

Mediational Links Among Parenting Styles, Perceptions of Parental Confidence, Self-Esteem, and Depression on Alcohol-Related Problems in Emerging Adulthood*

JULIE A. PATOCK-PECKHAM, PH.D.,[†] AND ANTONIO A. MORGAN-LOPEZ, PH.D.[†]

Department of Psychological Science, Missouri University of Science and Technology (formerly University of Missouri–Rolla), Humanities and Social Sciences Building Number 111, 500 West 14th Street, Rolla, Missouri 65409-1270

ABSTRACT. Objective: Depression is often found to be comorbid with alcohol-related problems. Parental overprotection, which may be of particular importance during emerging adulthood, has been linked to internalizing symptoms in offspring. This article evaluates the impact of parenting styles and parental confidence in their offspring on an internalizing pathway to alcohol-related problems through self-esteem and depression. **Method:** Mediational links were tested among parenting styles (authoritative, authoritarian, permissive), parental confidence (overprotection, autonomy), self-esteem, depression, and alcohol-related problems. A two-group, multiple indicator multiple-cause structural equation model with 441 (216 female, 225 male) college students was examined. **Results:** Overall, having a father who was confident in his child's ability to make autonomous decisions was protective against

depression for both genders. Perceptions of paternal autonomy mediated the impact of the fathers' parenting styles (authoritative, permissive) on depression for both genders. For men, parental overprotection mediated the impact of an authoritarian father on self-esteem, and self-esteem mediated the impact of parental overprotection on depression. Moreover, among men, perceptions of maternal autonomy mediated the impact of the mothers' parenting styles (authoritative, permissive) on self-esteem, and self-esteem mediated the impact of maternal autonomy on depression. **Conclusions:** The current pattern of findings is distinct from pathways through behavioral undercontrol with influences from the same-sex parent for both genders. These findings indicate that parenting may have differential influences on internalizing pathways to alcohol-related problems. (*J. Stud. Alcohol Drugs* 70: 215-226, 2009)

THE QUALITY OF THE RELATIONSHIPS with one's parents is thought to have important implications regarding emotional functioning throughout the life span (Ainsworth, 1989; Lopez, 1995; Simpson et al., 1992) and appears to be as important to adolescents and young adults (ages 12-30 years) as having a partner or best friend (van Wel et al., 2000). Bonds with parents can have a prolonged impact and may be reasonably stable over time (van Wel et al., 2000). In many cases, alcohol-use disorders have been linked to the confluence of poor parenting and temperamental factors in offspring (Sher, 1991).

Negative affect is often comorbid with alcohol-related problems (Armeli et al., 2000; Colder and Chassin, 1999). In fact, approximately half of alcoholic women and one third of alcoholic men meet criteria for major depression

(Hesselbrock et al., 1985). The self-medication (drinking to relieve negative affect) model (Sayette, 1999; Sher, 1987) suggests some individuals expect alcohol consumption will reduce feelings of tension or stress (Fromme et al., 1993). This model has been identified as one of the most enduring etiological perspectives used to explain problematic alcohol use (Sher et al., 2005). Thus, some understanding of the potential mediating and moderating relationships that predict depression may enhance our understanding of alcohol-related problems in general.

In a recent longitudinal study, Schuckit and Smith (2006) found three predictors accounted for 51% of the variance in the development of problematic alcohol use in men: (1) genetic influences (i.e., a low-level response to alcohol or attenuated cognitive deficits), (2) externalizing symptoms (e.g., impulsiveness), and (3) internalizing symptoms (e.g., depression). This is consistent with Sher and Trull's (1994) conclusion that "there does not appear to be a single alcoholic personality" (p. 99). It is clear the complexity of the distinct pathways and motivations contributing to alcohol-related problems requires additional illumination (Armeli et al., 2000).

Emerging adulthood

Specifically, this investigation sought to examine individuals in emerging adulthood (Arnett, 2000), when young adults are learning to fend for themselves. Emerging adulthood is the period of life when substance-use disorders are known to

Received: January 28, 2008. Revision: September 12, 2008.

*This research was supported by a Graduate Student Research Award in prevention to Julie A. Patock-Peckham (sponsored by the Prevention Research Center at Arizona State University); National Institute of Mental Health center grant P30MH39346 (Irwin Sandler, principal investigator); National Research Service Award Training grant 5T32MH18387 (Laurie Chassin, principal investigator); and Research Triangle Institute International's Health, Social and Economics Research Unit. Portions of this research were presented at the 30th Annual Scientific Meeting of the Research Society on Alcoholism, Chicago, Illinois, July 7-12, 2007.

[†]Correspondence may be sent to Julie A. Patock-Peckham at the above address or via email at: jpatock@mst.edu. Antonio A. Morgan-Lopez is with the Behavioral Health and Criminal Justice Division, RTI International, Research Triangle Park, NC.

be at peak prevalence (Substance Abuse and Mental Health Services Administration, 2002). College students suffering from depression are more likely to report heavy drinking while alone (Christiansen et al., 2002), problematic drinking-related outcomes, and heavy episodic use (Hussong et al., 2001; Weitzman, 2004). This is compelling, because college students often report using alcohol to deal with life stressors (Hutchinson et al., 1998; Park and Levenson, 2002) as well as to alleviate negative emotions (Kushner et al., 1994; Wood et al., 1992).

Parental confidence in their offspring

A lack of parental confidence in their offspring's abilities may be particularly problematic in the period of emerging adulthood when young adults are beginning to lead separate lives from their parents. Parental overprotection reflects a relationship characterized by excessive control and contact, intrusion, and infantilization of offspring (Parker et al., 1979). Conversely, parental allowance of autonomy indicates parents have confidence in their children's decision-making abilities and in their children's capabilities to take care of themselves.

Overprotection has been linked to a variety of psychological maladjustment variables in offspring. For instance, paternal overprotection has been linked to higher levels of anxiety (Bogels and van Melick, 2004), obsessive-compulsive disorder (Yoshida et al., 2005), internalizing symptoms (Muris et al., 2003), and depression (Oldehinkel et al., 2006; Yoshida et al., 2005). Martin et al. (2004) found "maternal overprotection makes strong and independent contributions to both moderate and serious levels of depressive symptomatology beyond contributions from low maternal care" (p. 655). Hence, parental overprotection may be associated with a number of internalizing problems linked to pathways regarding problematic alcohol use. Yet, to date, no one has examined the link between general approaches to parenting style (i.e., authoritarian, authoritative, permissive) and feelings of autonomy from parents regarding the development of alcohol-related problems. Conceivably, these influences may be moderated by the gender of both parent and offspring.

Self-esteem

Self-esteem is the extent to which individuals believe they are capable, significant, successful, and worthy (Coopersmith, 1981). Parental alcohol problems have been associated with low global self-worth in children (Bijttebier and Goethals, 2006). This is important, because low self-esteem has been linked to a variety of maladaptive behaviors (Dishion et al., 1988), including depressive symptoms (Workman and Beer, 1989). Recently, Swaim and Wayman (2004) found that, among Mexican-American women, those with lower self-confidence were more likely to engage in heavy episodic drinking. Herz and Gullone (1999) found parenting charac-

terized by high levels of overprotection and low levels of acceptance related negatively to self-esteem in adolescents.

Parenting styles

Conceivably a parent's general approach to rearing offspring should predict the quality of the bond that will eventually be formed with the parent. Parenting style is an expression of how parents choose to monitor and relate to their offspring. Baumrind (1971) suggested three prototypical styles of parenting: (1) authoritative, (2) permissive, and (3) authoritarian.

Authoritative parenting (i.e., clear and directive parenting with a high degree of warmth) has been positively associated with better social competence, academic success, and fewer internalizing symptoms (Steinberg, 2001); fewer externalizing problems (Patock-Peckham and Morgan-Lopez, 2006; Steinberg, 2001); a decreased likelihood of offspring denying parental authority regarding alcohol use (Jackson, 2002); and higher degrees of self-regulatory skills among college-age women (Patock-Peckham et al., 2001). Because authoritative parenting has been previously linked to increased self-regulation, we expected it to be positively linked to an increased allowance of autonomy.

