gender difference, this study found that adolescent girls reported significantly higher body dissatisfaction than adolescent boys, which is in accordance with existing Singaporean studies (e.g., Lwin & Malik, 2012; Chng & Fassnacht, 2016). Correlational analysis by gender revealed that parental teasing was significantly linked with body dissatisfaction in adolescent girls, but not in adolescent boys. This finding aligns with a recent study that found that parental teasing is significantly linked with adolescent females' body dissatisfaction, but not for males (Yoh, 2018). In other research, no significant association between parental teasing and adolescent males' body dissatisfaction was found (Helfert & Warschburger, 2011). A probable explanation is that parental teasing tends to evoke appearance anxiety in adolescent girls. A recent study has shown that females with high social appearance anxiety reported the greatest

degree of body dissatisfaction (Levinson & Rodebaugh, 2014). However, it could also be that the effect of parental teasing on adolescent males' body dissatisfaction was simply not detected because of a potential gender bias in the scale. Research suggests that while girls subscribe to the thin ideals, boys tend to value muscularity over thinness (McCreary & Sasse, 2000; Jones, 2004). As muscular concerns were not incorporated into the scale, adolescent boys' body dissatisfaction might not have been fully captured in the current study.

Consistent with the second hypothesis, the overall results of this study demonstrated that overt control positively predicted body dissatisfaction, above and beyond parental pressure. This finding corroborates previous studies (e.g., Fisher & Birch, 2000; Van Den Berg et al., 2010), which suggest that parental overt control of food intake may lead to body dissatisfaction. However, parental restriction and monitoring of food intake were significantly linked with higher body dissatisfaction in adolescent girls only. One possibility could be that adolescent girls internalize both parental and societal appearance-related expectations through parental overt control of food intake. Research has shown that internalization of societal standards of attractiveness can contribute to stronger body dissatisfaction (Carlson Jones, 2004; Thompson & Stice, 2001). Another potential reason could be the lack of statistical power to detect the effect of overt control on body dissatisfaction due to the small sample size for males. Consequently, the predictive effect of overt control on adolescent boys' body dissatisfaction was not statistically significant ($p > .05$).

Implications of the Study

The contribution of this study to the existing literature is twofold. First, this research extends knowledge by examining whether psychological and behavioural parental control can positively and uniquely predict body dissatisfaction in Singaporean adolescents.

Second, the findings can provide researchers, educators, and parents with a deeper insight into the specific parenting practices that might lead to higher levels of body dissatisfaction. As studies have shown that body dissatisfaction is the strongest predictor of eating disorders in adolescents (Abbate-Daga et al., 2010; Stice et al., 2011), the present research findings can thus help guide intervention efforts or prevention programs on eating disorders.

Strengths and Limitations

Given the lack of research exploring the effects of overt control on body dissatisfaction, the present study makes an important contribution to the current body of literature. Our findings confirm previous research speculations by demonstrating that overt control can uniquely predict greater body dissatisfaction in adolescents. Although parental pressure was not found to be a significant predictor of body dissatisfaction, these findings suggest that parental pressure (i.e., encouragement and criticism) may have positive and negative valence. However, the present study findings do have a few limitations. For starters, the study employed a convenience sampling method; hence, the sample is not representative of the Singaporean population as those of Chinese ethnicity are overrepresented in this study. Consequently, the findings of the research may not be generalizable to other racial groups. Therefore, future studies should replicate this research with a nationally representative sample. Lastly, the lack of significant effect of overt control on body dissatisfaction in adolescent boys might be due to a potential gender bias in the body dissatisfaction scale. As such, muscularity-related scales should be incorporated into future studies.

Conclusion

In summary, the findings of the present research suggest that paren-

tal overt control and parental teasing of adolescents' food intake can lead to greater body dissatisfaction in adolescents. Even though these effects were only found in adolescent girls, it would be too premature to conclude that parental overt control does not affect adolescent boys. Instead, future research should replicate the current study using a larger male sample size and a more gender-appropriate scale for body dissatisfaction. Given that body dissatisfaction is linked with eating disorders, prevention programs for eating disorders should therefore address parental teasing and overt control, such as educating parents on the deleterious outcomes of these behaviours on adolescents.

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