

Parental Authority and the Development of Female Dysfunctional Procrastination

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Eighty-four young women (M age = 19.1 years) and their parents (mothers (M age = 44.5 years; fathers M age = 47.2 years) completed reliable and valid measures on parental authority, dysfunctional procrastination (decisional and avoidant forms), and anger. Results indicated that permissiveness style by mothers or fathers was not significantly related to procrastination scores in their daughters. Authoritarian fathers, however, were significantly likely to raise daughters with decisional ($r = .32$) and avoidant ($r = .31$) procrastination tendencies. Authoritative fathers, in contrast, were significantly likely to raise daughters who were nonprocrastinators (decisional $r = -.22$; avoidant $r = -.28$). Mother's parental authority style was not significantly related to procrastination scores reported by their daughters, but mothers who are avoidant procrastinators are more likely to raise daughters who are avoidant procrastinators ($r = .26$) as well. Further, daughters categorized as dysfunctional procrastinators ($n = 28$) reported greater anger-in suppression perceived their fathers as more authoritarian and less authoritative, and had mothers who claimed to be more indecisive compared to nonprocrastinator daughters ($n = 33$). It would appear that fathers' parental authority style had a major influence on daughters who develop dysfunctional procrastination tendencies. These female procrastinators expressed anger emotions and had a mother who reported chronic indecision and tended to be an avoidant procrastinator. Future research should investigate other indirect and direct associations of parenting with offspring procrastination tendencies. © 1994 Academic Press, Inc.

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Parental authority contributes in a major way to the socialization process of youth (Peterson, Rollins, & Thomas, 1985; Rollins & Thomas, 1979). For example, it influences the development of autonomy (Pardeck & Pardeck, 1990) and prosocial values (Greenberger & Goldberg, 1989). Research indicates that parental authority may impact on academic performance by children (Dornbusch, Ritter, Leiderman, & Roberts, 1987). Parental authority styles may also place youths at risk of developing psychiatric disorders, such as narcissism, chemical dependency, depression, and low self-esteem (Bornstedt & Fisher, 1986; Buri, 1989; Buri, Louiselle, Misukanis, & Mueller, 1988; DeMarsh & Kumpfu, 1985; Kashani, Hooper, Beck, & Corcoran, 1987; Kernberg, 1989).

Baumrind (1970,1971) reported that children of parents with a *permissive* authority style, characterized as warm and less apt to employ punishment, tend to lack self-reliance and inquisitiveness. *Authoritarian* authority style of parents, who control through harsh punishment, tend to produce children who are discontent, withdrawn, and distrustful. In Baumrind's opinion, the ideal parent is one who exerts a high degree of control but encourages the child's striving for autonomy in appropriate areas. Children raised in this environment, termed *authoritative* parental authority, tend to be self-reliant, self-controlled, and inquisitive. Furthermore, authoritative parenting especially assists in the development of personality and behavioral correlates of high self-esteem (Baumrind, 1984).

Recently, Buri (1991) developed a self-report scale designed to measure Baumrind's typology of permissive, authoritarian, and authoritative parenting style provided by both mothers and fathers. The *Parental Authority Questionnaire* (PAQ) is a 30-item, 5-point Likert scale, with 10 items per style that is scored twice by respondents (once for each parent) and has acceptable reliability as a research tool. Studies using the PAQ suggest that both mothers and fathers who provide emotional support and guidance to their adolescent promoted self-esteem development, while parental authoritarianism was inversely related to adolescent self-esteem (Buri, 1989). Permissiveness by both mothers and fathers were not significantly related to self-esteem (Buri *et al.*, 1988). Similarly, adolescents' appraisals of mothers' and fathers' authority were more strongly related to hostility in fathers than in mothers (Buri, Cooper, Richtsmeier, & Komar, 1991). Fathers, but not mothers, who reported strong hostility tendencies, in fact, were judged as authoritarian parents and had daughters who claimed low self-esteem (Buri, Richtsmeier, Komar, Cooper, & Kirscher, 1992). Together, these studies suggest that gender differences extend to the context of parenting styles and its impact on the personality of children.