Although permissive parenting (i.e., a warm style virtually free from any discipline or structure) was previously linked to increased externalizing symptoms (i.e., impulsiveness) (Patock-Peckham and Morgan-Lopez, 2006), we did not expect it to be directly or indirectly related to depression. Because there is warmth in permissive parenting, we predicted it would be positively linked to greater feelings of autonomy and to higher self-esteem.

Because an authoritarian parenting style lacks warmth but commands unquestioning obedience, we anticipated an authoritarian style would indirectly affect self-esteem (by decreasing it) and depression (by increasing it) through increased feelings of parental overprotection. Because males are often afforded greater autonomy by parents than females, we expected higher reports of overprotection by male offspring would have a stronger effect on the esteem → depression → alcohol-related problems pathway than it would for female offspring.

Motivations of this present study

Depression is often comorbid with alcoholism and is, therefore, crucial to the full understanding of pathways to alcohol-related problems (Colder and Chassin, 1999; Hesselbrock et al., 1985). Parenting styles have been implicated as influencing poor behavioral control (Patock-Peckham and Morgan-Lopez, 2006; Patock-Peckham et al., 2001) as well as depression (Patock-Peckham and Morgan-Lopez, 2007; Pedersen, 1994). A parent's confidence in offspring may be particularly salient in emerging adulthood (Arnett, 2000),

when offspring are beginning to take on more adult responsibilities. Overprotection denotes a lack of confidence in young adults and suggests they are not ready to be on their own. Yet, no current investigations have examined depression as mediating the relationships among parental overprotection (lack of confidence in offspring abilities), parental autonomy (confidence in offspring abilities), and self-esteem on depression and alcohol-related problems. Although individual links in the parenting → esteem → depression → alcohol-related problems internalizing pathway have been examined separately in previous literature, these links have not been examined together in the same model. Further understanding these indirect linkages to parenting may be important to researchers developing preventive interventions to combat alcohol-related problems and disorders.

A secondary aim of this investigation concerns the fact that the vast majority of researchers examining parental bonds have done so without differentiating between the unique contributions of fathers and mothers (Lamborn and Steinberg, 1993; Steinberg and Silverberg, 1986; van Wel et al., 2002). Recently, researchers have started to suggest it is important to examine the unique and often moderating effects of both mothers and fathers and their impact on offspring regarding alcohol-related issues (Barnow et al., 2002; King and Chassin, 2004).

Originally, Pedersen (1994) found poor care by one's father had a direct influence on offspring suffering from anxiety and depression. More recently, Patock-Peckham and Morgan-Lopez (2007) found a negative (rejecting) bond with one's father indirectly influenced alcohol problems through depression. Although the care and rejection parenting dimensions, proposed by Parker et al. (1979), have been specified in the depression and alcohol-related problems pathway (see Patock-Peckham and Morgan-Lopez, 2007), the overprotection and allowance of autonomy dimensions have not. Possibly, the perception of parents lacking confidence in their offspring's abilities (overprotection) during emerging adulthood may be distinct from feeling one's parents are not concerned with one's overall well-being (rejection). Overprotection may represent a unique contribution to the internalizing pathway to alcohol-related problems via self-esteem and depression. Conceivably, an authoritarian parenting style can directly contribute to depression as well as indirectly contribute through feelings of overprotection and lower self-esteem; these influences may depend on both parent and offspring gender.

Method

Participants

Participants were university student volunteers recruited through introductory psychology classes at a large southwestern university in the United States who received credit

for their participation. The sample included 441 students (216 female, 225 male) who currently reported being drinkers of alcoholic beverages (abstainers from alcoholic beverages were not included in our sample). Out of a total sample of 441, 36 participants (19 female, 17 male) had missing data on at least one variable in the analysis. The sample was 51% male with an average (SD) age of 19.48 (1.97). The sample was predominantly white (75.6%), and the remaining sample was mostly Hispanic (9.5%) or Asian (6.3%). All other racial/ethnic groups represented less than 3% of the sample. All participants reported feeling they were raised by both parents, with 71.6% reporting their families were currently intact two-parent families, and 28.4% reporting they were from divorced families. Of all participants, 79% did not perceive their fathers to be alcoholics, and 92% did not perceive their mothers to be alcoholics.

Measures

Parental Authority Questionnaire. The Parental Authority Questionnaire (Buri, 1991; Buri et al., 1988) measures Baumrind's (1971) permissive, authoritarian, and authoritative parental authority prototypes. Measures consisted of 60 items (30 per parent) asking individuals how they perceived their parents' style of authority while growing up. The α reliabilities in this sample for the six subscales were as follows: mother permissive = .77, mother authoritative = .82, mother authoritarian = .85, father permissive = .81, father authoritative = .88, and father authoritarian = .90. Reitman et al. (2002) found the Parental Authority Questionnaire to have an acceptable factor structure, internal consistency, and convergent validity for samples with similar demographics to those in this investigation.

Parental Bonding Instrument. The Parental Bonding Instrument (Parker et al., 1979) contains 25 items (per parent) measuring four dimensions of bonds with parents: rejection, care, overprotection, and allowance of autonomy. For this investigation, only overprotection and allowance of autonomy dimensions were used. In addition, each item was asked regarding mothers and fathers separately. The parental overprotection (negative bond) dimension included seven items (i.e., did not want me to grow up, tried to control everything, invaded my privacy, tended to baby me, tried to make me dependent, felt that I could not look after myself, and was overprotective of me). The parental allowance of autonomy (positive bond) dimension included the following six items: let me do things, liked me to make my own decisions, let me decide things, gave me freedom, let me go out, and let me dress any way that I pleased. A 4-point Likert scale was used with the following anchors: 3 = very like, 2 = moderately like, 1 = moderately unlike, and 0 = very unlike. The α reliabilities in this sample for the four subscales were as follows: mother overprotection = .78, father overprotection = .77, mother autonomy = .81, and father autonomy = .87.

Rosenberg Self-Esteem. The Rosenberg Self-Esteem scale measures one's sense of global self-esteem (Rosenberg, 1965). This scale consists of 10 items (e.g., I feel I am a person of worth, I have a number of good qualities, I take a positive attitude toward myself). The α reliability for this measure was .91.

Center for Epidemiologic Studies Depression Scale. The Center for Epidemiologic Studies Depression Scale (CES-D) addresses the current frequency of depressive symptoms with 20 items regarding one's affect or mood (Radloff, 1977). Some sample items for the CES-D include "I felt sad," "I had crying spells," and "I did not feel like eating." The α reliability for the CES-D was .89 for this sample.

Depression Anxiety and Stress Scales. The Depression Anxiety Stress Scales (DASS) is a 42-item instrument intended to assess three negative emotional states: depression, anxiety, and stress (Lovibond and Lovibond, 1995a,b). For this investigation, only the depression scale was used. Some sample items for the DASS include "I felt I had nothing to look forward to," "I felt sad and depressed," and "I couldn't seem to get any enjoyment out of the things I did." The α reliability for the DASS was .93 in this sample.

Zung Depression Scale. The Zung Depression Scale is a 20-item scale intended to assess depressive symptoms at the time of testing (Zung, 1965). Participants were asked to respond in terms of whether the items were "generally descriptive of the respondent" on a scale ranging from 1 = "a little of the time" to 4 = "most of the time." An α reliability of .81 was obtained for this sample.

Alcohol use (quantity-frequency measure). Frequency of alcohol use in the past year was coded as follows: 1 = less than once a month; 2 = once a month; 3 = two or three times a month; 4 = once a week; 5 = two or three times a week; 6 = four or five times a week; and 7 = daily or nearly daily. For this sample, the median drinking frequency was between two and three drinking occasions per month (coded as 3) to weekly (coded as 4). The median drinking quantity was six or seven drinks per month, equivalent to 7 g of alcohol. For one drink (equivalent to one 12-oz bottle, can, or glass of beer; one 5-oz glass of wine; or one 1.5-oz drink of distilled spirits), the usual quantity of alcohol use was highly correlated in this sample with frequency and did not produce differential patterns of correlations. The quantity and frequency items were combined into a single quantity-frequency scale by converting the frequency levels into equivalent occasions per month (ranging from 1 = 0.5 times per month to 7 = 28 times per month) and the quantity levels into equivalent grams of alcohol (ranging from 1 = 10 g a month to 5 = 70 g a month). These values were then multiplied, and the distribution of scores was transformed through a \log_{10} transformation (Wood et al., 1992).

