THESIS

ASSOCIATION BETWEEN FATHERS' PARENTAL MINDFULNESS AND ADOLESCENT BEHAVIORAL DEVELOPMENT AND ACADEMIC GRADES

Submitted by

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ABSTRACT

ASSOCIATION BETWEEN FATHERS' PARENTAL MINDFULNESS AND ADOLESCENT BEHAVIORAL DEVELOPMENT AND ACADEMIC GRADES

This study examined the association of fathers' mindful parenting with adolescent problem behaviors and academic grades. Past research shows positive associations between mindful parenting and youth outcomes and supports the efficacy of parental mindfulness training for improving parent-child relationships and decreasing adolescent problem behaviors. Yet, much of this research is conducted with mothers, whereas fathers are less represented in these studies. Parenting research that has been done with fathers has highlighted the significant impact that a father-child relationship can have on a child's development, suggesting that mindful parenting might also be a useful avenue for study with fathers. In a sample of 244 families with participating fathers, this study tested the association between fathers' mindful parenting and adolescent internalizing behavior, externalizing behavior, and grades after controlling for fathers' general parenting and demographic characteristics. Results indicated that mindful parenting in fathers was associated with youth outcomes above and beyond fathers' general parenting and demographics, but only for youth-report of fathers' mindful parenting. These results indicated that when youth reported more mindful parenting by their father, they also had lower levels of externalizing and internalizing behaviors. Mindful parenting did not significantly predict grades. Outcomes of this study indicate a promising area of research regarding fathering and mindful parenting.

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INTRODUCTION

Behavioral health and academic outcomes can have a significant influence on youth long term well-being (Nock, Kazdin, Hiripi, & Kessler, 2007; Pascarella, Terenzini, & Feldman, 2005; Seidman, 2006). Early academic success is critical because it predicts higher educational attainment which has become increasingly important in today's society in order to obtain wellpaying employment (Pascarella et al., 2005). Early academic success also predicts attendance at college, which greatly increases the number of job opportunities available, and may also increase one's obtainable salary (Pascarella et al., 2005). Although the absence of higher education may negatively impact one's well-being, individuals who do not complete high school are at an even greater disadvantage. In the year 2010, almost one third of students from the U.S. public school system did not complete high school. Although this percentage is lower than previous years, these individuals are more likely to commit crimes and become incarcerated, significantly less likely to find employment, and more likely to experience health issues (Fall & Roberts, 2012). Understanding the various personal and contextual factors associated with successful academic achievement is an important area of study that can translate to developing interventions to promote this area of adolescent development.

Understanding the predictors of youth behavioral health issues, for both internalizing and externalizing behaviors, is also an important area of study. More than 5 million children in the United States are affected by Attention-Deficit/Hyperactivity Disorder (Anderson & Guthery, 2015) and 4.2% of children aged 4-17 are diagnosed with Oppositional Defiant Disorder (Clarke & Ameron, 2015). In addition, 48% of high school seniors reported using an illicit drug, and approximately 1,500 per every 100,000 17 year-olds are arrested for drug law violations

(Sickmund & Puzzanchera, 2014). Also of significance, studies show that between 20 and 50% of adolescents report symptoms of depression (Hankin, 2006) and over 30% experience symptoms of anxiety (Merkikangas et al., 2010). These statistics suggest that a significant proportion of youth in the United States are affected by these problems, yet they are not even inclusive of all internalizing and externalizing behavioral problems or juvenile crime, and do not take into account undiagnosed or unreported children. This means that the current statistics may be a low estimate. These behavioral problems in adolescence can significantly affect future development (Nock et al., 2007; Seidman, 2006).

Among the strongest predictors of youth academic and behavioral problems is parenting. Characteristics of high-quality parenting such as discipline that is consistent, effective, and non-punitive, interactions that are warm and supportive, and spending quality time with the adolescent, are associated with lower rates of problem behaviors (Cabrera et al., 2014; Carlson, 2006; Pougnet et al., 2011; Williams & Kelly, 2005). Mindfulness in parenting is an additional parenting characteristic that has been proposed as a prediction of youth behavioral and academic outcomes (Duncan, Coatsworth & Greenberg, 2009). The literature on both parenting and mindfulness in parenting has focused primarily on mothers with fewer studies focusing on quality of fathers' parenting. This study will address some of these gaps by first presenting a rationale for studying mindfulness in parenting among fathers and second by exploring the empirical association between effective parenting in fathers and adolescent behavioral development and academic grades, including whether mindfulness in parenting adds to this association.

