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The Intergenerational Transmission of Perfectionism: Fathers' Other-Oriented Perfectionism and Daughters' Perceived Psychological Control Uniquely Predicts Daughters' Self-Critical Perfectionism and Daughters' Personal Standards Perfectionism

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### Highlights

- Studied perfectionism and paternal psychological control in 159 father-daughter dyads.
- Fathers' demands of perfection predicted daughters' self-critical perfectionism (SCP).
- Fathers' demands of perfection predicted daughters' personal standards perfectionism (PSP).
- Daughters' reports of fathers' psychological control predicted daughters' SCP and PSP.
- Controlling and demanding fathers' have daughters high in SCP and PSP.

## Abstract

An often theorized but seldom tested possibility is perfectionism is traceable to parents who demanded perfection (other-oriented perfectionism) and parents who used controlling behaviors to dictate a child's thoughts, feelings, and actions (psychological control). In support, perceived parental psychological control correlates positively with self-critical perfectionism and personal standards perfectionism. Nevertheless, there remains much to learn. Does other-oriented perfectionism in fathers influence self-critical perfectionism and personal standards perfectionism in daughters? Alternatively, might the theoretically plausible link between fathers' other-oriented perfectionism and daughters' self-critical and personal standards perfectionism simply be secondary to paternal psychological control? We answered these important questions by studying 159 father-daughter dyads. Fathers completed measures of paternal psychological control and other-oriented perfectionism. Daughters completed measures of perceived paternal psychological control, self-critical perfectionism, and personal standards perfectionism. Structural equation modeling revealed both fathers' other-oriented perfectionism and daughters' reports of fathers' psychological control uniquely predicted daughters' self-critical perfectionism and daughters' personal standards perfectionism. Findings lend credence to longstanding theoretical accounts suggesting controlling fathers who demand perfection are more likely to raise daughters with elevated socially-based and self-generated pressures to be perfect.

*Keywords:* perfectionism, psychological control, self-criticism, personal standards, parenting, fathers, daughters

## 1. Introduction

Early theorists viewed parenting behaviors as the cause of perfectionism. Over 75 years ago, Karen Horney (1939, p. 218) observed perfectionists had “self-righteous parents who exerted unquestionable authoritative sway.” Likewise, Missildine (1963, p. 94), theorized perfectionism is rooted in “persistent parental demands.” And Hamachek (1978, p. 388) noted perfectionism gestated in family environments of “inconsistent approval.” Nonetheless, empirical evidence supporting such claims is limited. Indeed, although self-critical perfectionism in parents predicts their child’s self-critical perfectionism (Soenens, Vansteenkiste, Luyten, Duriez, & Goeseens, 2005a, Soenens et al., 2005b, 2008), self-critical perfectionism diverges from the outwardly directed, controlling and demanding parenting behaviors described in earlier writings. Explicitly, self-critical perfectionists do not impose lofty demands on others. On the contrary, self-critical perfectionists believe they are the recipients of others’ lofty demands (Dunkley, Zuroff, & Blankstein, 2003).

In contrast, parents high on other-oriented perfectionism—the tendency to demand perfection from others and experience dissatisfaction with others (Hewitt & Flett, 1991)—appear more in line with earlier writings (e.g., Missildine, 1963). Parents high on psychological control—parents who show conditional love and use manipulative and controlling behaviors to govern a child’s thoughts, feelings, and actions (Barber, 1996; Barber & Harmon, 2002)—also appear more aligned with past theory (e.g., Horney, 1939). Nonetheless, whether parents’ other-oriented perfectionism influences the development of their child’s self-critical perfectionism and personal standards perfectionism, beyond psychological control, is unclear.

### *1.1. Two-factor model of perfectionism and other-oriented perfectionism*

The two-factor model asserts perfectionism is a multidimensional personality trait with two higher-order factors: self-critical perfectionism and personal standards perfectionism (Dunkley et al., 2003). Self-critical perfectionism includes *socially prescribed perfectionism* (perceiving that others demand perfection; Hewitt & Flett, 1991), *concern over mistakes* (overly adverse reactions to perceived errors; Frost, Marten, Lahart, & Rosenblate, 1990), *doubts about actions* (nagging uncertainties about performance; Frost et al., 1990), and *self-criticism* (harsh self-rebuke; Bagby, Parker, Joffe, & Buis, 1994). Personal standards perfectionism includes *self-oriented perfectionism* (demanding perfection of the self; Hewitt & Flett, 1991) and *personal standards* (unreasonably high personal expectations; Frost et al., 1990). Compared to self-critical perfectionism, personal standards perfectionism typically displays smaller associations with psychopathology (e.g., Smith et al., 2016b). Even so, both self-critical and personal standards perfectionism put people at risk for psychopathology in the presence of ego-involving stressors (Hewitt & Flett, 2002). Békés et al. (2015), for instance, reported self-critical perfectionism interacted with interpersonal and achievement-related stressors, whereas personal standards perfectionism interacted with achievement-related, but not interpersonal, stressors in predicting depression. Nonetheless, the two-factor model does not accommodate other-oriented perfectionism (demanding perfection from others; Hewitt & Flett, 1991).