Problems with alcohol use. These 12 items assess moderate problems with alcohol use, which may be indicative of alcohol abuse or dependence (Rhea et al., 1993). The items

are scaled from 0 (never) to 3 (many times). Some sample items for this scale include using social occasions as an excuse to drink, becoming depressed after drinking, sneaking drinks/hiding bottles, and heavy episodic drinking. The α reliability for the problems-with-alcohol-use scale was .86.

Statistical approach

A series of multiple-group structural equation models were fit using Mplus 5 (Muthén and Muthén, 1998-2007) with the goals of the following: (1) testing the overall fit of the proposed structural model among men and women, irrespective of differences in parameter estimates across men and women; (2) assessing differences in structural paths across male and female respondents (through nested chi-square difference tests); and (3) examining mediation effects within and across genders. Full information maximum likelihood (ML) estimation was used to handle missing data under the assumption the probability of missingness may depend on data that are observed *but do not depend on the data that are missing* (i.e., missing at random; Schafer and Graham, 2002).

First, an initial model tested the overall fit with the structural paths allowed to vary across male and female groups. As part of this initial model, the measurement model for the depression latent variable was constrained to equality for both genders (i.e., measurement invariance) for all analyses. This initial conceptual model is shown in Figure 1. A series of nested models were estimated to examine structural invariance among paths across gender by constraining each individual path to equality across male and female groups. A significant chi-square difference between a base model, with all paths freed, and a constrained model, with each path constrained across gender, indicated a significant difference in the structural path across gender (i.e., moderation). Model fit was evaluated using chi-square statistics, root mean square error of approximation (RMSEA; Browne and Cudeck, 1993; Hu and Bentler, 1998), and comparative fit index (CFI; Bentler, 1990). Effect sizes for individual coefficients were calculated to assess the unique contribution of a predictor controlling for all other predictors in a particular equation using the approach of converting t statistics to r^2 's found in Rosenthal and Rosnow (1991).

After examining structural invariance across gender, mediation analyses (Baron and Kenny, 1986; Holmbeck, 1997) were conducted within each gender to examine indirect influences of parenting style on alcohol-related outcomes. Confidence interval estimations for mediation effects were conducted using the empirical Asymmetric Confidence Interval test for mediation with products of coefficients (MacKinnon et al., 2002, 2004). Testing the significance of three-path mediation effects was also conducted using the approach outlined in MacKinnon (2008).

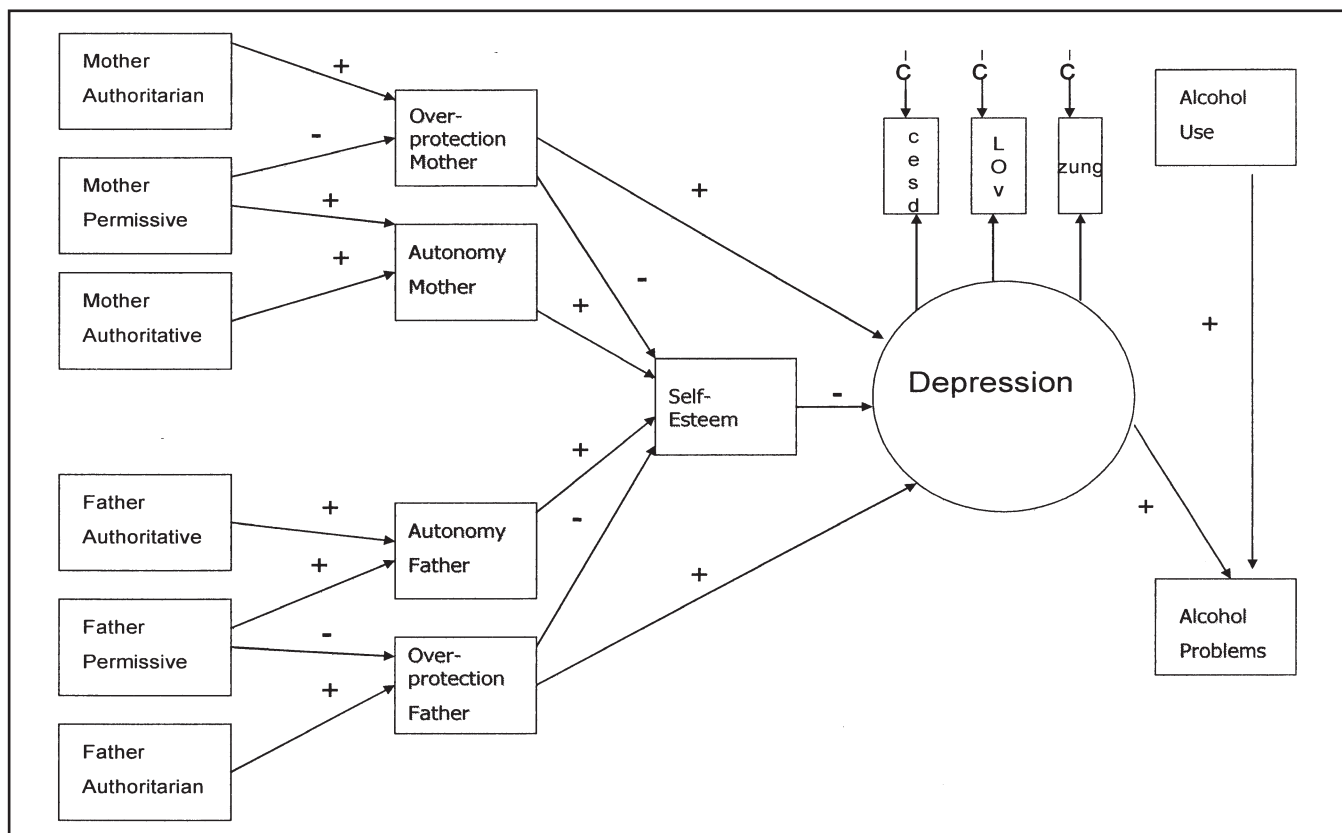


FIGURE 1. Conceptual figure including all exogenous and endogenous variables in the structural equation model. All exogenous variables were allowed to correlate. CESD = Center for Epidemiologic Studies Depression Scale; Lov = Depression Anxiety Stress Scales (depression subscale) by Lovibond and Lovibond (1995a,b); Zung = Zung Depression Scale.

Results

Descriptive statistics

The means and standard deviations for all variables examined in the conceptual model are presented in Table 1. This includes descriptive statistics for each scale included as part of the latent variable for depression. *T* tests for differences between groups were calculated to detect mean differences between the two genders for each variable used in the model. In general, men perceived their fathers to be significantly more permissive with them than did women, whereas women perceived their fathers to be significantly more overprotective than did men. Moreover, men perceived themselves to have a significantly greater degree of autonomy from their fathers than did women. Last, men reported a greater degree of alcohol use (quantity/frequency) than did women.

Overall model fit

In the initial model, all the hypothesized paths in Figures 2 and 3 were estimated separately across gender groups. Model intercepts (i.e., means for esteem, “latent” depression, alcohol use, and alcohol problems adjusted for all predictors)

were also allowed to vary across gender groups. However, for all models, the measurement model parameters linking observed measures of depression to the latent depression variable were constrained to equality. This model (referred to as the base model) yielded a χ^2 of 220.667 with 148 df ($p < .001$) with an RMSEA = .047 and a CFI = .964.

Tests for invariance across gender

Tests for gender differences across each path were conducted. A series of models in which each path was constrained to equality across gender were fit and compared with the base model. Chi-square difference tests (see Table 2) revealed there were significant gender differences in the strength of the mother authoritativeness → mother overprotection path (stronger for women than men; $\chi^2 = 6.015$, 1 df, $p = .014$) and self-esteem → depression path (stronger for women than men; $\chi^2 = 10.776$, 1 df, $p = .001$).

