Addictive Behaviors 39 (2014) 1404–1407

Contents lists available at ScienceDirect

Addictive Behaviors

Short Communication

Pathways of family influence: Alcohol use and disordered eating in daughters

Annette S. Kluck *, Lucille Carriere, Starla Dallesasse [1], Batsirai Bvunzawabaya [2], Erin English, Megan Cobb [3], Therese Borges, Kseniya Zhuzha, Daniel Fry

Special Education, Rehabilitation, Counseling (SERC), Auburn University, United States

HIGHLIGHTS

- Evaluated distal and proximal risk factors for addiction-related coping behaviors
- Family dynamics directly related to parental addiction-related coping behaviors
- Family dynamics indirectly related to addiction-related coping behaviors
- Perceived parental alcohol problems best predicted problematic alcohol use
- Perceived parental emphasis on appearance best predicted disordered eating

ARTICLE INFO

Available online 28 May 2014

Keywords:
Disordered eating
Alcohol use
Family
Behavioral model

ABSTRACT

Models of addiction etiology and treatment emphasize the influence of family-of-origin experiences. Using two addiction-related coping behaviors (ARCBs) common among college women (i.e., problematic alcohol use, disordered eating), we examined whether ARCBs in parents related to matching ARCBs in college women offspring. We expected that matching parental ARCBs would relate more strongly to the ARCBs in offspring than more distal/general family factors. A total of 197 college women completed measures of family dynamics, parental difficulties with alcohol, family focus on appearance and weight, personal difficulties with alcohol use, and disordered eating. A significant indirect effect for family dysfunction on disordered eating and alcohol-related problems was found. That is, family relationship difficulties predicted parents' ARCBs, which predicted matching ARCBs in participants (e.g., parental alcohol problems predicted participant alcohol problems). Matched parental ARCBs were better predictors of participants' ARCBs than more general/distal family factors and non-matched ARCBs. Specifically, path analysis and testing of beta weights supported specificity of parental ARCBs for predicting matching offspring ARCBs. Implications of study findings for tailoring prevention efforts are discussed.

1. Introduction

Empirical studies have linked family dysfunction with maladaptive emotion-focused coping behaviors such as those associated with addictive processes (also called addiction-related coping behaviors; ARCBs) related to alcohol use/abuse (Downs & Robertson, 1987; West, Hosie, & Zarski, 1987) and eating disorders (Bruch, 1971; Humphrey, 1988). However, not all individuals originating from families with dysfunctional dynamics develop psychological difficulties. The authors of the present study suggest that parents' problematic coping behavior may provide more specific and proximal sources of risk for a particular ARCB among offspring. Specifically, behavioral theories (e.g., Bandura, Ross, & Ross, 1963) may help explain the tendency for some coping mechanisms to appear to run in families.

Addictive behaviors like substance use and disordered eating are often viewed as maladaptive coping mechanisms (e.g., Dube, Anda, Felitti, Edwards, & Croft, 2002; Wagener & Much, 2010). They may reflect somewhat unique psychological difficulties in that they are believed to be a means through which individuals use avoidance to cope with stress, including stress from dysfunctional family environments. In line with behavioral theory (e.g., Bandura et al., 1963), parents may model problematic attitudes and behaviors related to alcohol, body weight, and food as ways of dealing with (through avoidance) difficulties such as family intimacy dysfunction. In addition, addiction research has documented an increased risk in developing an alcohol-related disorder in offspring of alcoholic parents (Sher, Gershuny, Peterson, &

* Corresponding author at: SERC, Auburn, AL 36849, United States.
E-mail address: ask0002@auburn.edu (A.S. Kluck).
[1] Now at Central Alabama Veterans Health Care System.
[2] Now at University of Pennsylvania Counseling and Psychological Services.
[3] Now at University of Wisconsin - La Crosse.

http://dx.doi.org/10.1016/j.addbeh.2014.05.015
0306-4603/

Raskin, 1997; Tildesley & Andrews, 2008; Vungkhanching, Sher, Jackson, & Parra, 2004), and parental alcoholism is predictive of the development of problematic alcohol use in offspring after controlling for the potential role of other parental psychological disorders (Chassin, Pitts, DeLucia, & Todd, 1999) and parental relational factors, including parental warmth and hostility (White, Johnson, & Buyske, 2000). Similarly, research indicates that parental modeling of problematic eating may predict problematic eating in their daughters (e.g., Francis & Birch, 2005; Kluck, 2008; Stice, Agras, & Hammer, 1999), and family modeling and use of reinforcement contingencies mediated the relationship between dysfunctional family dynamics and disordered eating (Kluck, 2008). Thus, in families with dysfunctional dynamics, specific ARCBs found among parent(s) may influence the type of ARCBs that offspring develop.

If family intimacy dysfunction is a general risk factor and parental modeling behaviors are more specific and proximal risk factors in the development of a particular type of ARCB, modeling of problematic alcohol use in parents should be associated with problematic alcohol use in daughters, and parental modeling of disordered eating attitudes that emphasize thinness and appearance should be associated with disordered eating in daughters. Thus, the purpose of the present study was to test a model where family intimacy dysfunction has an indirect effect on ARCBs in daughters through parents' ARCBs. We hypothesized that (1) family intimacy dysfunction would be associated with ARCBs in parents (i.e., parental alcohol problems, family appearance focus), (2) ARCBs among parents would be associated with increases in similar ARCBs among participants, (3) parents' ARCB (e.g., family appearance focus) that matched the daughters' ARCB (e.g., disordered eating) would be more strongly associated with that specific ARCB among daughters than would general family climate (i.e., intimacy dysfunction) or another type of parental ARCB (e.g., parental problematic alcohol use), and (4) family intimacy dysfunction would have an indirect effect on collegiate women's ARCBs through parents' ARCBs.