Initially, other-oriented perfectionism was overlooked due to weaker associations with psychopathology (Nealis, Sherry, Lee-Baggley, Stewart, & Macneil, 2015). However, it is increasingly apparent that, although other-oriented perfectionists may not themselves suffer, they may cause tremendous distress in other people (Nealis et al., 2015; Smith et al., 2017). Hence, other-oriented perfectionism has experienced a resurgence in the literature (Nealis et al., 2015; Smith et al., 2016a; Stoeber, 2014; 2015). In fact, it is now clear that other-oriented

perfectionism is a dark form of perfectionism tied to Machiavellianism, narcissistic grandiosity, and psychopathy (Smith et al., 2016a; Stoeber, 2014). Moreover, as reported by Smith et al. (2017), other-oriented perfectionism in influencers (fathers, mothers, romantic partners, and friends) predicts socially prescribed perfectionism in targets (undergraduates).

### *1.2. Psychological control and perfectionism*

Psychologically controlling parents pressure children into meeting lofty goals by withdrawing love and by expressing disappointment (Barber, 1996). And theory suggests children internalize these pressures and become perfectionistic to cope with controlling and manipulative behaviors directed at them by their parents (Flett, Hewitt, Oliver, & Macdonald, 2002; Hewitt, Flett, & Mikail, 2017). In support, Soenens et al., (2005a) found perceived parental control displayed small-to-moderate positive associations with concern over mistakes, doubts about actions, and personal standards (but parents' self-reports of their psychological control were unrelated to of these same variables). Likewise, Soenens et al. (2005b, 2008) and Gong, Paulson, and Wang (2016) reported perceived parental control predicted concern over mistakes, doubts about actions, and personal standards. Similarly, Reilly, Stey, and Lapsley (2016) found a moderate positive relationship between perceived parental control and socially prescribed perfectionism. Given that concern over mistakes, doubts about actions, and socially prescribed perfectionism are aspects of self-critical perfectionism, and given that personal standards and self-oriented perfectionism are aspects of personal standards perfectionism (Dunkley et al., 2003), extant evidence implicates perceived parental psychological control in the development of self-critical and personal standards perfectionism.

### *1.3. Parental other-oriented perfectionism, daughters' self-critical perfectionism and daughters' personal standards perfectionism*

From a biological standpoint, self-critical and personal standards perfectionism are heritable. Tozzi et al. (2004) studied female twins and found concern over mistakes (a core facet of self-critical perfectionism) and personal standards (a core facet of personal standards perfectionism) overlapped substantially and had “significant contributions from common genetic factors” (p. 490). Furthermore, though self-critical, personal standards, and other-oriented perfectionism are meaningfully distinct (Hewitt, Flett, Besser, Sherry, & McGee, 2003), they stem from the same general factor (Smith & Saklofske, 2017). Accordingly, parents high on other-oriented perfectionism may beget daughters high on self-critical perfectionism and personal standards perfectionism due to a shared genetic lineage.

Alternatively, from a social learning standpoint, parents high on other-oriented perfectionism create environments for daughters filled with lofty expectations (Flett et al., 2002). Though such parents reward daughters when they meet expectations, they also fail to reward, or even punish, daughters when they fall short of expectations (Appleton, Hall, & Hill, 2010), which reinforces perfectionistic tendencies (Flett et al., 2002). Additionally, from a psychodynamic standpoint, demanding and critical parents lead to establishment of painful and negative introjects in daughters, with daughters’ internalizing parents’ lofty expectations in fear of losing parental care and approval (Blatt & Homann, 1992; Hewitt et al., 2017). Nevertheless, research on the role parents’ other-oriented perfectionism has on the development of their child’s perfectionism is scarce. Cook and Kearney (2014) found mother’s other-oriented perfectionism showed positive relationships with her child’s socially prescribed and self-oriented perfectionism. Yet, the extent to which Cook and Kearney (2014) findings generalize to self-critical and personal standards perfectionism, as well as father-daughter dyads, is unclear.

#### *1.4. Present study*



We tested whether fathers' other-oriented perfectionism adds to the prediction of self-critical perfectionism and personal standards perfectionism in daughters, beyond daughters' reports of fathers' psychological control and fathers' self-reported psychological control. Based on prior findings, we anticipated daughters' reports of fathers' psychological control, but not fathers' self-reported psychological control, would uniquely predict self-critical and personal standards perfectionism in daughters (Reilly et al., 2016; Soenens et al., 2005a, 2005b, 2008). Likewise, building on theory (Flett et al., 2002) and research (Cook & Kearney, 2015), we anticipated fathers' other-oriented perfectionism would uniquely predict self-critical and personal standards perfectionism in daughters. We studied fathers, rather than mothers, as perfectionistic fathers tend to be domineering and hostile, whereas perfectionistic mothers tend to be submissive (Habke & Flynn, 2002). Therefore, we presumed other-oriented perfectionism would be most salient in father-daughter dyads.