Key within-gender mediation effects

Standardized estimates are shown (structural model only; measurement model estimates are not shown) for paths that were statistically significant at $p < .05$. Because of the large

TABLE 1. The means, standard deviations, and *t* tests for differences between groups among each variable included in the path model

Variable	Men (<i>n</i> = 225) Mean (SD)	Females (<i>n</i> = 216) Mean (SD)	<i>t</i> test value	
			<i>t</i>	<i>p</i>
Mother authoritarian	29.62 (6.41)	29.17 (7.93)	-0.65	NS
Mother permissive	26.51 (5.66)	25.59 (6.26)	1.61	NS
Mother authoritative	35.54 (5.82)	36.48 (6.29)	1.62	NS
Father authoritarian	32.12 (7.43)	31.18 (9.38)	1.16	NS
Father permissive	26.85 (6.43)	25.30 (6.67)	2.48	<i>p</i> < .05
Father authoritative	34.35 (6.50)	34.60 (8.06)	0.36	NS
Mother overprotection	1.19 (0.56)	1.14 (0.70)	0.82	NS
Mother autonomy	2.13 (0.56)	2.04 (0.60)	1.62	NS
Father overprotection	0.71 (0.56)	0.88 (0.64)	-2.96	<i>p</i> < .01
Father autonomy	2.14 (0.68)	1.96 (0.70)	2.73	<i>p</i> < .01
Self-esteem	3.30 (0.67)	3.27 (0.62)	0.49	NS
DASS (depression)	5.53 (5.95)	6.69 (7.51)	1.79	NS
CES-D (depression)	34.06 (8.62)	34.77 (9.71)	0.81	NS
Zung (depression)	-0.43 (0.08)	-0.39 (0.89)	0.66	NS
Alcohol use (quant./freq.)	2.08 (0.64)	1.86 (0.68)	3.50	<i>p</i> < .001
Alcohol-related problems	0.71 (0.51)	0.72 (0.57)	0.19	NS

Notes: DASS = Depression Anxiety and Stress Scales; CES-D = Center for Epidemiologic Studies Depression Scale; NS = not significant; quant. = quantity; freq. = frequency.

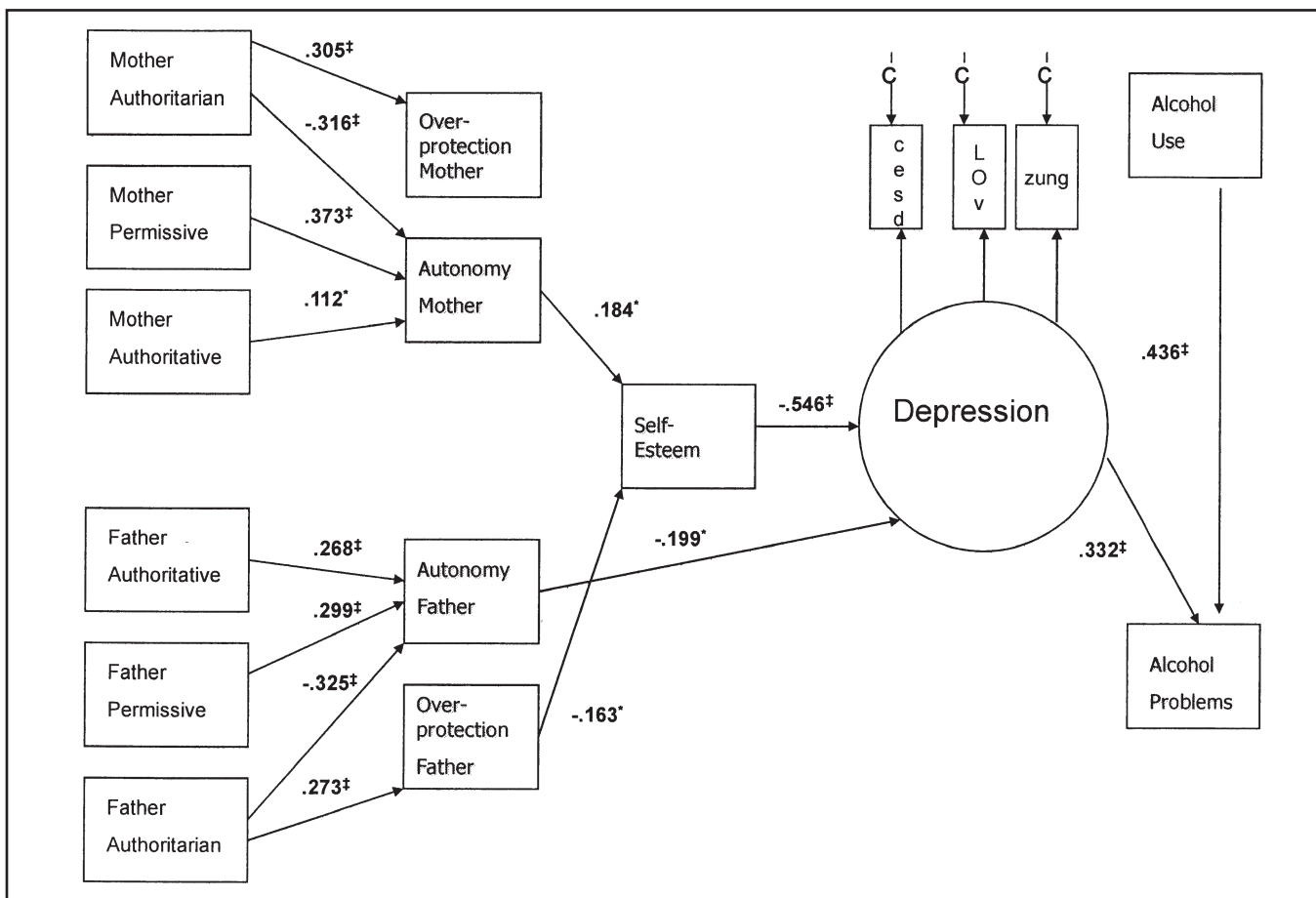


FIGURE 2. Multiple-group structural equation model (males). Standardized coefficients are shown. All exogenous variables were allowed to correlate freely in the model. CESD = Center for Epidemiologic Studies Depression Scale; Lov = Depression Anxiety Stress Scales (depression subscale) by Lovibond and Lovibond (1995a,b); Zung = Zung Depression Scale.

