

More than Books in the Backpack: The Impact of Family Dysfunction on College Student Risk Behaviors

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Abstract

Researchers, practitioners and educators have, historically, been interested in assessing the development and impact of family dynamics on children, adolescents and college students (e.g., Chang, et al., 2016; Dring, 2014, Minuchin, Rosman & Baker, 1978; Seligman, 1998). Family dysfunction has been found to impact children in a variety of areas including (but not limited to): risky sexual behavior (e.g., Burnett et al, 2011), pessimism and anger (e.g., Boman, Smith & Curtis, 2003), eating disorders (e.g., Dring, 2015), alcohol/drug abuse (e.g., Minuchin, Rosman & Baker, 1978), and suicide (e.g., Chang, et al., 2016). The current study examined the relationships between self-reported risk by college students (utilizing the Youth Risk Behavior Survey - CDC, 2017) and self-reported characteristics of family dysfunction (utilizing the Edinburgh Family Scale). As predicted, higher scores on family dysfunction were associated with significantly higher scores on all categories of risk behavior characteristics (safety behaviors, tobacco use, alcohol/drug usage, sex behaviors, eating behaviors, and physical activities).

Keywords: Adolescence, child well-being, family dynamics, health, parent-child relationships, risky behaviors

1. Introduction

According to the U.S. Department of Health and Human Services (2011), “Priority health-risk behaviors, which are behaviors that contribute to the leading causes of morbidity and mortality among youth and adults, often are established during childhood and adolescence, extend into adulthood, and are interrelated and preventable.” (p. 2). This means that preventable health-risk behaviors are, at least partially, learned “at home” and carried forward into adult life – including college. Though this same report concludes that health-risk behaviors among youth have been declining since 1991 (condom use, for example, has been increasing) in some ways, prior risk behaviors (such as unprotected sex) are being supplanted by new ones (e.g., texting or emailing while driving, increasing obesity). Although understanding the prevalence, interrelatedness and effects of health-risk behaviors from childhood into adulthood is crucially important, research on the variables that might cause the development of these health-risk behaviors in young persons is less clear – perhaps because categorizing and tracking family effects is difficult.

Many efforts have been undertaken over the years to understand elements of family functioning and environment and how these might impact the development (physical, cognitive and emotional) of children (e.g., Bandura & Walters, 1959; Barber & Buehler, 1996; Becker, 1964; Blair, 1996; Deykin, 1972; Halberstadt & Eaton, 2008; Minuchin, Rosman and Baker, 1978; Moos & Moss, 1976; Scoresby & Christensen, 1976; Turchik & Gidycz, 2012). There are, of course, hundreds more studies that could be cited. The challenge is demonstrating what patterns of family functioning relate to particular patterns of problem behavior in children that might carry forward into adulthood. Additionally, variables that might predict dysfunction in families and problems that carry forward into adulthood and adult relationships – such as enmeshment – can be found to be more or less problematic depending on the presence or absence of other factors – such as culture and cohesiveness (e.g., Barber and Buehler, 1996; Galatzer-Levy, Burton, C.L. & Bonanno, G.A. 2012; Yunmiao, Y., et al., 2015).

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Recent findings underscore the importance of assessing family environment in mental health symptoms in college students (e.g., Yunmiao, et al., 2015). Indeed, many of these studies assess the same variables that other studies have assessed (e.g., cohesion and control) but found that some of those factors – such as high level of cohesion – were predictive of better mental health outcomes for Chinese college students (Yunmiao, et al., 2015) whereas other studies (e.g., Barber & Buehler, 1996) have found cohesion and enmeshment to differentially predict either positive or negative outcomes. It seems reasonable to assume that the culture of the individuals studied – Chinese students in the Yunmiao (2015) study and American students in the Barber and Buehler (1996) study – makes a difference on the impact of these family variables on college student behavior and functioning. Thus, it is not clear that a particular element of family functioning (such as enmeshment or overprotectiveness) is predictive of problematic behaviors in college students across the board.