Moreover, we advanced research on psychological control and perfectionism in two key ways. First, most research on psychological control and perfectionism uses mono-source designs (Gong et al., 2016; Reilly et al., 2016). Such designs are useful, but represent a single perspective on what could be a dyadic problem. Accordingly, our multi-source investigation makes a needed contribution. Second, past studies used only one measure for psychological control (Reilly et al., 2016; Soenens et al., 2005a, 2005b, 2008). In contrast, we used multiple measures and assessed psychological control as a latent variable. Latent variables provide more accurate estimates that are less influenced by the idiosyncratic properties of individual measures (Kline, 2015).

## **2. Method**

### *2.1. Participants*

We recruited 159 father-daughter dyads. Fathers had a mean age of 52.3 ( $SD = 6.8$ ). Most fathers were Caucasian (92.5%) and were born in Canada (83.1%). Daughters had a mean age of 19.9 ( $SD = 3.0$ ), were primarily Caucasian (91.8%), were predominantly born in Canada (93.2%), and were enrolled in their second year of university ( $M = 2.1$ ,  $SD = 1.1$ ). On average fathers were involved in their daughters lives for 19.9 years ( $SD = 2.4$ ).

## 2.2. Measures

### 2.2.1. Daughters' perceptions of fathers' psychological control

Daughters' perceptions of fathers' psychological control was measured as a latent variable using the following indicators: the 8-item dependency subscale of Soenens, Vansteenkiste, and Luyten's (2010) Dependency-Oriented and Achievement-Oriented Psychological Control Scale (DAPCS-D; "My father is only happy with me if I rely exclusively on him for advice"), the 9-item achievement subscale of the DAPCS (DAPCS-A; "My father only shows his love for me if I get good grades"), and the 6-item short-form psychological control subscale of Schaefer's (1965) Children's Report of Parental Behavior Inventory (CRPBI-PC; "My father is a person who is always trying to change me"). Daughters responded to DAPCS-D and to DAPCS-A items using a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*); daughters responded to CRPBI-PC items using a 3-point scale from 1 (*not like him*) to 3 (*a lot like him*). We selected these measures given research suggesting they are reliable and valid measures of psychological control (Schaefer, 1965; Soenens et al., 2010).

### 2.2.2. Fathers' reports of paternal psychological control

Fathers' reports of psychological control was measured as a latent variable using the same three subscales as daughters' perceptions of fathers' psychological control. Informant-report items (e.g., "My father is less friendly with me if I perform less than perfectly") were

modified into self-report items (e.g., “I am less friendly with my daughter if she performs less than perfectly”).

### 2.2.3. *Other-oriented perfectionism*

Fathers’ other-oriented perfectionism was measured as a latent variable using the following indicators: the 5-item short-form of the other-oriented perfectionism subscale of Hewitt and Flett’s (1991) Multidimensional Perfectionism Scale (HFMPs-OOP; “I have high expectations for people who are important to me”), the 8-item other-oriented perfectionism subscale of Hewitt and Flett’s (1990) Multidimensional Perfectionism Scale (OOP-1990; “I think less of people if they make mistakes”), and the 7-item high standards for others subscale from Hill et al.’s (2004) Perfectionism Inventory (PI-HSFO; “I am often critical of others”). The HFMPs is rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The OOP-1990 and the PI-HSFO are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). We selected these three subscales given evidence suggesting they are reliable and valid measures of other-oriented perfectionism (Hewitt & Flett, 1990, 1991; Hill et al., 2004; Nealis et al., 2015; Stoeber, 2014, 2015).

### 2.2.4. *Self-critical perfectionism*

Self-critical perfectionism was measured as a latent variable using the following indicators: the 5-item short-form of the socially prescribed perfectionism subscale of the HFMPs (HFMPs-SPP; “Success means that I must work even harder to please others”), the 5-item short-form of the concern over mistakes subscale of Frost’s et al.’s (1990) Multidimensional Perfectionism Scale (FMPS-COM; “If I fail at work/school, I am a failure as a person”), the 4-item doubts about actions subscale of the FMPS (FMPS-DAA; “I tend to get behind in my work because I repeat things over and over”), and the 5-item short-form of the self-criticism subscale

of Bagby et al.'s (1994) Depressive Experience Questionnaire (DEQ-SC; "Often, I feel that I have disappointed others"). The HFMPs-SPP and the DEQ-SC are rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The FMPS-COM and the FMPS-DAA are rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). We selected these subscales given research suggesting they measure core interpersonal, cognitive, and behavioral features of self-critical perfectionism (Dunkley et al., 2003). These measures have also demonstrated adequate reliability and validity (Dunkley et al., 2003; Stoeber, in press).