**p* < .05; [‡]*p* < .001.

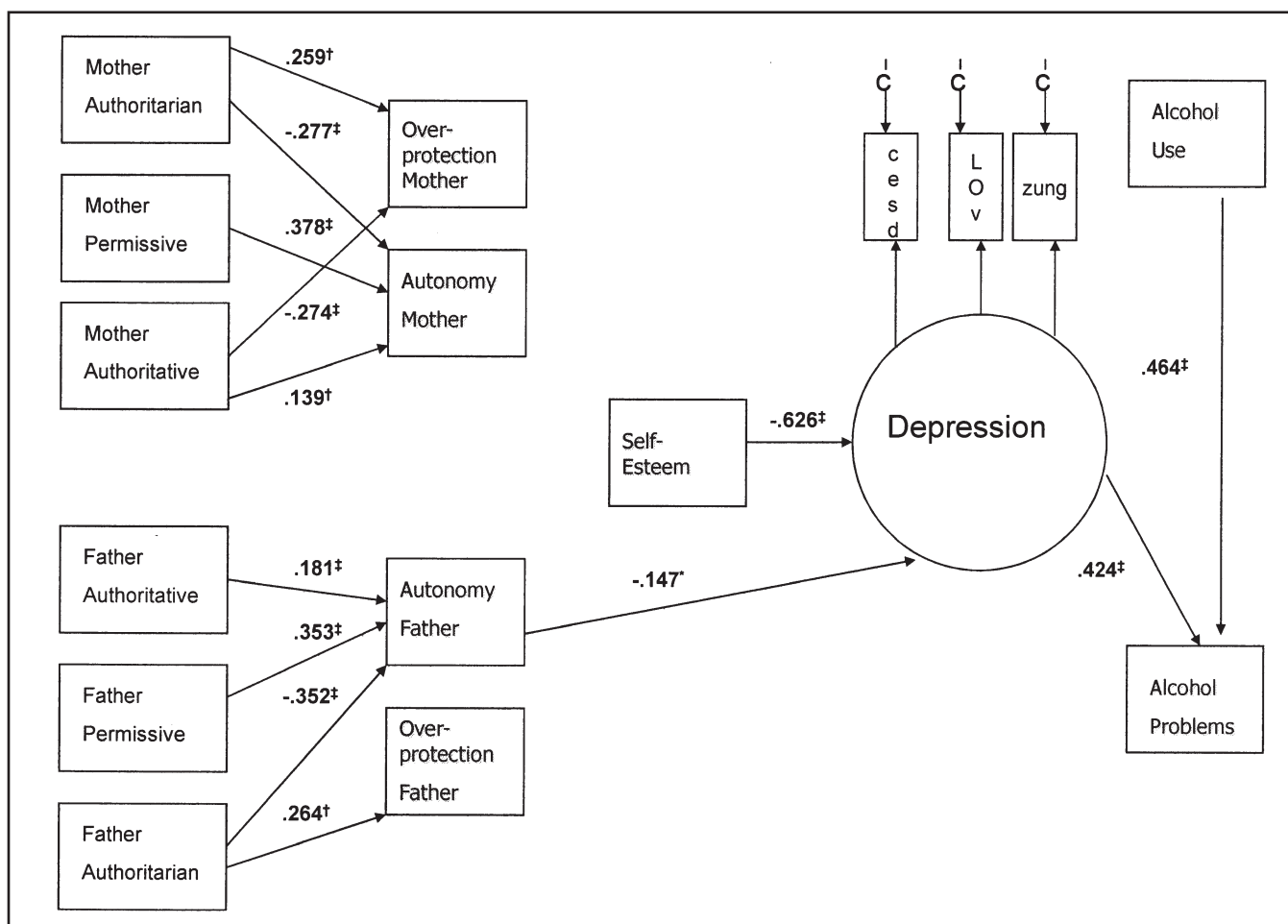


FIGURE 3. Multiple-group structural equation model (females). Standardized coefficients are shown. All exogenous variables were allowed to correlate freely in the model. CESD = Center for Epidemiologic Studies Depression Scale; Lov = Depression Anxiety Stress Scales (depression subscale) by Lovibond and Lovibond (1995a,b); Zung = Zung Depression Scale.
 * $p < .05$; [†] $p < .01$; [‡] $p < .001$.

TABLE 2. Unstandardized path coefficients for three-path mediation

Effects	A path (SE)	B path (SE)	C path (SE)	Three-path mediation estimate (CI)
Men				
FTN → FAUTO → DEP → PROB	-0.029 (0.005)	-2.138 (0.872)	0.024 (0.005)	.0014 (.0002, .0031)
FP → FAUTO → DEP → PROB	0.031 (0.006)	-2.138 (0.872)	0.024 (0.005)	-.0015 (-.0034, -.0002)
FVE → FAUTO → DEP → PROB	0.027 (0.005)	-2.138 (0.872)	0.024 (0.005)	-.0013 (-.002, -.0002)
FTN → FOVER → EST → DEP	0.020 (0.006)	-0.196 (0.094)	-5.849 (0.686)	.022 (.001, .054)
MTN → MAUTO → EST → DEP	-0.028 (0.005)	0.219 (0.100)	-5.849 (0.686)	.035 (.003, .076)
MP → MAUTO → EST → DEP	0.037 (0.005)	0.219 (0.100)	-5.849 (0.686)	-.047 (-.097, -.004)
MVE → MAUTO → EST → DEP	0.011 (0.005)	0.219 (0.100)	-5.849 (0.686)	-.014 (-.037, .0002) ^a
Women				
FTN → FAUTO → DEP → PROB	-0.026 (0.004)	-1.943 (0.868)	0.026 (0.004)	.0013 (.00015, .0027)
FP → FAUTO → DEP → PROB	0.037 (0.004)	-1.943 (0.868)	0.026 (0.004)	-.0010 (-.0039, -.002)
FVE → FAUTO → DEP → PROB	0.016 (0.004)	-1.943 (0.868)	0.026 (0.004)	-.0008 (-.0018, -.00008)

Notes: CI = confidence interval; FTN = father authoritarianism; FAUTO = father autonomy; DEP = depressive symptomatology; PROB = alcohol-related problems; FP = father permissiveness; FVE = father overprotection; EST = esteem; MTN = mother authoritarianism; MAUTO = mother autonomy; MP = mother permissiveness; MVE = mother overprotection. A path = path from parenting variables to the first mediator. B path = path from first mediator to second mediator. C path = path from second mediator to outcome variable. All individual paths shown are significant at $p < .05$ or greater. ^aMediation effect not significantly different from 0.

number of significant structural paths, we focused on linkages between variables via formalized testing of two-path and three-path mediation (using raw coefficients and standard errors; see MacKinnon et al. [2004] for two-path mediation; see MacKinnon [2008] for three-path mediation), although other nonmediated effects are depicted in Figures 2 and 3.

Men

For men, higher levels of father authoritarianism led to decreased father autonomy, which in turn predicted higher levels of depressive symptoms (mediated effect = .062; confidence interval [CI]: .011, .120). Also, higher levels of father permissiveness led to increased father autonomy, which in turn predicted lower levels of depressive symptoms (mediated effect = $-.066$; CI: $-.131, -.012$). Lastly, higher levels of father authoritative-ness led to increased father autonomy, which in turn predicted lower levels of depressive symptoms (mediated effect = $-.057$; CI: $-.113, -.010$). Although increased father authoritarianism led to greater depressive symptoms among men, higher levels of authoritative-ness and permissiveness were linked to lower levels of depressive symptoms.

Higher levels of father authoritarianism were also linked to higher levels of father overprotection, which were then linked to lower self-esteem (mediated effect = $-.003$; CI: $-.009, -.0002$). Also, greater father overprotection was linked to lower self-esteem among men, which in turn led to greater depressive symptoms (mediated effect = 1.14 ; CI: $.069, 2.31$).

Higher levels of mother authoritarianism led to lower mother autonomy, which in turn led to decreased self-esteem (mediated effect = $-.006$; CI: $-.012, -.0006$). Mother permissiveness led to higher mother autonomy, which led to increases in self-esteem (mediated effect = $.008$; CI: $.009, 0.18$). Self-esteem also mediated the links between mother autonomy and depression (mediated effect = $-.002$; CI: $-.00004, -.006$). Higher levels of mother autonomy were related to increased self-esteem, which in turn led to lower levels of depressive symptoms (mediated effect = -1.28 ; CI: $-2.51, -.130$).

Women

For women, father autonomy mediated the following: (1) the father authoritarianism \rightarrow depression link, (2) the father permissiveness \rightarrow depression link, and (3) the father authoritative-ness \rightarrow depression link. Although increased father authoritarianism led to greater levels of depressive symptoms among women, higher levels of authoritative-ness and permissiveness by fathers were protective against depressive symptoms. For women, higher levels of father authoritarianism led to decreased father autonomy, which in turn predicted higher levels of depressive symptoms (mediated

effect = $.050$; CI: $.005, .100$). Also, higher levels of father permissiveness led to increased father autonomy, which in turn predicted lower levels of depressive symptoms (mediated effect = $-.071$; CI: $-.144, -.008$). Lastly, higher levels of father authoritative-ness led to increased father autonomy, which in turn predicted lower levels of depressive symptoms (mediated effect = $-.031$; CI: $-.066, -.003$).

Three-path mediation effects

Men. Among men, formalized testing of three-path mediation effects suggested (each of the three) father parenting style(s) \rightarrow father autonomy \rightarrow depression \rightarrow alcohol-related problems effects were significant (see Table 2). Authoritative and permissive fathering were linked to greater autonomy, lower levels of depressive symptoms, and fewer alcohol-related problems. In contrast, authoritarian parenting by fathers was linked to lower autonomy, greater father overprotection, higher levels of depressive symptoms, and higher rates of alcohol-related problems. Both authoritative and permissive mothering styles were linked to higher levels of mother autonomy, greater self-esteem, and lower levels of depressive symptoms.