The present study investigated the influence of Baumrind's three pa-

rental authority protocols (as assessed by the PAQ) on the development of dysfunctional procrastination tendencies among late adolescent (college student) females. To the authors' knowledge, this study is the first to explore the developmental roots for chronic task delays. A growing body of literature suggests that chronic procrastination is not an effective technique for life success and may be a maladaptive personality tendency and dysfunctional (Ferrari, 1991a; 1993b). Procrastinators appear to be more likely than nonprocrastinators to engage in self-handicapping behavior (Ferrari, 1991b), employ impression management techniques (Ferrari, 1991c), and avoid self-relevant diagnostic information (Ferrari, 1991d). Correlational studies have reported a relationship between procrastination and low self-confidence and self-esteem; high states of anxiety, depression, neurosis, forgetfulness, disorganization, noncompetitiveness; and lack of energy (Beswick, Rothblum, & Mann, 1988; Effert & Ferrari, 1989; Ferrari, 1989; Lay, 1986, 1987, 1988). These studies suggest that chronic procrastination involves affective, behavioral, and cognitive components and is more than ineffective time management.

Two types of dysfunctional procrastination have been reliably assessed, and both were examined in the present study. One type has been called indecisiveness, or *decisional procrastination* (Janis & Mann, 1977; Mann, 1982). A cognitive antecedent of performance delay, decisional procrastination is said to be a coping pattern used to deal with decision-making situations perceived as stressful (Janis & Mann, 1977). Decisional procrastination has been related to diffuse-identity, forgetfulness, and cognitive processing failure, but not associated with a lack of intelligence (Effert & Ferrari, 1989; Ferrari, 1989, 1991a). A second type of procrastination may be called *avoidant procrastination* and is a tendency to delay task performance as a way to avoid aversive tasks, performance failure, or threats to self-esteem (Ferrari, 1989; McCown & Johnson, 1989). Avoidant procrastination has been related to self-presentation styles, a desire to distance oneself from challenging tasks, and dysfunctional impulsiveness at the last moment of task performance (Ferrari, 1992, 1993a, 1993b).¹

The authors did not expect decisional and avoidant procrastination to be related to mothers' and fathers' permissive authority styles. Previous research found that permissive parenting was not related to dysfunctional personality tendencies such as low self-esteem (Buri *et al.*, 1988, 1991) or codependency (Fischer & Crawford, 1992). Therefore, it was not expected in the present study to be a relevant variable affecting the development of chronic dysfunctional procrastination.

¹ Interested readers may refer to Ferrari, McCown, and Johnson (in press) for complete discussion of the different forms of procrastinatory behavior.

Authoritarian parents who are forceful, overbearing, and highly controlling may promote children who lack self-confidence and self-worth (Baumrind, 1984). Furthermore, research has found that authoritarian parenting has a greater impact on the personality development of daughters than sons (Buri, 1988; Buri *et al.*, 1991, 1992; Fischer & Crawford, 1992). Burka and Yuen (1983) and others (Ferrari, 1989; Lay 1986) state that procrastinators have low self-confidence and self-esteem and may operate from a belief that they lack self-worth. Perhaps daughters raised in authoritarian households develop low self-esteem and are more likely to rebel or "strike back" by taking their time to complete tasks (i.e., procrastinate) that are commanded to be done. In other words, indecision and avoidant procrastination may be ways of rebelling against the controlling demands made by an authoritarian parent such as a father.

Individuals who report chronic procrastination tendencies also may claim high states of anger expression. Ferrari, McCown, and Johnson (in press) report that frequent decisional and avoidant procrastinators claim passive-aggressive personality styles. It is possible that some people use frequent procrastination as a passive-aggressive way to rebel against controlling, manipulative, forceful demands, like those made by authoritarian parents. Spielberger (1980; Spielberger, Johnson, Russell, Crane, Jacobs, & Worden, 1985) has conceptualized anger expression as anger-in, the withholding of anger and expressing it indirectly, and anger-out, the direct outward demonstration of hostility. To the extent that parental authority styles influence the development of procrastination frequency, it was expected that self-reported procrastination rates among women would be related to claimed authoritarian parenting. The use of chronic procrastination may be a child's attempt to cope in a nonthreatening, nonconfrontational way to highly restrictive parental control over one's life. Consequently, it was expected that frequent procrastination would be related to measures of anger suppression.