### 2.2.5. *Personal standards perfectionism*

Personal standards perfectionism was measured as a latent variable using the following indicators: the 5-item short-form self-oriented perfectionism subscale of the HFMPs (HFMPs-SOP; "I must work to my full potential at all times"), the 4-item short-form personal standards subscale of the FMPS (FMPS-PS; "It is important that I be perfect in everything I do"), and the 4-item modified self-oriented perfectionism subscale of Garner, Olmstead, and Polivy's (1983) Eating Disorder Inventory (EDIP-SOP; "I set impossibly high standards for myself"). The HFMPs-SOP is rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). The FMPS-PS is rated on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The EDIP-SOP is rated on a 6-point scale from 1 (*never*) to 6 (*always*). Research supports the use of these subscales to measure personal standards perfectionism (Smith, Saklofske, Yan, & Sherry, 2015); and these measures show adequate reliability and validity (Smith et al., 2015; Stoeber, in press).

### 2.3. *Procedure*

XXX University's research ethics board approved our study. Daughters were recruited via online ads posted in the Department of Psychology's subject pool as well as paper flyers posted around the University. Daughters completed measures in lab and were asked to provide

their fathers' email. Fathers were contacted through email and invited to complete measures online. Daughters were awarded \$25, or \$10 and three bonus points, towards a psychology course; fathers were entered into a draw for a \$50 gift certificate.

#### *2.4. Data analytic strategy*

Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were conducted using Mplus (Muthén & Muthén, 2012). All analyses employed maximum likelihood estimation. The following approximate fit indices were used for model evaluation: the comparative fit index (CFI), Tucker-Lewis fit index (TFI), and root-mean-square error of approximation (RMSEA). CFI and TFI values above .95 suggest good model fit and values between .90 and .95 suggest acceptable model fit (Hu & Bentler, 1998). The RMSEA is an indicator of the level of misfit per degrees of freedom, with values of .08 or below being acceptable and values of .05 or less indicating good model fit (Kline, 2015). Prior to hypothesis testing, we evaluated the fit of our measurement model using CFA (see Figure 1). Next, we used SEM for hypothesis testing. Standardized betas were interpreted with Cohen's (1991) guidelines for small, medium, and large effect sizes ( $r = .10, .30, \text{ and } .50$ , respectively).

### **3. Results**

#### *3.1. Missing data, descriptive statistics, and preliminary analyses*

Only 0.9% of our data points were missing and Little's test suggested our missing data was missing completely at random,  $\chi^2(1248, N = 159) = 1254.02, p > .05$  (Little, 1988). Thus, missing data were handled using full information maximum likelihood estimation. Bivariate correlations, alpha reliabilities, and descriptive statistics are in Table 1. Alpha reliabilities were acceptable (see Table 1). Correlations between fathers' and daughters' reports of parental psychological control were not significant. Daughter's reports of psychological control displayed small-to-moderate

positive associations with daughters' self-critical and personal standards perfectionism.

Conversely, fathers' reports of psychological control displayed marginal relationships with daughters' self-critical and personal standards perfectionism. Likewise, fathers' other-oriented perfectionism displayed small-to-moderate associations with daughters' self-critical and personal standards perfectionism. A *t*-test revealed a significant difference between fathers' and daughters' reports of paternal psychological control,  $t(306) = 5.14, p < .001$ , with fathers describing themselves as less psychologically controlling.

### 3.2. Measurement model

Our measurement model provided adequate fit:  $\chi^2(94) = 183.37, p < .001$ , RMSEA = .08 90% CI [.06, .09], CFI = .92, and TLI = .90. Standardized factor loadings for indicators were all significant ( $p < .05$ ) and large ( $> .40$ ). Results suggest indicators were adequately measuring their corresponding latent variables (see Figure 1).

### 3.3. Structural model

Our structural model is in Figure 2 and provided adequate fit:  $\chi^2(94) = 183.37, p < .001$ , RMSEA = .08 90% CI [.06, .09], CFI = .92, and TLI = .90. Fathers' psychological control had a large positive association with fathers' other-oriented perfectionism:  $B = 7.21, \beta = .75$  (95% CI, .64, .87)  $p < .001, SE = .06$ . Fathers' other-oriented perfectionism also displayed a small positive association with daughters' reports of fathers' psychological control:  $B = 3.14, \beta = .19$  (95% CI, .01, .37)  $p = .041, SE = .09$ . However, the relationship between fathers' psychological control and daughters' reports of fathers' psychological control was non-significant:  $B = 0.73, \beta = .11$  (95% CI, -.10, .32)  $p = .289, SE = .11$ .