College students are presented with decisions to make about drug and alcohol use and sexual behavior early in the transition into college (Fromm, Corbin & Kruse, 2008). Clearly it is important to understand what variables most impact the decisions that students are making during this transition period. Numerous studies have shown that early adversity in the family (broadly defined as “higher exposure to abuse and family dysfunction”) predicts smoking, risky sexual behavior and drinking in first-year college students (e.g., Filipkowski, Heron, & Smyth, 2016; Read, Colder, Merrill et al., 2012). Indeed, it seems that family dysfunction could impact how students are responding to these decision opportunities surrounding drinking, sexual behavior and drug use.

Researchers have found that attributional style has a significant effect on risk behavior in college students (Burnett, et. al, 2011). In this study, attributional style in relationship to sexual behavior was assessed by the Dyadic Sexual Regulation Scale (Catania, McDermott & Wood, 1984). Male college students with an external attributional style (those who made external, unstable and specific attributions) were more likely to engage in unsafe sexual practices and to engage in more risky drinking and drug behavior than female students with the same attributional style. However, both male and female college students with an internal attributional style (e.g., internal, stable and global attributions) were more likely to engage in risky drug use and HIV-risky sexual behaviors (e.g., multiple partners, non-condom use). The researchers predicted that students with an external locus of control would engage in safer sexual practices and drink less and engage in less illicit drug use than those with an internal locus of control. This was hypothesized because individuals with an external locus of control tend to perceive what happens to them as more controlled by outside sources (e.g., chance, healthcare professionals, peers, etc.) than those with an internal locus. Students with an internal locus of control have been shown to be more aware of the dangers of HIV infection, and feel more control and proactive when it comes to preventing infection (Gwandure, 2008).

Somewhat surprisingly, however, in the study by Burnett et al. (2011), the only individuals shown to engage in less risky sexual behavior and substance-related behaviors were females with an external locus of control. Despite the somewhat contradictory (at least compared to other studies and the study hypotheses) findings by Burnett et al. (2011), the work makes a logical and important connection between attributional style and risk behavior in college students. Though this study does not address the causal relationship between family dynamics and attributional style (does the attributional style of the children impact the dynamics of the family or do family dynamics influence the development of attributional style in children?), there is much research that has addressed this issue under the guise of many names – such as self-efficacy (e.g., Bandura, 1982; Sullivan 1953), learned helplessness (e.g., Abramson, Seligman & Teasdale, 1978) and learned optimism (e.g., Carver and Scheier, 2002; Seligman, 1998).

For example, early work on what would come to be known as “attributional style” by Abramson, Seligman and Teasdale (1978) discussed “learned helplessness.” The fact that this early work suggested that feelings of helplessness can be learned, reinforces the notion that family dynamics come first and attributional style in children comes second (e.g., Boman, Smith & Curtis, 2003). Additionally, later work by Seligman and others (e.g., Carver & Scheier, 2002; Seligman, 1998) suggests that family dynamics can facilitate either positive or negative attributional styles in children. Findings such as these underscore the importance of determining how these family dynamics “carry forward” in terms of adult behavior, especially when that individual has just recently moved away from home – such as first-year college students.

According to SparkNotes.com, individuals with an internal attributional style, “infer that an event or a person’s behavior is due to personal factors such as traits, abilities, or feelings.” This, of course, includes attributions about self. As such, these individuals are more likely to believe that they can “control” what happens to them and less likely to be concerned that unexpected things could happen to them. It is easy to see how these attributional tendencies could relate to risk-behaviors (www.sparknotes.com).

But how does this attributional style develop? Certainly, a case could be made that attributional style is a feature of personality and, therefore, fairly stable. But this does not mean that family environment and how one is raised has no effect on it. In fact, Vines and Nixon (2009) found that life events (especially ones that were negative and those associated with the home environment) had a profound impact on children's attributional style and that attributional style then had significant implications for depressed mood. It is worth noting that this study found the number of positive life events did not significantly ameliorate the negative life events. This strongly suggests attributional style appears to be more strongly influenced by negative life events (than positive ones) and in the negative direction – toward a more depressed style and mood and that this is especially true for life events happening in the home. Additionally, research has shown that attributional style as influenced by the family, influences decision-making style and that decision-making styles differ in men who are addicted in comparison to those who are not (Shaghaghly, Saffarinia, Iranpoor & Soltanynejad, 2011).