Women. Among women, (see Table 2), authoritative and permissive fathering were linked to greater father autonomy, lower levels of depressive symptoms, and fewer alcohol-related problems. In contrast, authoritarian parenting by fathers was linked to lower father autonomy, greater father overprotection, higher levels of depressive symptoms, and higher rates of alcohol-related problems.

Cross-gender differences in mediation. Differences in mediation across gender were explored using mediation contrast methods described in MacKinnon (2008; see also MacKinnon [2000] for two-path contrasts; see Patock-Peckham and Morgan-Lopez [2006] for an example). There were no gender differences in the magnitude of any two- or three-path mediation effects across gender among any of the mediation effects that were significant within at least one of the gender groups of (1) father authoritative-ness and (2) father authoritarianism on alcohol-related problems.

Discussion

This investigation increases understanding of how parenting affects alcohol-related problems in several ways. It illustrates the negative impact that fathers who are rule driven and who lack in warmth (i.e., those with an authoritarian style) can contribute to internalizing symptoms known to be comorbid with alcohol-related problems. These findings extend previous work that focused exclusively on the importance of maternal overprotection and its links to depressive symptoms (Martin et al., 2004). Our findings, instead, highlight the importance of a father's parental contributions to the internalizing pathway to alcohol-related problems through

depressive symptoms. In addition, this model allowed for the exploration of multiple mediational pathways. Specifically, this investigation found that an authoritarian paternal style contributed to feelings of having an overprotective father, which led to lower self-esteem; this in turn was predictive of increased depressive symptoms and increased alcohol-related problems (but not alcohol use *per se*) in male offspring. Authoritarian fathering was also found to decrease feelings of autonomy from one's father, which is protective against depression for both genders. Moreover, as recommended by several investigators, it is a model that accounted for independent parental influences from both mothers and fathers, conjointly, within the same model (Chassin and Handley, 2006; Fromme, 2006; King and Chassin, 2004).

This present investigation provides a better understanding of direct and indirect influences of internalizing symptoms (e.g., depression) known to be strong predictors of alcohol-related problems. Although numerous investigations have highlighted the importance of the mother-child bond (Field et al., 1995; LeCroy, 1988; Thornton et al., 1995), this investigation shows the contribution of the father-child bond that is often ignored in the literature. Our findings are consistent with those of Patock-Peckham and Morgan-Lopez (2007), which illustrated the indirect influences, and those of Pedersen (1994), which illustrated the direct influences of the father-child relationship on depression. Specifically, this study illustrates the negative implications of having an overprotective father for male offspring regarding alcohol-related problems transmitted through both low self-esteem and depression.

Overprotection of offspring in the stage of emerging adulthood (Arnett, 2000) communicates to children that their parent(s) do not have confidence in their abilities to make decisions as an adult. Having a father communicate this lack of confidence to male offspring was linked to lower levels of self-esteem, which strongly influences depressive symptoms in the alcohol-related problems pathway.

Both male and female offspring showed higher levels of self-esteem when their fathers had a bonding style allowing for some autonomy on the child's part. Men also received a boon to self-esteem levels when their mothers also selected a bonding style with some allowance of autonomy for their sons, but this link was not shown for daughters. Hence, continuing to examine when the parent-child gender match/mismatch influences emerge appears to continue to expand our understanding of a variety of possible pathways to alcohol-related problems.

Fathering with an element of warmth (authoritative and permissive styles) was found to increase feelings of autonomy from one's father, which is protective against depression along the pathway to alcohol problems for both genders. This finding needs to be kept within the situational constraints pertaining to pathways regarding internalizing symptoms. Specifically, permissive parenting has been found to con-

tribute to externalizing symptoms via behavioral-control processes, such as through lower levels of self-regulation (Patock-Peckham et al., 2001) and higher levels of impulsiveness (Patock-Peckham and Morgan-Lopez, 2006). Thus, it would be imprudent to conclude permissive fathering is an optimal parenting style.

In this current study, we learned more about gender-specific influences from mothers regarding the pathway to alcohol-related problems through the constructs of self-esteem and depression. Mothering with an element of warmth (authoritative or permissive) increased feelings of autonomy from one's mother and self-esteem that was protective against depression in the alcohol-problems pathway among male offspring only. Conversely, authoritarian mothering led to lower feelings of autonomy from one's mother, lowering self-esteem and therefore increased depression in male offspring. This illustrates a parent-offspring gender mismatch.

We are beginning to outline which mechanisms may be relevant for all four parent-offspring combinations: mother-son, mother-daughter, father-son, and father-daughter. Previous work has found that mothers indirectly influence daughters' drinking behaviors through behavioral control mechanisms such as self-regulation (Patock-Peckham et al., 2001) or impulsiveness (Patock-Peckham and Morgan-Lopez, 2006); yet, it was fathers who indirectly influenced sons through these same mechanisms.

Recent work has also outlined the importance of father influences (i.e., rejection) over and above the influence of mothers on both male and female offspring regarding internalizing pathways to alcohol-related problems such as depression (Patock-Peckham and Morgan-Lopez, 2007; Pedersen, 1994). Our findings in this current study further demonstrate the differential impact mothers and fathers can have on offspring outcomes regarding alcohol-related problems when the mediating mechanism is changed. It is apparently important to be specific regarding which mechanism is being addressed when discussing the differential indirect impact of mothers and fathers on alcohol-related outcomes, because these relationships are much more complex than originally thought.

Authoritarian fathering was found to influence both male and female offspring by reducing their feelings of autonomy from fathers, which was in turn directly linked to higher levels of depressive symptoms. These findings, among others (Patock-Peckham and Morgan-Lopez, 2007; Pedersen, 1994), suggest fathers play a role in internalizing pathways regarding problematic alcohol use for both genders. This is important because most parental bonds are conjointly measured with mother and father influences lumped together as simply "parent" influences. It is clear that feeling rejected by one's father (Patock-Peckham and Morgan-Lopez, 2007; Pedersen, 1994) as well as feeling one's father's lack of confidence in his offspring during a period of emerging adulthood contributes to depression.

Although previous investigations on parenting style and externalizing problems (i.e., behavioral undercontrol) have found an authoritarian style encompassing rules and structure may help deter some problems (Lamborn et al., 1991; Patock-Peckham and Morgan-Lopez, 2006), it appears to contribute indirectly to internalizing problems (e.g., depression). Nevertheless, an authoritative style appears to be protective against depression by contributing to warm relationships and providing structure (Patock-Peckham and Morgan-Lopez, 2007) as well as other psychological adjustment variables, such as behavioral control (Patock-Peckham and Morgan-Lopez, 2006; Patock-Peckham et al., 2001).

There are several limitations to the present investigation related to the cross-sectional nature of the design and the college student population. Therefore, this article should be considered an initial inquiry into multiple mediation pathways for parenting styles, parental confidence in offspring (overprotection, autonomy), global self-esteem, depression, alcohol use, and alcohol problems in a multiple-group path model.

Investigators in the possession of longitudinal data who are able to examine these constructs are encouraged to see whether this model remains consistent with repeated measures data. For instance, this dataset cannot account for any potential reciprocal relationships between internalizing behaviors and parenting behaviors (Buist et al., 2004; Reitz et al., 2006). However, recent investigators have observed children high in negative affect early in life appear to benefit disproportionately from supportive environments (Belsky, 1997, 2004; Crockenberg, 1981). Thus, it appears an authoritarian parenting style may not be an optimal strategy for offspring with internalizing symptoms regardless of whether the root cause began with either the parent or the child. Future investigators should also examine these relationships with more multidimensional aspects of self-esteem beyond just global self-esteem (see Swaim and Wayman, 2004).

Acknowledgment

We thank Jeff Starrick and Alexander Serafin for assisting with the data collection and the data entry. In addition, we thank Mallary Kleeshulte for her editorial suggestions regarding this manuscript.