General Mindfulness

Mindfulness is the ability to be present in the moment and to experience each moment without judgment or reactivity (Fishbane & Siegel, 2013; Goldstein, 2013; le, Ngnoumen & Langer 2014). Stemming from Buddhist, Hindu, and Chinese traditions, mindfulness has been shown to be associated with a high level of life satisfaction as well as positive interpersonal relationships (Grossman et al., 2004; le, et al., 2014; Turpyn & Chaplin, 2015). Mindfulness can be thought of as a naturally occurring characteristic of a person as in the concept of "traitmindfulness," as specific practices that cultivate mindfulness such as through mindfulness meditation or as the result of those practices (Allen & Kiburz, 2012; Bullis, Boe, Asnaani & Hofmann, 2014; Tamagaura et al., 2013). Individuals high on trait mindfulness display better life satisfaction and well-being, family involvement, quality of sleep, and self-regulation than individuals without this trait, and also display decreased physiological and emotional response in stressful situations (Allen & Kiburz, 2012; Bullis et al., 2014; Tamagaura et al., 2013). Trait mindfulness, which involves the characteristic of non-reactivity to personal internal experiences, also acts as a protective factor against depression (Paul, Stanton, Greeson, Smoski, & Wang, 2013).

Significant improvements in well-being have been linked to mindfulness training (Grossman et al., 2004; Turpyn & Chaplin, 2015). Such improvements include positive changes in mental health, such as decreases in depression and anxiety and increased coping skills (Grossman et al., 2004). In addition, regular practitioners of mindfulness report decreased stress and increased overall well-being (Turpyn & Chaplin, 2015). In sum, trait mindfulness, reflected in the characteristics of focused attention on present experiences, openness, non-judgmental attitude and decreased reactivity to these experiences, shows individual differences across

people, but can also be trained, and is associated with reduced stress and better well-being (Grossman et al., 2004; Paul, Stanton, Greeson, Smoski, & Wang, 2013; Turpyn & Chaplin, 2015).

Mindful Parenting

Mindfulness has also been proposed as characteristic of effective parenting. Parents who exhibit trait mindfulness are able to be present in the moment with their children, and communicate with their children in a way that is non-reactive and non-judgmental (Bögels et al., 2014; de Bruin et al., 2014; Grossman et al., 2004). Mindfulness in parenting has been conceptualized as comprising five key dimensions (Coatsworth et al., 2015; Duncan, et al., 2009). First, parents practicing mindful parenting are listening to their children with full attention. Second, parents are accepting of themselves and their child in a non-judgmental way. Third, parents are emotionally aware of themselves and their child. Fourth, parents are able to effectively self-regulate and finally, parents exhibit compassion for themselves and their child (Duncan et al., 2009).

Current research shows promising results for the effectiveness of parental mindfulness training in improving parent-child relationships (Bögels, Hellemans, van Deursen, Römer, & van der Meulen, 2014, Coatsworth et al., 2015). These relationships are shown to improve for several reasons. First, a study conducted by Bögels et al. (2014) found that parental mindfulness training results in a decrease in parental stress as well as parental internalizing and externalizing behaviors (Bögels et al., 2014). In addition to the direct impact on the parent, these positive changes in parenting style indirectly influence the well-being and behavior of the adolescents, including decreases in adolescents' anxiety, depression, behavioral problems, and substance use

(Turpyn & Chaplin, 2015). Improvements in stress and behaviors following mindfulness training were reported to have been sustained at eight week follow up (Bögels et al., 2014).

Parental mindfulness also encourages discipline techniques that are shown to be effective in improving parent-child relationships (Turpyn & Chaplin, 2015). These techniques include employing discipline in a consistent manner with rules being clear and concise, while displaying a positive attitude with limited judgment or reactivity (Turpyn & Chaplin, 2015; Halgunseth, Perkins, Lippold, & Nix, 2013). Individuals practicing parental mindfulness learn how to effectively regulate their emotions eliciting a more positive response from the disciplined child (Turpyn & Chaplin, 2015).