In contrast, authoritative mothers and fathers, who establish expectations but are flexible to the developmental needs of their children, may raise daughters (and sons) who are self-assured, self-reliant, and assertive (Baumrind, 1984). Children of authoritative parents may not need to use procrastination as a defensive coping strategy to parental authority. Therefore, it was expected that self-reported procrastination (decisional and avoidant) would be inversely related to parental authoritative style. No a priori prediction was made as to whether mothers or fathers would have a greater impact in nonprocrastination tendencies.

METHOD

Participants

Female college students ($n = 84$; M age = 19.1 years) at a small private college who were enrolled in an introductory developmental psychology course participated in the present

study for extra course credit.² All participants completed introductory psychology as a prerequisite, were enrolled in an associate degree program (typically child studies), and were predominantly in their 1st (56.0%) or 2nd (38.1%) year of college. Their position within the family's birth order for children was distributed relatively equal across first/early child (34.5%), second/middle child (28.6%), and third/last child (28.6%). Only 7.1% indicated they were an only child.

In addition to these women, their mothers (M age = 44.5 years) and fathers (M age = 47.2 years), as an intact family (i.e., not divorced or separated), participated in the study. Most mothers were employed full-time (64.3%) and were either high school graduates (36.9%) or had completed some college education (20.2%). Similarly, most fathers were employed full-time (89.3%) and either graduated high school (29.8%) or had finished some college coursework (28.6%). Thus, consistent with the typical student profile developed by the college's admissions department, students who attend this private college are most often women from working class families whose parents were not college graduates.

Psychometric Scales

Included among the scales completed was the *Decisional Procrastination Scale* by Mann (1982). A reliable and valid measure of indecision, the inventory is a 5-item scale taken from a set of measures on conflict coping patterns (see Janis & Mann, 1977). High scores on this procrastination scale indicate a tendency to put off decisions by doing other tasks. Procrastination items include "I delay making decisions until it is too late" or "I put off making decisions." The scale has a Cronbach α of .80 and retest reliability of .69 (Effert & Ferrari, 1989). Decisional procrastination scores from this measure have been related to forgetfulness, memory loss, and behavioral indices of procrastination, but not to low intelligence (Effert & Ferrari, 1989; Ferrari, 1989, 1991a, b).

Participants also completed McCown and Johnson's (1989) *Adult Inventory of Procrastination* (AIP). The 15-item scale assesses an individual's tendency to delay the beginning and/or completion of tasks. Procrastination scores are obtained by summing across response items (seven items reverse-scored); high scores are indicative of frequent procrastination. Sample items include, "I don't get things done on time" or "I am not very good at meeting deadlines." The scale has a coefficient α of .79 and retest reliability of .71. Validity studies indicate that high scores have been related to inefficient time management, delays in returning completed scales, filing income tax returns, and shopping for Christmas gifts (Ferrari, 1992, 1993a; McCown & Johnson, 1989). Ferrari (1992) reported that among college students, AIP scores loaded on a tendency to avoid self-relevant cognitive information, indicating that the AIP assessed an avoidance procrastination motive.

The *Anger Expression* scale, developed by Spielberger *et al.* (1985), was also completed. This 24-item self-report inventory has three subscales for assessing individual differences in

² Only 12 male students were enrolled in the developmental psychology courses. Although these men did not differ significantly from the female participants on demographic items or procrastination scores, their data were not included in the present study. The authors believed that since so few men were involved, the generalizability of results might be limited. Only data from the 86 female students and their parents were included in the analysis. It should be noted that originally we had 107 women in our study, but included only the 84 who completed all inventories. The 23 women eliminated in the study did not complete the anger inventory and so were not included in the final analyses. Further, with all 107 women, decisional procrastination and avoidant procrastination were significantly related to fathers' authoritarian parenting style (decisional $r = .31, p < .003$; avoidant $r = .31, p < .003$) and to fathers' authoritative parenting style (decisional $r = -.21, p < .05$; avoidant $r = -.27, p < .010$), consistent with the results reported for the 84 participants.