As anticipated, daughters' reports of fathers' psychological control uniquely predicted daughters' self-critical perfectionism ( $B = 0.43, \beta = .33$  [95% CI, .15, .51]  $p < .001, SE = .09$ )

and daughters' personal standards perfectionism ( $B = 0.49, \beta = .35$  [95% CI, .18, .53]  $p < .001, SE = .09$ ). Likewise, fathers' other-oriented perfectionism uniquely predicted daughters' self-critical perfectionism ( $B = 0.37, \beta = .41$  [95% CI, .08, .75]  $p = .016, SE = .17$ ) and daughters' personal standards perfectionism ( $B = 0.38, \beta = .40$  [95% CI, .07, .74]  $p = .018, SE = .17$ ). Fathers' psychological control also predicted daughters' personal standards perfectionism ( $B = -0.88, \beta = -.36$  [95% CI, -.72, -.01]  $p = .046, SE = .17$ ), but not daughters' self-critical perfectionism ( $B = -0.63, \beta = -.27$  [95% CI, -.63, .08]  $p = .134, SE = .18$ ). However, the bivariate correlation between fathers' psychological control and daughters' personal standards perfectionism was marginal and non-significant (see Figure 1). As such, fathers' other-oriented perfectionism and daughters' reports of fathers' psychological control appear to have suppressed the relationship between fathers' self-reported psychological control and daughters' personal standards perfectionism. Accordingly, the unique effect of fathers' psychological control on daughters' personal standards perfectionism should be interpreted with caution.

#### 4. Discussion

Self-critical perfectionism and personal standards perfectionism confer risk for psychopathology (Békés et al., 2015; Hewitt & Flett, 2002; Smith et al., 2016b). Thus, it is vital to identify contributing factors to assist prevention and treatment efforts. One such factor, supported by over 75 years of theory, is parental psychological control. Indeed, compelling evidence suggests people who perceive their parents as guilt-inducing, as disregarding their point of view, and as responsive only when lofty parental standards are met, report higher self-critical perfectionism and higher personal standards perfectionism (Gong et al., 2016; Reilly et al., 2016; Soenens et al., 2005a, 2005b, 2008). But, attributing the etiology of self-critical perfectionism and personal standards perfectionism solely to individual factors (e.g., Reilly et al., 2016),

without considering the wider interpersonal context (e.g., family relationships), paints an incomplete picture of perfectionism's origins. Moreover, the theoretically plausible link between parents' other-oriented perfectionism and their adult child's self-critical and personal standards perfectionism, remains untested. Consequently, we addressed these important gaps in knowledge by conducting a rigorous multi-source investigation into fathers' other-oriented perfectionism, fathers' psychological control, daughters' reports of fathers' psychological control, daughters' self-critical perfectionism, and daughters' personal standards perfectionism.

As expected, fathers' other-oriented perfectionism and daughters' reports of fathers' psychological control both uniquely predicted self-critical and personal standards perfectionism in daughters. Hence, findings corroborate accounts suggesting perfectionistic and controlling fathers are more likely to have daughters troubled by self-critical perfectionism and by personal standards perfectionism (Flett et al., 2002). Moreover, findings complement biopsychosocial models of perfectionism. Namely, daughters may develop self-critical and personal standards perfectionism due to shared genetics with their other-oriented perfectionistic fathers or they may learn perfectionistic tendencies through observation and reinforcement (Appleton et al., 2010; Flett et al., 2002; Tozzi et al., 2004). Likewise, daughters may develop self-critical perfectionism and personal standards perfectionism by internalizing their fathers' demands (Blatt & Homann, 1992). Additionally, other-oriented perfectionistic fathers may cause daughters to form a view of the self as flawed and unworthy (a foundation of self-critical and personal standards perfectionism; Hewitt et al., 2017). Taken together, our results are congruent with a relational approach to perfectionism (Hewitt et al., 2017). Thus, in circumstances in which perfectionism is embedded within an unhealthy father-daughter dynamic, clinicians might consider adopting an interpersonally oriented treatment approach (see Hewitt et al., 2017).



As anticipated, the relationship between fathers' self-reported psychological control and daughters' self-critical perfectionism was not significant. In contrast, daughters' reports of fathers' psychological control showed a positive relationship with daughters' self-critical perfectionism. So, what might explain why fathers' and daughters' reports of psychological control diverged? On the one hand, fathers may not perceive their behaviors as controlling; rather they might see their behaviors as benign or even supportive. Fathers may also have blind spots when evaluating their controlling behaviors (i.e., fathers may lack insight) or fathers may want to present themselves in a positive light (Vazire & Carlson, 2011). Alternatively, self-critical perfectionism could lead daughters to perceive their fathers as more controlling and demanding than their fathers actually are. Yet, until fathers' and daughters' behaviors are observed directly (e.g., lab-based videotaping and coding of interactions), the reasons why daughters' and fathers' reports of psychological control diverge will likely remain unresolved.