Training in parental mindfulness is linked to improvements in parent-child communication (Lippold, Duncan, Coatsworth, Nix, & Greenberg, 2015). More mindful parents showed less judgment, displayed more warmth towards their children, and were less reactive during conflict provoking conversations with their youth which in turn allowed youth to feel more comfortable opening up and disclosing information that they otherwise may have withheld (Lippold et al., 2015). This increased comfort may also be influenced by the increased positive attitude and decreased stress experienced by those practicing parental mindfulness; increasing overall parenting quality (Parent, McKee, Rough, & Forehand, 2015).

Mindfulness in parenting leads to quantitatively different parenting styles or strategies which in turn influences their children. Parental mindfulness results in stronger parent-child relationships and a modeling of the associated positive characteristics (Coatsworth et al., 2015). Parental mindfulness, including being present in the moment with one's child, taking a non-reactive and non-judgmental attitude toward one's own internal experiences and to the behaviors and expressions of one's child, is also expressed in a greater ability for parents to self-regulate

(Coatsworth et al., 2015). This skill is then modeled to the children of mindful parents, encouraging them to develop similar skills. The indirect influence of such modeled behaviors on adolescents is significant because of the positive impact on their well-being. Specifically, a child's ability to self-regulate has been shown to have a significant impact on school readiness and academic success (Willis & Dinehart, 2014).

Mindful parenting, like parenting in general, is mostly studied with mothers. Although Coatsworth and colleagues (2015) have shown some effects of their intervention on fathers' mindful parenting, there is still a need to further understand the associations between fathers' parenting in general and mindful parenting and adolescent development.

Fathering and Child Development

Historically, research on parenting has focused predominantly on the role of the mother (Coley, Carrano, & Lewin-Bizan, 2011). However, this pattern has begun to shift over the past several years with an increase in research on fathering and the importance that this role plays in a child's life (Coley et al., 2011; Kim & Hill, 2015; Lewis & Lamb, 2003). Through this increase in research on fathering, it has become apparent that the relationship between a father and his child can have a significant impact on the child's development (Cabrera et al., 2014; Carlson, 2006; Coley et al., 2011; Karbach et al., 2013; Pougnet et al., 2011; Williams & Kelly, 2005).

Current research on fathering highlights the importance of parenting techniques such as positive parental control, supportiveness, quality time, and father involvement (Cabrera et al., 2014; Cabrera et al., 2007; Karbach, Gottschling, Spengler, Hegewald, & Spinath, 2013; Pougnet et al., 2011). Although these studies are not specifically measuring mindfulness in parenting, the characteristics they are studying might show some conceptual overlap with parental mindfulness. For example, compassion, a dimension of mindful parenting, is likely associated with a

supportive parenting style. In contrast, constructs such as father involvement may be measured by the amount of time spent with a child and not with respect to the quality of the involvement, whereas mindful parenting dimensions all reflect a high quality of involvement. Despite the conceptual overlap, studies have not tested whether mindfulness in parenting helps us understand the association between parenting and adolescent development beyond what other dimensions of parenting do.

Fathering and Academic Success

The interactions that children experience within their households may vary significantly, including differences in the level of parental control that is implemented within the home. Parental control includes the type of discipline employed, punishment, reward, and feedback that children receive from their parents (Karbach et al., 2013; Pougnet et al., 2011). Parents who utilize reactive, harsh discipline practices are employing negative parental control, and parents who are less reactive, consistent, and warm are exhibiting positive parental control (Pougnet et al., 2011). The type of parental control that is exhibited by fathers has been shown to have a significant influence on the cognitive development of their children which can influence their level of academic success (Karbach et al., 2013; Pougnet et al., 2011).