the expression of anger, and two of the subscales were used here: anger toward others or objects (*anger-out*: "I say nasty things"), and suppressive or anger held in (*anger-in*: "I boil inside, but do not show it"). The coefficient α s for these scales for college students range from .72 to .89. Spielberger (1988) reported that the validity of these scales was promising. In addition, some students completed Spielberger's (1980) *State-Trait Anger Scale*, a psychometric self-report inventory with separate 10-item scales for assessing state and trait anger. State anger consists of subjective emotions of irritation, annoyance, fury, and rage that varies over time and setting ("I am furious" or "I feel irritated"). Trait anger is defined in terms of the frequency with which angry feelings are experienced ("I am a hot-headed person" or "I feel annoyed when I am not given recognition for doing good work"). The α coefficients of the state anger scale range from .88 to .95; those of the trait anger scale range from .81 to .91. Spielberger *et al.* (1985) report the scales have acceptable validity at measuring angry feelings among nonclinical populations and that both scales were moderately correlated with anger-out and anger-in scales for anger expression.

All students completed Buri's (1991) *Parental Authority Questionnaire*, a 30-item inventory completed by the child for each parent. Three 10-item subscales yield scores for *permissive style* (parent is warm, yet has nondemanding, noncontrolling attitudes toward his/her children: "As I was growing up, my [mother] seldom gave me expectations and guidelines for my behavior."), *authoritarian style* (parent values unquestioning obedience with punitive discipline: "My [mother] has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to."), and *authoritative style* (parent has firm and clear expectations, but is flexible and rational in manner: "My [mother] has always encouraged verbal give-and-take, whenever I have felt that family rules and restrictions were unreasonable."). The scale has acceptable internal consistency (.74 to .87) and retest reliability (.77 to .92). Scale scores have been related to hostility in parents (Buri, Cooper, Richtsmeier, & Komar, 1991) and low self-esteem development in children (Buri, Louiselle, Misukanis, & Mueller, 1988), as well as parental nurturance (Buri, 1991).

Procedure

Approximately 3 weeks into the semester, students enrolled in developmental psychology classes taught by the first author were asked to participate in a research project involving their parents. Students were asked to take a project packet (coded for later matching in data analysis) for either or both parents who raised them. The packet contained demographic items, standardized personality scales, and a consent form with instructions. The demographic information requested the adult's age, gender, employment status, and education level. Parents were also instructed to complete the decisional and avoidant procrastination scales and to sign and date the consent form. Parents read that their participation could earn their child extra class credit, but that they were under no obligation to participate.³ Further, they were instructed to complete all the material in the packet at one sitting, to work individually, and without discussion of the task with their spouse or children, and then to place all completed materials into a large manila envelope and to seal it. Sealed envelopes could be returned by mail or hand-delivered by their child to the professor. Only nine parents chose to mail the envelopes, and all envelopes were returned sealed with

³ No student indicated that their parents responded negatively to the request for participation, nor that their parents wished not to be involved. In fact, a few parents (3) wrote to the professor with positive interest in the project and requested copies of this written paper. Several students (6 females) who would not have contact with their parents or whose parents had died were given an alternative project in which to earn bonus points.

consent forms signed and dated. Parents had 6 weeks to complete this task, which included a week-long semester break.⁴

On the day parents' envelopes were due for return, students were informed that they could earn additional extra credit if they participated in "part two" of the project. Students who agreed to participate were given a folder containing a consent form to be signed and dated, a demographic item sheet, decisional and avoidant procrastination scales, and the parental authority questionnaire with sections for evaluating their parents. These students completed the anger measures during the previous semester as part of another research project (see Ferrari, McCown, & Johnson, in press). It took students approximately 45 to 50 min to complete all their folders and to return them to the professor. After all completed folders were collected, students were "debriefed" with a developmental lecture on parenting styles and personality development.