Finally, aside from advancing research on the development of perfectionism, our findings contribute to the contentiously debated (mal)adaptiveness of personal standards perfectionism. The positive associations between fathers' other-oriented perfectionism, daughters' reports of fathers' psychological control, and daughters' personal standards perfectionism, suggests daughters' personal standards perfectionism may emerge not from a supportive and a nurturant parenting style in fathers, but from a harsh and an aversive parenting style in fathers (Hewitt et al., 2017; Smith et al 2016a, 2016b). In other words, personal standards perfectionism may be born out of adversity.

#### *4.1. Limitations and directions for future research*

Our study was cross-sectional. Thus, though we present compelling evidence that fathers' other-oriented perfectionism and daughters' perceptions of fathers' psychological control are

concomitants of daughters' self-critical and personal standards perfectionism, we were unable to address issues of directionality or temporal precedence. Future studies might address this using a multi-wave longitudinal design. We also captured one snapshot of dyadic functioning between men of approximately 50 years of age and their daughters of approximately 19 years of age. Hence, it is not clear if these same variables would be influential in a sample of younger fathers and children. Additionally, future research might attempt to replicate our findings in mother-daughter, mother-son, and father-son dyads. Moreover, future research might investigate internal familial interactions as daughters' self-critical perfectionism and personal standards perfectionism may shape interactions with fathers (see Hewitt et al., 2017). Likewise, future research might compare fathers who demand perfection but have moderate-to-high acceptance to fathers who are both demanding and rejecting in their perfectionistic demands (Flett et al., 2002). Finally, future research might attempt to replicate our results using other agents of socialization.

#### *4.3. Concluding remarks*

The present study incrementally advances understanding of the intergenerational transmission of perfectionism. Findings revealed fathers' other-oriented perfectionism and daughters' reports of fathers' psychological control uniquely predicted self-critical and personal standards perfectionism in daughters. Our findings substantiate longstanding, widely-cited theoretical accounts (e.g., Flett et al., 2002; Hamachek, 1978; Horney, 1939; Missildine, 1963) suggesting daughters with fathers who demand perfection, as well as daughters who perceive their fathers as manipulative and controlling, are more likely to have high self-critical perfectionism and high personal standards perfectionism.

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Table 1

*Bivariate correlations, means, standard deviations, possible range, actual range, and alpha reliabilities*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Daughters' reports of paternal control																
1. DAPCS-D	—															
2. DAPCS-A	.49***	—														
3. CRPBI-PC	.63***	.54***	—													
Fathers' reports of paternal control																
4. DAPCS-D	.10	.03	.06	—												
5. DAPCS-A	.03	.06	-.01	.54***	—											
6. CRPBI-PC	.13	-.01	.11	.30***	.36***	—										
Fathers' other-oriented perfectionism																
7. HFMPs-OOP	.04	.00	-.02	.25***	.29***	.27***	—									
8. OOP-1990	.17*	.17*	.09	.50***	.55***	.37***	.63***	—								
9. PI-HSFO	.09	.17*	.11	.30***	.26***	.27***	.53***	.53***	—							
Daughters' self-critical perfectionism																
10. HFMPs-SPP	.21*	.46***	.33***	.03	.07	.07	.11	.14	.16	—						
11. FMPS-COM	.17*	.36***	.16*	-.01	.05	-.01	.15	.17*	.13	.52***	—					
12. FMPS-DAA	.14*	.31***	.13	.03	.06	.12	.04	.18*	.03	.35***	.49***	—				
13. DEQ-SC	.17*	.22***	.16*	.08	.04	.04	.25***	.25***	.09	.54***	.68***	.51***	—			
Daughters' personal standards perfectionism																
14. HFPS-SOP	.12	.29***	.14	-.02	.02	-.02	.06	.08	.15	.45***	.45***	.37***	.32***	—		
15. FMPS-PS	.19*	.30***	.17	-.09	.07	.08	.06	.19*	.20*	.46***	.45***	.32***	.32***	.74***	—	
16. EDIP-SOP	.31***	.41***	.28***	-.09	.03	-.02	.05	.16*	.18*	.54***	.60***	.44***	.46***	.69***	.78***	—
Mean	11.11	14.30	8.10	9.84	11.32	6.73	20.43	13.41	20.74	18.82	11.65	9.33	18.48	23.17	12.74	14.28
Standard deviation	4.45	6.86	2.08	2.76	3.63	1.45	7.53	5.09	6.67	6.69	4.86	3.72	7.17	6.02	4.13	4.41
Possible range	8-40	9-45	6-18	8-40	9-45	6-18	5-35	8-40	7-35	5-35	5-25	4-20	5-35	5-35	4-20	4-24
Actual range	8-36	9-41	6-16	8-23	9-33	6-18	6-35	8-28	7-34	5-35	5-25	4-19	5-35	8-35	4-20	4-24
Alpha reliabilities ( $\alpha$ )	.82	.92	.80	.86	.83	.76	.87	.86	.90	.84	.84	.80	.87	.87	.89	.83