Karbach et al., (2013) showed that *negative* parental control was associated with poorer academic outcomes (Karbach et al., 2013). Pougnet et al., (2011) found that *positive* parental control exhibited by fathers is positively associated with the cognitive development of their children. More explicitly, positive parental control by fathers was shown to influence the IQ scores of their children, with children in these households developing higher IQ scores than their counterparts (Pougnet et al., 2011). The results also indicated that positive parental control displayed by fathers is associated with a child's nonverbal cognition (Pougnet et al., 2011). The

results were produced utilizing longitudinal data that were collected at two different time periods 3-5 years apart (Pougnet et al., 2011). In addition to positive parental control, supportiveness from a father has also been shown to have positive developmental implications, improving the cognitive and language development of their children (Cabrera et al., 2014; Cabrera et al., 2007). Such increases in cognitive development including language, nonverbal cognition, and IQ may positively influence academic success in adolescents (Cabrera et al., 2014; Cabrera et al., 2007; Pougnet et al., 2011). It is possible that mindful fathering, including non-reactive responses to children, consistent discipline, non-judgment, and warmth (Bögels et al., 2014; Lippold et al., 2015), may contribute to youth cognitive development beyond other forms of parenting like positive control.

Fathering and Behavioral Functioning

In addition to cognitive functioning, studies show a positive association between good parenting and behavioral functioning in children (Cabrera et al., 2014; Carlson, 2006; Pougnet et al., 2011; Williams & Kelly, 2005). Children with highly involved fathers, as indicated by fathers' discipline and moral guidance, level of support, time spent with youth, nurturance, and dependability, have significantly fewer internalizing and externalizing behaviors than children with fathers who are less involved (Carlson, 2006). Internalizing and externalizing behaviors are common, broad-band dimensions of symptoms that are commonly used to characterize youth behavior problems (Achenbach, Dumenci, & Rescorla, 2003). Internalizing includes symptoms such as anxiety, depression and somaticizing. Externalizing includes such things as conduct problems, aggressive and rule-breaking behaviors. Positive parental control and paternal supportiveness have also been shown to have a positive influence on behavior (Cabrera et al., 2014; Pougnet et al., 2011). Children with fathers who exhibited positive parental control were

shown to have fewer internalizing behavioral problems at school than their peers, and children with supportive fathers had an increased ability to self-regulate (Cabrera et al., 2014; Pougnet et al., 2011).

In contrast, children from low-income families where the father uses harsh, punitive, discipline practices are more likely to exhibit internalizing behaviors than children from families where fathers do not use harsh discipline (Coley, Carrano, & Lewin-Bizan, 2011). The associations found by Coley and colleagues were longitudinal, with early harsh parenting when the child was age 3 predicting behavior problems at age 9 (Coley et al., 2011). In addition, the study found that fathers' antisocial behaviors were associated with children's internalizing and externalizing behaviors, and when harsh discipline was combined with antisocial behavior, the child's negative behavior outcomes were even worse (Coley et al., 2011). Conceptually, parental mindfulness is associated with more positive discipline skills and softer, less harsh responses (Bögels et al., 2014), and could be a strong counter to harsher discipline practices.

The quality of the father-child attachment, and involvement, is also strongly associated with youth internalizing and externalizing behaviors (Williams & Kelly, 2005). Moreover, the association was moderated by the child's sex such that attachment with fathers was more strongly associated with externalizing behaviors in daughters than sons (Williams & Kelly, 2005). This study also found that the ways in which fathers provide advice to their children is associated with their social competence (Williams & Kelly, 2005). This finding links well to parental mindfulness, as fathers who are practicing such techniques will exhibit more positivity and less judgement when providing advice to their children making it more likely that the advice will be received in a positive manner (Bögels et al., 2014; de Bruin et al., 2014; Grossman et al., 2004).

These associations between fathering and behavioral development highlight the importance of quality time spent between children and their fathers, which may include the level of emotional support and feelings of closeness in the relationship (Carlson, 2006). Given the similarity in the qualities of mindful parenting and positive parenting, the question remains whether fathers' mindfulness in parenting adds to our understanding of this association. Through practicing mindfulness, fathers may develop a deeper connection with their children through improved communication skills, which may then influence the quality of the interactions fathers and children have during the time they spend together (Lippold et al., 2015). In addition, fathers who exhibit mindfulness, which may be reflected in qualities such as parental involvement, positive parental control and supportiveness, may have children who grow up with fewer internalizing behavioral problems and increased self-regulation (Bögels et al., 2014; Cabrera et al., 2014).