RESULTS

Correlational Analysis

Table 1 presents the simple correlation coefficients among procrastination, anger, and parental authority scores by daughters and their mothers and fathers. For the daughters, decisional procrastination was positively correlated with avoidant procrastination, state-anger, and anger-in. Additionally, avoidant procrastination was found to correlate positively with state-anger and anger-out. Trait-anger was positively related to anger-in, and both state-anger and trait anger were positively related to anger-out. Also, as noted in Table 1, anger-in and anger-out correlate highly with one another.

Turning to the parental authority scores, Table 1 indicates that for mothers, authoritative parenting style was negatively related to authoritarian parenting style, and that their avoidant procrastination score was positively related to permissive parenting style. A significant positive correlation was found between mothers' avoidant procrastinatory behavior and their daughters' avoidant procrastination behavior. A different pattern was found to exist for fathers, however. As noted from Table 1, an authoritarian parenting style for fathers was positively related to decisional procrastination and avoidant procrastination in their daughters. Authoritative parenting style, in contrast, correlated negatively to daughters' decisional and avoidant procrastination.

Comparing maternal and paternal parenting styles, Table 1 also indicates a positive correlation between permissiveness in mothers and fathers, as well as a positive correlation between authoritarian parenting style in both mothers and fathers. Authoritarian parenting style in fathers was negatively related to authoritative parenting style in mothers, and authoritative parenting style for both mothers and fathers correlates posi-

⁴ Requesting parents and students to complete and return questionnaires to a researcher is a valid and reliable method for collecting data in this area of study (Buri *et al.*, 1991, 1992).

TABLE 1
SIMPLE CORRELATION COEFFICIENTS BETWEEN STUDENTS (DAUGHTERS) AND THEIR MOTHERS AND FATHERS ON PROCRASTINATION, ANGER, AND PARENTAL AUTHORITY MEASURES ($n = 84$)

Personality variables	SDP	SAP	STATE	TRAIT	A-IN	A-OUT	MPESS	MRIAN	MTIVE	MDP	MAP	FPES	FRIAN	FTIVE	FDP
SDP	—														
SAP	.654**	—													
STATE	.367*	.485**	—												
TRAIT	.262	.259	.243	—											
A-IN	.447**	.270	.275	.390*	—										
A-OUT	.300	.308*	.314*	.709**	.482**	—									
MPESS	.078	.087	.159	.078	.056	.027	—								
MRIAN	.125	.187	.037	-.197	-.052	.265	-.198	—							
MTIVE	-.034	-.098	-.208	.026	-.133	-.156	.348	-.311**	—						
MDP	-.072	-.003	.375*	-.022	.165	.005	.011	-.273*	-.121	—					
MAP	.201	.261	-.073	.227	.218	.120	.269*	-.065	-.142	.157	—				
FPES	-.109	-.127	-.104	-.069	-.037	-.028	.378**	.089	.165	-.145	.046	—			
FRIAN	.318**	.309**	.249	.208	.163	.300	.034	.395**	-.263*	-.104	.088	-.422**	—		
FTIVE	-.217*	-.282**	-.162	-.028	-.200	.087	.061	-.042	.347**	.016	-.211	.336**	-.377**	—	
FDP	-.109	-.184	-.252	-.232	-.131	-.132	.174	.024	-.165	-.142	.072	.224*	-.097	-.235*	—
FAP	.172	.006	.282	-.200	.346*	.394**	.287*	-.142	-.045	-.041	.160	.049	.033	-.197	.405**

Note. Abbreviations are as follows: SDP, Student's Decisional Procrastination; SAP, Student's Avoidant Procrastination; STATE, State Anger; TRAIT, Trait Anger; A-IN, Anger-In; A-OUT, Anger-Out; MPESS, Mother Permissive; MRIAN, Mother Authoritarian; MTIVE, Mother Authoritative; MDP, Mother Decisional Procrastination; MAP, Mother Avoidant Procrastination; FPES, Father Permissive; FRIAN, Father Authoritarian; FTIVE, Father Authoritative; FDP, Father Decisional Procrastination; FAP, Father Avoidant Procrastination.

* $p < .05$.