*Note.* **DAPCS-D** = Soenens et al.'s (2010) Dependency-Oriented and Achievement-Oriented Psychological Control Scale dependency subscale; **DAPCS-A** = Soenens et al.'s (2010) Dependency-Oriented and Achievement-Oriented Psychological Control Scale achievement subscale; **CRPBI-PC** = Schaefer's (1965) Children's Report of Parental Behaviour Inventory psychological control subscale; **HFMPs** = Hewitt and Flett's (1991) Multidimensional Perfectionism Scale; **OOP-1990** = Hewitt and Flett's (1990) Perfectionism Scale other-oriented perfectionism subscale; **PI** = Hill et al.'s (2004) Perfectionism Inventory; **FMPS** = Frost's et al.'s (1990) Multidimensional Perfectionism Scale; **DEQ** = Bagby et al.'s (1994) Depressive Experience Questionnaire; **EDIP** = Garner et al.'s (1983) Eating Disorder Inventory; **OOP** = other-oriented perfectionism; **HSFO** = high standards for others; **COM** = concern over mistakes; **DAA** = doubts about actions; **SC** = self-criticism. **SOP** = self-oriented perfectionism; **PS** = personal standards.

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



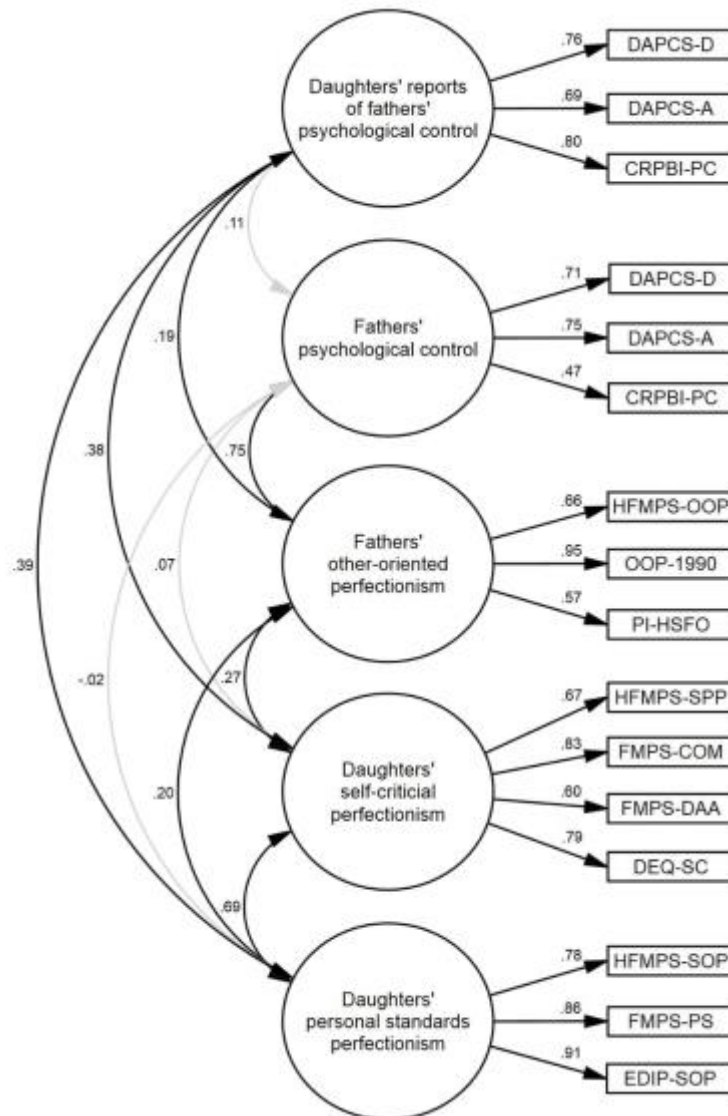


Figure 1. Measurement model. Ovals represent latent variables. Rectangles represent observed indicators. Estimates are standardized. Double-headed black arrows represent significant correlations ( $p < .05$ ). Double-headed gray arrows represent non-significant correlations ( $p > .05$ ). Single-headed black arrows represent significant loadings ( $p < .05$ ). **DAPCS-D** = Soenens et al.'s (2010) Dependency-Oriented and Achievement-Oriented Psychological Control Scale dependency subscale; **DAPCS-A** = Soenens et al.'s (2010) Dependency-Oriented and Achievement-Oriented Psychological Control Scale achievement subscale; **CRPBI-PC** = Schaefer's (1965) Children's Report of Parental Behavior Inventory psychological control subscale; **HFMPS** = Hewitt and Flett's (1991) Multidimensional Perfectionism Scale; **OOP-1990** = Hewitt and Flett's (1990) Perfectionism Scale other-oriented perfectionism subscale; **PI** = Hill et al.'s (2004) Perfectionism Inventory; **FMPS** = Frost et al.'s (1990) Multidimensional Perfectionism Scale; **DEQ** = Bagby et al.'s (1994) Depressive Experience Questionnaire; **EDIP** = Garner et al.'s (1983) Eating Disorder Inventory; **OOP** = other-oriented perfectionism; **HSFO** = high standards for others; **COM** = concern over mistakes; **DAA** = doubts about actions; **SC** = self-criticism; **SOP** = self-oriented perfectionism; **PS** = personal standards.