Minuchin (Minuchin, Rosman & Baker, 1978) provided early support for the notion that elements of dysfunction in families can have serious psychological and physical effects on children. Minuchin suggests that families with high levels of overprotectiveness/enmeshment, rigidity and poor conflict resolution strategies are more likely to have children with severe psychological and physical disturbances such as alcohol/substance abuse and Anorexia Nervosa. Enmeshment is characterized by poorly differentiated boundaries, shifting alliances in the family, and inordinate concern over the welfare of family members. Rigidity is characterized by authoritarian parenting, unhealthy family interactions, and an inflexible demand for the following of a strict moral and/or religious code. Lastly, poor conflict resolution strategies include a denial that conflict occurs and the development of complex conflict avoidance strategies that result in an “ignorance is bliss” mentality in the family, such that no effort is made to acknowledge or resolve resulting problems.

Minuchin's work does not, necessarily, resolve the question of causality – it is not clear whether children with problems such as eating disorders and alcohol/substance abuse foster psychosomatic (dysfunctional) patterns or response in families or whether families that exhibit dysfunctional patterns prompt an increase in the likelihood of such disorders in children. None-the-less, it is certainly logical that the causal arrow is more likely to lead from family first to disorder second (e.g., Hosier, 2014). This same “causal” issue was raised above when discussing attributional style (e.g., Bowman, Smith and Curtis, 2003) and it seems likely that the same general trend would hold.

Research using scales such as the Edinburgh Family Scale have been important in the development of “Family Therapy.” In this approach to therapy the therapist approaches an illness or behavior pattern as systemic to family functioning. This could be because the family has developed unhealthy dynamics for dealing with that illness - such as Minuchin, et al. (1978) documented for children with cystic fibrosis – or because the unhealthy family dynamics have created unhealthy behavioral patterns in the children – such as Minuchin, et al. (1978) found with daughters and sons with alcohol/drug abuse problems and eating disorders. More recent work has also documented the impact of unhealthy (dysfunctional) family dynamics on the development of anorexia nervosa in children (Dring, 2015). In fact, although Dring (2014) acknowledges that eating disorders run in families, his work shows that it is due significantly more to family dynamics than it is to genetics.

Although one cannot say with absolute certainty that dysfunction in families leads to unhealthy behavior patterns in children, a recent study by Ahlin and Antunes (2015) provides strong evidence that family orientation (and degree of functionality or dysfunction) is a stronger predictor of locus of control in children than peer-orientation, neighborhood characteristics or individual characteristics. Additionally, early work by Minuchin and colleagues (Minuchin, Rosman & Baker, 1978) clearly suggests that the causal arrow can go both directions – families with children born with serious challenges (such as cystic fibrosis) can develop unhealthy dynamic patterns in response to those challenges and families demonstrating high levels of dysfunctional family dynamics often see psychological challenges arise in their children such as eating disorders in daughters and alcohol and substance use disorders in sons. From this, one could conclude that family dysfunction, therefore, would be a strong predictor of unhealthy behavior patterns in college students. What seems lacking in the literature, then, is not work on attributional style as it relates to risky behavior by young adults (e.g., Vines & Nixon, 2009). Nor is there a paucity of work on the impact of family dysfunction on such extreme actions as suicide (e.g., Chang, Yu, Najarian, Wright, Chen, Chang, Du & Hirsch, 2016). Borowsky, Ireland & Resnick (2001) demonstrated a significant relationship between thwarted feelings of belongingness and suicidal ideation and attempt. A major predictor of feelings of belongingness is family. Unhealthy family dynamics (such as poorly differentiated boundaries and poor conflict resolution strategies) may have a significant impact on the presence or absence of these feelings of belongingness (e.g., King & Boyd, 2016).