References

- AINSWORTH, M.D.S. Attachments beyond infancy. *Amer. Psychol.* **44**: 709-716, 1989.
- ARMELI, S., TENNEN, H., AFFLECK, G., AND KRANZLER, H.R. Does affect mediate the association between daily events and alcohol use? *J. Stud. Alcohol* **61**: 862-871, 2000.
- ARNETT, J.J. Emerging adulthood: A theory of development from the late teens through the twenties. *Amer. Psychol.* **55**: 469-480, 2000.
- BARNOW, S., SCHUCKIT, M.A., LUCHT, M., ULRICH, J., AND FREYBERGER, H.J. The importance of a positive family history of alcoholism, parental rejection and emotional warmth, behavioral problems and peer substance use for alcohol problems in teenagers: A path analysis. *J. Stud. Alcohol* **63**: 305-315, 2002.
- BARON, R.M. AND KENNY, D.A. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Pers. Social Psychol.* **51**: 1173-1182, 1986.
- BAUMRIND, D. Current patterns of parental authority. *Devel. Psychol.* **4**: 1-103, 1971.
- BELSKY, J. Variation in susceptibility to rearing influence: An evolutionary argument. *Psychol. Inquiry* **8**: 182-186, 1997.
- BELSKY, J. Differential susceptibility to rearing influence: An evolutionary hypothesis and some evidence. In: ELLIS, B.J. AND BJORKLUND, D.F. (Eds.) *Origins of the Social Mind: Evolutionary Psychology and Child Development*, New York: Guilford Press, 2004, pp. 139-163.
- BENTLER, P.M. Comparative fit indexes in structural models. *Psychol. Bull.* **107**: 238-246, 1990.
- BIJTTEBIER, P. AND GOETHALS, E. Parental drinking as a risk factor for children's maladjustment: The mediating role of family environment. *Psychol. Addict. Behav.* **20**: 126-130, 2006.
- BOGELS, S.M. AND VAN MELICK, M. The relationship between child-report, parent self-report, and partner report of perceived parental rearing behaviors and anxiety in children and parents. *Pers. Individ. Diff.* **37**: 1583-1596, 2004.
- BROWNE, M.W. AND CUDECK, R. Alternative ways of assessing model fit. In: BOLLEN, K.A. AND LOND, J.S. (Eds.) *Testing Structural Equation Models*, Thousand Oaks, CA: Sage, 1993, pp. 136-162.
- BUIST, K.L., DEKOVIC, M., MEEUS, W., AND VAN AKEN, M.A.G. The reciprocal relationship between early adolescent attachment and internalizing and externalizing problem behavior. *J. Adolesc.* **27**: 251-266, 2004.
- BURI, J.R. Parental Authority Questionnaire. *J. Pers. Assess.* **57**: 110-119, 1991.
- BURI, J.R., LOUISELLE, P.A., MISUKANIS, T.M., AND MUELLER, R.A. Effects of parental authoritarianism and authoritativeness on self-esteem. *Pers. Social Psychol. Bull.* **14**: 271-282, 1988.
- CHASSIN, L. AND HANDLEY, E.D. Parents and families as contexts for the development of substance use and substance use disorders. *Psychol. Addict. Behav.* **20**: 135-137, 2006.
- CHRISTIANSEN, M., VIK, P.W., AND JARCHOW, A. College student heavy drinking in social contexts versus alone. *Addict. Behav.* **27**: 393-404, 2002.
- COLDER, C.R. AND CHASSIN, L. The psychosocial characteristics of alcohol users versus problem users: Data from a study of adolescents at risk. *Devel. Psychopathol.* **11**: 321-348, 1999.
- COOPERSMITH, S. *Coopersmith Self-Esteem Inventory-School Form (CSEI)*, San Diego, CA: Consulting Psychology Press, 1981.
- CROCKENBERG, S.B. Infant irritability, mother responsiveness, and social support influences on security of infant-mother attachment. *Child Devel.* **52**: 857-865, 1981.
- DISHION, T.J., PATTERSON, G.R., AND REID, J.R. Parent and peer factors associated with sampling in early adolescence: Implications for treatment. In: RAHDERT, E.R. AND GRABOWSKI, J. (Eds.) *Adolescent Drug Abuse: Analyses of Treatment Research*. NIDA Research Monograph No. 77, DHHS Publication No. (ADM) 88-1523, Washington: Government Printing Office, 1988, pp. 69-93.
- FIELD, T., LANG, C., YANDO, R., AND BENDELL, D. Adolescents' intimacy with parents and friends. *Adolescence* **30**: 133-140, 1995.
- FROMME, K. Parenting and other influences on the alcohol use and emotional adjustment of children, adolescents, and emerging adults. *Psychol. Addict. Behav.* **20**: 138-139, 2006.
- FROMME, K., STROOT, E.A., AND KAPLAN, D. Comprehensive effects of alcohol: Development and psychometric assessment of a new expectancy questionnaire. *Psychol. Assess.* **5**: 19-26, 1993.
- HERZ, L. AND GULLONE, E. The relationship between self-esteem and parenting style: A cross-cultural comparison of Australian and Vietnamese Australian adolescents. *J. Cross-Cult. Psychol.* **30**: 742-761, 1999.
- HESSSELBROCK, M.N., MEYER, R.E., AND KEENER, J.J. Psychopathology in hospitalized alcoholics. *Arch. Gen. Psychiat.* **42**: 1050-1055, 1985.
- HOLMBECK, G.N. Toward terminology, conceptual, and statistical clarity in