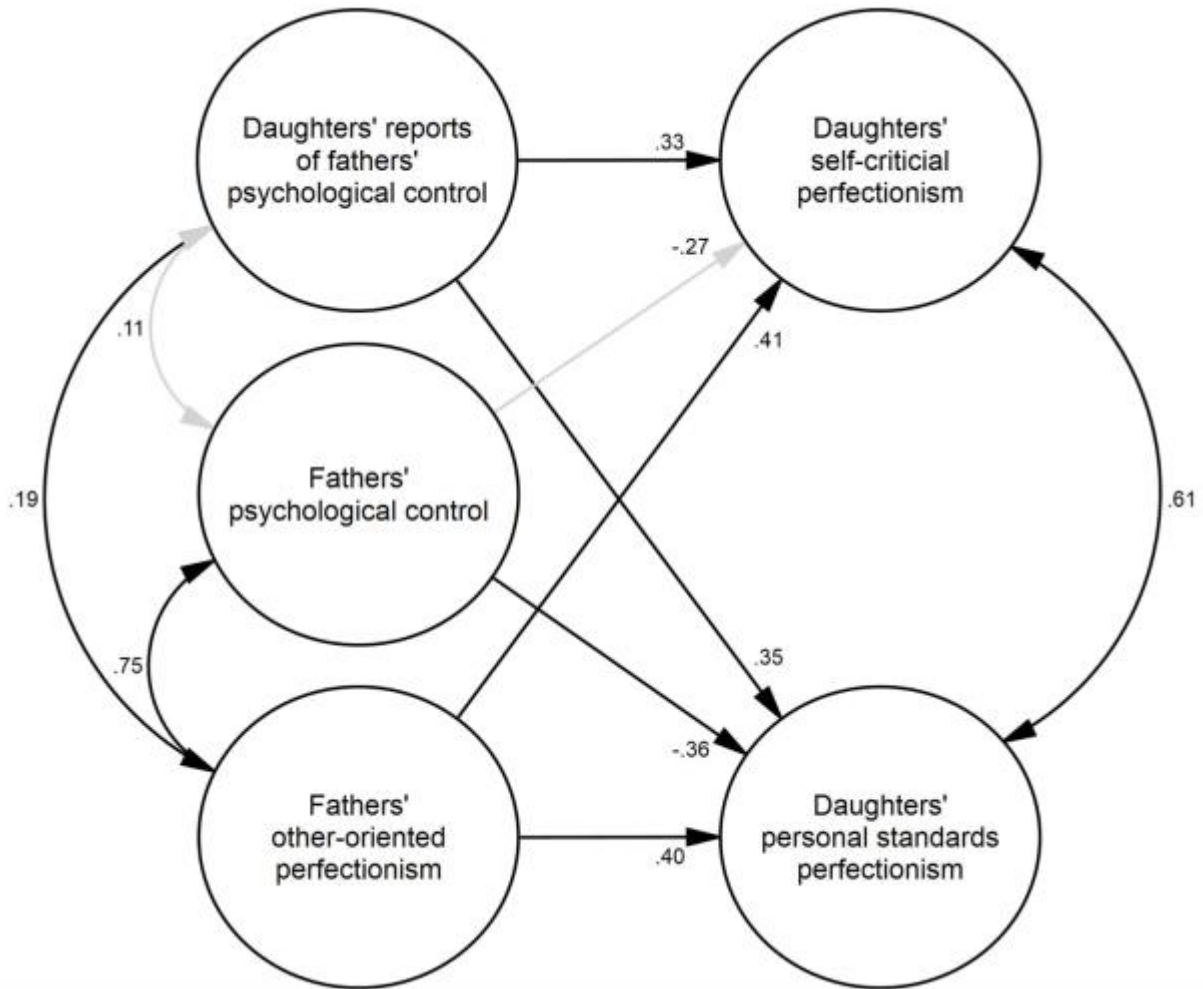


Figure 2. Structural model. Ovals represent latent variables. Estimates are standardized. Error terms are not displayed. Double-headed black arrows represent significant correlations ( $p < .05$ ). Double-headed gray arrows represent non-significant correlations ( $p > .05$ ). Single-headed black arrows represent significant paths ( $p < .05$ ). Single-headed gray arrows represent non-significant paths ( $p > .05$ ). The structural model explained 21.40% of the variance in daughters' self-critical perfectionism and 22.2% of the variance in daughters' personal standards perfectionism.