** $p < .01$.

tively. Also for fathers, permissiveness was found to correlate positively with authoritative parenting style and with decisional procrastination. Authoritative parenting style in fathers also correlated negatively with decisional procrastination. Finally, the two procrastination behaviors—avoidant and decisional—were also found to correlate positively with one another for fathers.

Multiple Regression Analysis

Stepwise multiple regression analyses were conducted separately on daughters' decisional procrastination and avoidant procrastination in an attempt to determine if authoritarian, authoritative, and permissive parenting styles of both mothers and fathers predicted their child's procrastinatory behaviors. Interestingly, only fathers' authoritarian style was found to predict decisional procrastination ($R^2 = .10$, $p < .003$) and avoidant procrastination ($R^2 = .096$, $p < .004$).

Comparing Dysfunctional Procrastinators and Nonprocrastinators

One way of more closely examining personality characteristics for dysfunctional procrastinators may be to compare individuals who exhibit a relatively high degree of both decisional *and* avoidant procrastination with those individuals who show a relatively low degree of these behavioral tendencies (labeled "nonprocrastinators"). This procedure permits further assessment of individuals who use procrastination strategically but experience performance failure (Ferrari, 1993b). In order to accomplish this, a median-split method was employed to categorize daughters as low or high on both decisional and avoidant procrastination. Specifically, those daughters scoring above the median on *both* decisional procrastination ($Md = 13.0$) and avoidant procrastination ($Md = 37.5$) were classified as "dysfunctional procrastinators" ($n = 28$). Conversely, daughters scoring below the median for decisional and avoidant procrastination were labeled "nonprocrastinators" ($n = 33$).

Table 2 contains the mean scores and associated *t* tests for dysfunctional procrastinators and nonprocrastinators across personality characteristics. Significant differences were obtained for all characteristics but state-and trait-anger, anger-out, mothers' permissiveness, authoritarian and authoritative parenting styles, fathers' permissiveness parenting style, fathers' avoidant procrastination, and both mothers' and fathers' decisional procrastination. As expected, dysfunctional procrastinators are more likely to exhibit higher levels of anger-in, but contrary to expectations, did not appear to exhibit lower levels of state-and trait-anger. Additionally, dysfunctional procrastinators are more likely than nonprocrastinators to have fathers who are more authoritarian but less authoritative, along with mothers who exhibit higher levels of avoidant procrastination.

TABLE 2
t TESTS FOR DIFFERENCES IN MEAN SCORES OF PERSONALITY VARIABLES BETWEEN LOW AND HIGH COMBINED AVOIDANT AND DECISIONAL PROCRASTINATORS^a

	Non-procrastinators (<i>n</i> = 33)		Dysfunctional procrastinators (<i>n</i> = 28)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
DP	9.03	2.62	16.61	2.35	-11.92	.01
AIP	27.91	6.10	46.04	6.64	-11.03	.01
STATE	12.67	4.60 ^b	17.89	10.53 ^c	-1.86	.07 ns ^d
TRAIT	21.33	7.55 ^b	26.06	7.40 ^c	-1.69	.10 ns
A-IN	18.83	4.63 ^b	23.17	7.33 ^c	-1.98	.05
A-OUT	18.00	5.86 ^b	21.28	7.41 ^c	-1.35	.19 ns
FPESS	27.67	6.14	26.00	6.66	1.01	.32 ns
FRIAN	26.79	8.99	32.29	8.27	-2.49	.02
FTIVE	35.36	6.97	31.25	6.83	2.32	.02
MPESS	25.61	6.37	28.07	5.35	-1.64	.11 ns
MRIAN	25.79	7.99	28.14	7.45	-1.19	.24 ns
MTIVE	36.36	7.86	36.18	7.97	.09	.93 ns
FDP	10.88	4.44	9.68	3.53	1.18	.24 ns
FAIP	31.24	11.10	33.64	10.56	-.86	.39 ns
MDP	12.03	5.02	10.89	4.41	.94	.35 ns
MAIP	30.42	7.31	36.75	10.95	-2.60	.01

^a Based on median split method.