It seems very likely that these feelings of belongingness or thwarted belongingness would influence the behaviors of those children as they transition into college. As already mentioned, there is also much work showing how family dysfunction can be related to and possibly result from illnesses in children – such as cystic fibrosis and eating disorders (e.g., Minuchin, Rosman & Baker, 1978). One precursor to the development of an eating disorder, of course, is risky eating behavior (e.g., Cruz-Sáez, S., Pascual, A., Salaberria, K., Etxebarria, I. & Echeburúa, E., 2015). What does appear lacking, however, is an attempt to connect elements of family dysfunction (such as enmeshment, rigidity and poor conflict resolution) to specific risk behaviors in college students (such as sexual behavior, illicit drug use, alcohol consumption or risky physical behaviors). The current study is an attempt to assess different elements of family dysfunction and determine how these relate to varying risk behaviors in first year college students.

2. Method

The study was conducted at a large university in the Southwestern United States. Since participants were recruited from Introduction to Psychology courses, the assumption was made that all could read at a level necessary to understand the study materials and the informed consent form. The research was approved by the Institutional Review Board of the university. All measures, manipulations and exclusions used in this study were reported. Forty college students completed a series of measures about Risk Behavior (Youth Risk Behavior Survey, CDC 2017) and Family Dynamics (Edinburgh Family Scale, Blair, 1996; Minuchin et al., 1978).

Participants

First year students were recruited using a research participation program called SONA. All Introduction to Psychology students at the university at which the study was completed are required to complete hours of experimentation as part of the course requirements. The only restriction for participation was that students must be in their first year of college at the university (any university). This exclusion was included because the research question of interest centers on elements of family dysfunction as they relate to risk behaviors in first year college students. Demographically, those who chose to participate were representative of the demographics of the enrollment across sections of the Introduction to Psychology course. The average age of participants was 18.54, 65 percent of the participants were female, and the racial distribution was 43 percent White, 35 percent Hispanic, 16 percent African American and five percent Asian.

Materials

The Youth Risk Behavior Survey (CDC, 2017) is comprised of 90 questions related to different elements of risk behavior (safety, violence, bullying, suicide/sadness, cigarette smoking/vaping/tobacco, alcohol use, marijuana use, other drug use, sexual behavior, food, physical activity, concussions, other health behaviors, and thoughts about cigarette, alcohol and drug use). The Edinburgh Family Scale (EFS) is a 27-item measure for measuring dimensions of Minuchin's Model of the Psychosomatic Family (Blair, 1996; Minuchin, Rosman & Baker, 1978). The scale assesses family dynamics in terms of enmeshment/overprotectiveness, rigidity and conflict. In terms of psychometric properties, the EFS correlates positively with expected scales on the Family Assessment Measure (Skinner et al., 1993) and as expected in both positive and negative directions with scales on the Family Assessment Device (Epstein, 1982).

Procedure

Participants who met the criteria of being in their first year of college were invited to participate and could access this study (along with various other studies being conducted in the department at the same time), via the participation system. All questionnaires were administered online following the reading and submission of an Informed Consent Form. Presentation of questionnaires (either the EFS or the Youth Risk Behavior Survey) was randomized by the experiment program following completion of the short demographic questionnaire. Following completion of the questionnaires, each participant was provided with a scenario about a family event ("You return home to find out that something bad has happened to a family member, how would your family respond to this situation?") and asked to engage in a "free write" in response to that prompt. Of the 40 participants, three had to be excluded from analyses because of a failure to complete all of the surveys.

3. Results

Though it was expected that relationship patterns would emerge between levels of family dysfunction (such as enmeshment or poor conflict resolution) and particular risk behaviors (such as excessive drinking or risky eating), every element of family dysfunction on the Edinburgh Family Scale was correlated significantly with each of the possible risk behavior patterns on the Youth Risk Behavior Survey.

In order to determine, then, if levels of family dysfunction were associated with total risk behavior, Family Dysfunction score totals were subjected to a Median Split to categorize students into a lower and higher dysfunction category. Individuals were then compared in terms of self-reported Risk Behavior scores and Dysfunction Category. As expected, those who reported significantly more family dysfunction, also reported significantly higher risk behavior in their first year of college than those who reported lower levels of family dysfunction at home, means of 324.44 and 153.37, $T(1,35) = -22.425$, $p < .001$.