2. Method

Women ($N = 203$) recruited from undergraduate psychology courses at a large Southeastern University in the United States served as participants. Only participants under age 25 who were never married were included in study analyses. The resulting sample of 197 participants had a mean age of 20.26 ($SD = 1.24$). The majority of participants self-identified as Caucasian (81.7%) and heterosexual (99.0%).

The balanced cohesion subscale from the *Family Adaptability and Cohesion Scales — IV* (FACES IV; Olson, 2011) was used to assess participants' perceptions of family intimacy in their family environment with higher scores indicating healthier relationships. ARCBs of parents were assessed using the *Children of Alcoholics Screening Test* (CAST; Jones, 1983), a measure of perceptions of parental problematic alcohol use during participants' childhoods, and the *Family Influence Scale* (FIS; Young, Clopton, & Bleckley, 2004), a measure of family emphasis on appearance and thinness. ARCBs of participants were assessed using the *Michigan Alcoholism Screening Test* (MAST; Selzer, 1971) to measure problematic alcohol use and the *Eating Disorder Examination Questionnaire* (EDE-Q; Fairburn & Beglin, 1994) to measure disordered eating.

Following approval from the university Institutional Review Board, participants were recruited from an undergraduate psychology participant pool. Participants received information about the study purpose, benefits, risks, and their right to discontinue participation without penalty. After providing consent, participants completed a questionnaire packet containing a demographic sheet and the five questionnaires, which were partially counterbalanced to control for order effects. When finished, participants returned the packets to a researcher and received course credit in exchange for their participation.

3. Results

All measures were scored such that higher scores were associated with higher levels of the construct. Reliabilities for the study measures were adequate to excellent ranging from .70 (for the MAST) to .97 (for the CAST). Tests of order effects across the four orders were not significant.

Consistent with what would be expected if ARCBs in parents were associated with more problematic family functioning, lack of intimacy (as measured by low cohesion, $M = 29.74$; $SD = 5.13$) was associated with daughters' perceptions of problematic behaviors in their parents (for the CAST, $M = 2.58$, $SD = 5.59$, $r = -.22$, $p < .01$; for the FIS, $M = 41.23$, $SD = 10.49$, $r = -.20$, $p < .01$). Family climate variables that represented the specific perceived parental ARCBs were significantly associated with ARCBs in daughters in the respective domains. Increased perceived parental alcohol use was associated with increased alcohol-related problems among participants ($M = 1.52$, $SD = 1.62$), $r = .34$, $p < .01$, and increased perceived focus upon appearance and thinness in the family was positively associated with disordered eating ($M = 1.88$, $SD = 1.29$), $r = .44$, $p < .01$. However, the more diffuse family climate variable (i.e., difficulties with family intimacy) was generally unrelated to problematic behaviors in daughters (for EDE-Q, $r = -.04$; for MAST, $r = -.06$). Although participants' scores on the measure of alcohol problems were unrelated to their scores on the measure of disordered eating ($r = .07$), their perceptions of their parents' alcohol problems were predictive of greater difficulties with disordered eating among participants ($r = .17$, $p < .05$). Perceived emphasis on thinness and appearance was unrelated to problematic alcohol use ($r = -.05$).

Next, we examined the predictive power of matched parental–participant behaviors (i.e., alcoholism–alcoholism, appearance focus–disordered eating) compared to family dysfunction and unmatched parental–participant behaviors (e.g., alcoholism–disordered eating) by statistically testing the differences in the regression weights using a modified (with Bonferroni correction) alpha cutoff of .013. Perceived parental alcohol problems were a significantly stronger predictor of participant alcohol problems than were perceived family focus on appearance and thinness ($z = 3.76$, $p < .001$) and family cohesion ($z = 3.71$; $p < .001$), and there was no significant difference in the predictive power of the latter two variables ($z = 0.09$, $p = .928$). Similarly, perceived family focus on appearance and thinness was a significantly stronger predictor of disordered eating than perceived parental alcohol problems ($z = 2.74$, $p = .006$) or family cohesion ($z = 3.87$; $p < .001$), and there was no significant difference in the predictive power of the latter two variables ($z = 1.89$; $p = .059$). As such, only the perceived parental ARCB that matched the ARCB in participants was significantly stronger as a predictor than other family climate variables.

Following the recommendations by Preacher and Hayes (2004), we used a bootstrapping technique for the *Sobel* test to test for the presence of a significant indirect effect. Sobel ($z = -2.65$, $p = .008$; $z = -2.58$, $p = .010$) and bootstrapping (95% CI = −.046 to −.007; 95% CI = −.038 to −.008) approaches revealed a significant indirect effect for perceived parental problems in the relationships between indicators of perceived family functioning (i.e., cohesion) and problematic alcohol use and disordered eating, respectively, in participants.

We used path analysis to further test for specificity of the parental ARCB model. Fig. 1 includes three sets of path coefficients for three models (i.e., the full model containing both direct and indirect effects, the model containing only indirect effects, the model with paths between unmatched ARCBs). The direct paths between cohesion to the participants' ARCBs in the full effects models were near zero. The full effects model had adequate fit (Table 1). The indirect effects only model also had adequate fit (Table 1). The $\chi^{2\ \text{difference}}$ between the two models was not significant ($p = .748$), suggesting that dropping the direct effects paths did not result in over-trimming of the model. We ran a third model, referred to as the crossover model, in which we allowed