^b *n* = 12 (varying ns are due to the fact that some student participants were involved in another study, and some parents did not complete their packets).

^c *n* = 18 (see explanation in ^b above).

^d ns, not significant.

DISCUSSION

The present study suggests that a major source for the development of chronic procrastination tendencies lies within the home environment.⁵ As expected, authoritarian fathers who exercise overcontrol and inflexibility of authority untempered by warmth or support were perceived by daughters as the parental figure that influenced their preference toward cognitive and behavioral procrastination. Authoritative fathers (perceived as accepting and supportive of their children while flexible in their use of

⁵ In terms of demographics, an analysis for birth order effects on procrastination was performed. Univariate analysis of variance showed no significant difference among birth ranks on decisional or avoidant procrastination scores. *T* tests between first borns and other categories combined also revealed no significant differences on either measure of procrastination. Thus, for women, placement within the family seems not to be a relevant predictor for the development of dysfunctional procrastination tendencies.

authority) were inversely related to daughters' procrastination scores. Permissive fathers (perceived as accepting without use of parental authority) were unrelated to the procrastination scores of their daughters. The parental authority style perceived by daughters to be associated with their mothers was unrelated to the child's procrastination scores, although dysfunctional procrastinators had mothers who reported to be indecisive. In addition, mothers of procrastinating daughters tended to be avoidant procrastinators themselves. Thus, it seems that "daddy made me not do it," particularly if he was perceived as an authoritarian parental figure, and "mommy is like me" in that she tended to be a procrastinator like her daughter. Such results contribute to current interest by child and developmental psychologists to examine the role of fathers in understanding maladjusted personality development (see Phares, 1992).

Furthermore, as expected, frequent procrastinators reported greater anger and anger suppression than nonprocrastinators. This fact suggests an interesting explanation for why these women chose procrastination as a strategic coping mechanism. It seems that by delaying the beginning of or completion of tasks these women were able to release their anger, or "strike back", at their controlling fathers' wishes in an indirect, nonconfrontational manner. Procrastination, then, for these women, may be a form of passive aggression against the controlling demands made by an authoritarian father and the poor decision-making efforts of an indecisive mother. The results of this study are consistent with previous research demonstrating an association between procrastination and passive-aggressive tendencies (Ferrari *et al.*, in press) and extends to other studies demonstrating the influence of parenting styles on personality development (e.g., low self-esteem—Buri, 1991; Buri *et al.*, 1992; codependency—Fischer & Crawford, 1992).

Despite the present study, further research clearly is needed on the development of dysfunctional procrastination. For example, only daughters from intact families (both parents alive and living together in the home) were utilized in this study. Considering that many families are not intact, future research should examine the differences in procrastinatory behavior that might exist between children living in both intact and non-intact families. It is conceivable that markedly different patterns of interpersonal relationships could exist in both type of families.

Additionally, only women were used in this study. While no significant gender difference in procrastination scores have been reported in previous studies (see Ferrari *et al.*, in press), it remains unclear how male procrastinators perceive their parents' authority. Furthermore, the perceptions of parental authority were made by the children themselves and not their parents. This procedure was used so as not to overburden parents who volunteered time and effort to participate, although research psy-

chologists have been extremely leery of this technique (e.g., Halverson, 1988; Lewinsohn & Rosenbaum, 1987). It also should be noted that parents and children tend to be consistent in their mutual ratings of parental authority styles (J. Buri, personal communication, June 1992). Still, the present study would have benefited by including males and by comparing parents and children in their perceptions of authority styles.

Finally, the present study only indirectly established that parental authority may result in the development of dysfunctional procrastination as a form of passive-aggression. More direct tests of this hypothesis are needed. Furthermore, it is possible that daughters may elicit further discipline by their authoritarian fathers when they procrastinate, suggesting that delaying an initial command for action would not be an effective strategy for ending conflicts. Why, then, would these daughters use frequent procrastination if it was ineffective and may get their fathers even more upset? Future research should explore other indirect as well as direct associations in the development of procrastinatory behavior. The reasons why some individuals choose this behavior pattern to cope with life remains an interesting research issue.

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