Naïve raters were provided with definitions of each of the four elements of family dysfunction and were asked to rate the free writing of the participants in terms of each of those elements and then summing those scores for each essay. Interrater reliability was tested by sampling five of the free writes, having two raters score each and then comparing those scores. Initial scores were in 85 percent agreement. On average, the raters were scoring the free write essays within 15 percentage points of each other. This was considered sufficient scoring agreement to warrant averaging the ratings across the two raters for the analyses. All analyses on the free write, then, are based on the average total score given to each essay by the raters.

As expected, those individuals scoring higher on total risk behavior (following a Median Split into low and high scores), were also rated as reflecting more family dysfunction in the free write essay as rated by the naïve raters, Means of 8.41 and 17.10 for low and high risk scorers, respectively, $T(1,35) = -8.879$, $p < .01$. This means that students who self-reported significantly higher levels of risky behavior in the first year of college, were also writing essays about how their family would handle a negative family event that were scored by the raters as significantly more reflective of elements of family dysfunction than those who self-reported lower levels of risk behavior in their first year of college.

4. Discussion

Clearly, understanding how family dynamics impact children is important (e.g., Blair, 1996; Minuchin, Rosman & Baker, 1978). It is equally important to understand how those effects get “carried” forward into college and adult life (e.g., Carver & Scheier, 2002; Gwandure, 2008). But little work has been done on delineating what elements of family dysfunction most impact attributional style in children and how these attributional tendencies impact risk behavior as those “children” move out of the home and into adulthood. One important aspect of that transition is the movement into college life.

The current study assessed first-year college student self-reports of elements of family dynamics (enmeshment, triangulation, rigidity and poor conflict resolution) that have been shown to be predictive of dysfunction in families (e.g., Blair, 1996) and also measured self-reported risk behaviors using the Youth Risk Behavior Survey (CDC, 2017). First-year college students reporting higher levels of family dysfunction also rated themselves as engaging in significantly higher levels of risk behavior in their first year than other first year students reporting lower levels of family dysfunction. This pattern held true whether each risk behavior was assessed separately (safety, violence, bullying, suicide/sadness, cigarette smoking/vaping/tobacco, alcohol use, marijuana use, other drug use, sexual behavior, food, physical activity, concussions, other health behaviors, and thoughts about cigarette, alcohol and drug use) or combined into a total risk score. Additionally, student writings about how the family would handle a “negative event” were rated by naïve raters for the presence of these unhealthy family dynamics. Scores on these essays demonstrate the same pattern as student self-reports of family dysfunction; those whose essays scored as reflecting more elements of family dysfunction were significantly more likely to engage in risk behaviors than those students whose essays were scored as reflecting lower levels of family dysfunction.

Though no causality can be determined from this study, previous research (e.g., Turchik & Gidycz, 2012) suggests that family dynamics create patterns that are likely to then impact behavioral choices of those children into adulthood. Likewise, attributional style (e.g., Seligman, 1998), is likely to be influenced by family dynamics and has been clearly shown to influence decisions as that young person moves from the family into college and adulthood especially as those decisions relate to risk behaviors such as drinking or drug use (e.g., Shaghaghay, Saffarinia, Iranpoor & Soltanynejad, 2011). It is clear that risk behavior in college students is at high levels and needs to be further studied (e.g., Randolph, Torres, Gore-Felton, Lloyd & McGarvey, 2009). Surprisingly little work has attempted to specifically connect patterns of dysfunction in families with these patterns of risk behavior in college students. If such connections exist, it is crucial that they be understood for treatment if students develop problems, but also to design and implement preventative intervention programs on college campuses. The current study is one attempt to document the potential relationship between elements of family dysfunction (in particular, patterns of enmeshment/overprotectiveness, rigidity and poor conflict resolution strategies) and risk behavior in first year college students (problematic behaviors related to physical behaviors, sex and substance use, in particular).

Significantly more work is needed to study such “carry forward” effects from family dynamics into college life and additional work needs to address issues of gender, race/ethnicity and other variables that may serve to exacerbate or buffer these effects.

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