- the study of mediators and moderators: Examples from child-clinical and pediatric psychology literatures. *J. Cons. Clin. Psychol.* **65**: 599-610, 1997.
- HU, L.-T. AND BENTLER, P.M. Fit indices in covariance structure modeling: Sensitivity to underparameterization model misspecification. *Psychol. Meth.* **3**: 424-453, 1998.
- HUSSONG, A.M., HICKS, R.E., LEVY, S.A., AND CURRAN, P.J. Specifying the relations between affect and heavy alcohol use among young adults. *J. Abnorm. Psychol.* **110**: 449-461, 2001.
- HUTCHINSON, G.T., PATOCK-PECKHAM, J.A., CHEONG, J., AND NAGOSHI, C.T. Irrational beliefs and behavioral misregulation in the role of alcohol abuse among college students. *J. Ration-Emot. Cog. Behav. Ther.* **16**: 61-74, 1998.
- JACKSON, C. Perceived legitimacy of parental authority and tobacco and alcohol use during early adolescence. *J. Adolesc. Hlth* **31**: 425-432, 2002.
- KING, K.M. AND CHASSIN, L. Mediating and moderating effects of adolescent behavioral undercontrol and parenting in the prediction of drug use disorders in emerging adulthood. *Psychol. Addict. Behav.* **18**: 239-249, 2004.
- KUSHNER, M.G., SHER, K.J., WOOD, M.D., AND WOOD, P.K. Anxiety and drinking behavior: Moderating effects of tension-reduction alcohol outcome expectancies. *Alcsm Clin. Exp. Res.* **18**: 852-860, 1994.
- LAMBORN, S.D., MOUNTS, N.S., STEINBERG, L., AND DORNBUSCH, S.M. Patterns of competence and adjustment among adolescents from authoritative, authoritarian, indulgent, and neglectful families. *Child Devel.* **62**: 1049-1065, 1991.
- LAMBORN, S. AND STEINBERG, L. Emotional autonomy redux: Revisiting Ryan and Lynch. *Child Devel.* **64**: 483-499, 1993.
- LECROY, C. Parent-adolescent intimacy: Impact of adolescent functioning. *Adolescence* **23**: 137-147, 1988.
- LOPEZ, F.G. Contemporary attachment theory: An introduction with implications for counseling psychology. *Counsel. Psychol.* **23**: 395-415, 1995.
- LOVIBOND, S.H. AND LOVIBOND, P.F. Manual for the Depression Anxiety Stress Scales, Sydney, Australia: Psychological Foundation of Australia, 1995a.
- LOVIBOND, P.F. AND LOVIBOND, S.H. The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behav. Res. Ther.* **33**: 335-342, 1995b.
- MACKINNON, D.P. Contrasts in multiple mediator models. In: ROSE, J.S., CHASSIN, L., PRESSON, C.C., AND SHERMAN, S.J. (Eds.) *Multivariate Applications in Substance Use Research: New Methods for New Questions*, Mahwah, NJ: Lawrence Erlbaum, 2000, pp. 141-160.
- MACKINNON, D.P. Introduction to Statistical Mediation Analysis, Mahwah, NJ: Lawrence Erlbaum, 2008.
- MACKINNON, D.P., LOCKWOOD, C.M., HOFFMAN, J.M., WEST, S.G., AND SHEETS, V. A comparison of methods to test mediation and other intervening variable effects. *Psychol. Meth.* **7**: 83-104, 2002.
- MACKINNON, D.P., LOCKWOOD, C.M., AND WILLIAMS, J. Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivar. Behav. Res.* **39**: 99-128, 2004.
- MARTIN, G., BERGEN, H.A., ROEGER, L., AND ALLISON, S. Depression in young adolescents: Investigations using 2 and 3 factor versions of the Parental Bonding Instrument. *J. Nerv. Ment. Dis.* **192**: 650-657, 2004.
- MURIS, P., MEESTERS, C., AND VAN DEN BERG, S. Internalizing and externalizing problems as correlates of self-reported attachment style and perceived parental rearing in normal adolescents. *J. Child Fam. Stud.* **12**: 171-183, 2003.
- MUTHÉN, L.K. AND MUTHÉN, B.O. *Mplus User's Guide*, Version 4, Los Angeles, CA: Muthén and Muthén, 1998-2006.
- OLDEHINKEL, A.J., VEENSTRA, R., ORMEL, J., DE WINTER, A.F., AND VERHULST, F.C. Temperment, parenting, and depressive symptoms in a population sample of preadolescents. *J. Child Psychol. Psychiat.* **47**: 684-695, 2006.
- PARK, C.L. AND LEVENSON, M.R. Drinking to cope among college students: Prevalence, problems, and coping processes. *J. Stud. Alcohol* **63**: 486-497, 2002.
- PARKER, G., TUPLING, H., AND BROWN, L.B. A parental bonding instrument. *Brit. J. Med. Psychol.* **52**: 1-10, 1979.
- PATOCK-PECKHAM, J.A., CHEONG, J.-W., BALHORN, M.E., AND NAGOSHI, C.T. A social learning perspective: A model of parenting styles, self-regulation, perceived drinking control, and alcohol use and problems. *Alcsm Clin. Exp. Res.* **25**: 1284-1292, 2001.
- PATOCK-PECKHAM, J.A. AND MORGAN-LOPEZ, A.A. College drinking behaviors: Mediation links between parenting styles, impulse control, and alcohol-related outcomes. *Psychol. Addict. Behav.* **20**: 117-125, 2006.
- PATOCK-PECKHAM, J.A. AND MORGAN-LOPEZ, A.A. College drinking behaviors: Mediation links between parenting styles, parental bonds, depression, and alcohol problems. *Psychol. Addict. Behav.* **21**: 297-306, 2007.
- PEDERSEN, W. Parental relations, mental health, and delinquency in adolescents. *Adolescence* **29**: 975-990, 1994.
- RADLOFF, L.S. The CES-D Scale: A self-report depression scale for research in the general population. *Appl. Psychol. Meas.* **1**: 385-401, 1977.
- REITMAN, D., RHODE, P.C., HUPPES, S.D.A., AND ANTOBELLO, C. Development and validation of the Parental Authority Questionnaire-Revised. *J. Psychopathol. Behav. Assess.* **24**: 119-127, 2002.
- REITZ, E., DEKOVIC, M., MEIJER, A.M., AND ENGELS, R.C.M.E. Longitudinal relations among parenting, best friends and early adolescent problem behavior: Testing bidirectional effects. *J. Early Adolesc.* **26**: 272-295, 2006.
- RHEA, S.A., NAGOSHI, C.T., AND WILSON, J.R. Reliability of sibling reports on parental drinking behaviors. *J. Stud. Alcohol* **54**: 80-84, 1993.
- ROSENBERG, M. *Society and the Adolescent Self-Image*, Princeton, NJ: Princeton Univ. Press, 1965.
- ROSENTHAL, R. AND ROSNOW, R.L. *Essentials of Behavioral Research: Methods and Data Analysis*, 2nd Edition, New York: McGraw Hill, 1991.
- SAYETTE, M.A. Does drinking reduce stress? *Alcohol Res. Hlth* **23**: 250-255, 1999.
- SCHAFFER, J.L. AND GRAHAM, J.W. Missing data: Our view of the state of the art. *Psychol. Meth.* **7**: 147-177, 2002.
- SCHUCKIT, M.A. AND SMITH, T.L. An evaluation of the level of response to alcohol, externalizing symptoms, and depressive symptoms as predictors of alcoholism. *J. Stud. Alcohol* **67**: 215-227, 2006.
- SHER, K.J. Stress response dampening. In: BLANE, H.T. AND LEONARD, K.E. (Eds.) *Psychological Theories of Drinking and Alcoholism*, New York: Guilford Press, 1987, pp. 227-271.
- SHER, K.J. *Children of Alcoholics: A Critical Appraisal of Theory and Research*, Chicago, IL: Univ. of Chicago Press, 1991.
- SHER, K.J., GREKIN, E.R., AND WILLIAMS, N.A. The development of alcohol use disorders. *Annual Rev. Clin. Psychol.* **1**: 493-523, 2005.
- SHER, K.J. AND TRULL, T.J. Personality and disinhibitory psychopathology: Alcoholism and antisocial personality disorder. *J. Abnorm. Psychol.* **103**: 92-102, 1994.
- SIMPSON, J.A., RHOLES, W.S., AND NELLIGAN, J.S. Support seeking and support giving within couples in an anxiety provoking situation: The role of attachment styles. *J. Pers. Social Psychol.* **62**: 434-446, 1992.
- STEINBERG, L. We know some things: Parent-adolescent relationships in retrospect and prospect. *J. Res. Adolesc.* **11**: 1-19, 2001.
- STEINBERG, L. AND SILVERBERG, S.B. The vicissitudes of autonomy in early adolescence. *Child Devel.* **57**: 841-851, 1986.
- SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION (Office of Applied Studies). *Results From the 2002 National Survey on Drug Use and Health: Main Findings*, DHHS Publication No. SMA 03-3836, Rockville, MD: Substance Abuse and Mental Health Administration, 2002.
- SWAIM, R.C. AND WAYMAN, J.C. Multidimensional self-esteem and alcohol use among Mexican American and white non-Latino adolescents: Concurrent and prospective effects. *Amer. J. Psychol.* **74**: 559-570, 2004.
- THORNTON, A., ORBUCH, T.L., AND AXINN, W.G. Parent-child relationships during the transition to adulthood. *J. Fam. Issues* **16**: 538-564, 1995.

- VAN WEL, F., LINNSEN, H., AND ABMA, R. The parental bond and the well-being of adolescents and young adults. *J. Youth Adolesc.* **29**: 307-318, 2000.
- VAN WEL, F., TER BOGT, T., AND RAAIJMAKERS, Q. Changes in the parental bond and the well-being of adolescents and young adults. *Adolescence* **37**: 317-333, 2002.
- WEITZMAN, E.R. Poor mental health, depression, and associations with alcohol consumption, harm, and abuse in a national sample of young adults in college. *J. Nerv. Ment. Dis.* **192**: 269-277, 2004.
- WOOD, M.D., NAGOSHI, C.T., AND DENNIS, D.A. Alcohol norms and expectations as predictors of alcohol use and problems in a college student sample. *Amer. J. Drug Alcohol Abuse* **18**: 461-476, 1992.
- WORKMAN, M. AND BEER, J. Self-esteem, depression and alcohol dependency among high-school students. *Psychol. Rep.* **65**: 451-455, 1989.
- YOSHIDA, T., TAGA, C., MATSUMOTO, Y., AND FUKUI, K. Parental overprotection in obsessive-compulsive disorder and depression with obsessive traits. *Psychol. Clin. Neurosci.* **59**: 533-538, 2005.
- ZUNG, W.W. A self-rating depression scale. *Arch. Gen. Psychiat.* **12**: 63-70, 1965.