Fathering and Mindfulness

Few research studies with a specific focus on parental mindfulness in fathers have been conducted. However, a study conducted by Coatsworth et al. (2015) shows promising results for the impact of mindfulness in fathering. The study included four hundred and thirty-two families, and participants were randomly assigned to either a current parental training program, a parental training program with mindfulness included, or a control group (Coatsworth et al., 2015).

Assessments were administered at three intervals, including the start of the intervention, after the completion, and one year later (Coatsworth et al., 2015). The parental training program with mindfulness included showed stronger results for fathers than for mothers, and the results were maintained through follow up (Coatsworth et al., 2015). With the numerous positive outcomes of mindfulness and parental mindfulness discussed above, as well as the impact that fathers can

have on their children's cognitive and behavioral development, training in parental mindfulness could have a profound impact on the relationship between fathers and their children.

Youth versus Parent Reports

Studies have shown a relative lack of correspondence between parent and youth reports of parenting that has been attributed to differing perceptions of the parenting behaviors (Korelitz & Garber, 2016). Prior research also indicates that reports remain equally inconsistent when reporting on both positive and negative parenting behaviors (Korelitz & Garber, 2016). It can be argued that parent perceptions of their parenting may be subject to self-report bias (Morsbach & Prinz, 2006) that may not be present in youth reports. Until this inconsistency in reports is better understood, research studies on parenting should consider utilizing both youth and parent reports in their analyses. Prior analyses have indicated that youth reports of mindful parenting and parent reports of mindful parenting are weakly associated, so analyses examining these variables have been conducted separately for mothers, fathers, and youth (Coatsworth et al., 2015). This study adopted that perspective and methodology.

The Current Study

As research on the association between the father-child relationship and adolescent development is increasing, it is becoming apparent that the role of the father is imperative. The relationship that a father has with his children can have a significant impact on their behavioral and cognitive development. A popular focus in the parenting literature is mindfulness in parenting (Duncan et al. 2009), however, the current literature includes few results of studies examining the associations between father's mindfulness in parenting and outcomes such as father-child relationship qualities, or youth behavior problems. Mindfulness in parenting is a type

of positive parenting behavior and fathers who exhibit it may be more likely to have a stronger relationship with their children than non-mindful fathers. The findings discussed above indicate that the type of parenting fathers employ and the type of relationship that fathers have with their children is associated with their child's behavioral and cognitive outcomes. For this reason, it is important to continue investigation of the role of fathers and the ways in which paternal mindfulness can influence a child's development.

RESEARCH QUESTION AND HYPOTHESIS

Research Question

Is fathers' mindful parenting associated with adolescent behavioral development and academic grades, after controlling for fathers' general parenting (e.g. discipline style and positive affect) and background demographic characteristics?

Hypothesis

It was hypothesized that fathers' mindful parenting is negatively associated with adolescent internalizing and externalizing problems and positively associated with academic grades after controlling for fathers' general parenting (consistency in discipline, harsh discipline, monitoring, positive affect, positive guidance and support, and inductive reasoning) and background demographic characteristics.

METHODS

Data for this study were taken from a larger randomized clinical trial that investigated the effects of integrating mindful parenting into an evidence-based family strengthening program (Coatsworth et al., 2015). Families were recruited from four school districts in urban and rural parts of central Pennsylvania. Recruitment took place over four consecutive academic years and included the families of 6th and 7th grade students. Four hundred and thirty-two families participated in the study (Coatsworth et al., 2015).

Participants

Participants in the current study included two hundred and forty-four families who had participating fathers (82% European American, 4% Latino, 7% African American, 4% Asian, 1% American Indian, 2% biracial). Thirty percent of participating fathers had an education level of high school graduate or less. The average age of target youth was 12.14 (SD .67) with an age range of 10 to 14, and fifty-four percent were female.

Procedures

The Pennsylvania State University Institutional Review Board approved the procedures for this study. As part of the larger study, fathers, mothers, and their youth completed individual assessments at three time points - baseline, post-intervention, and one year follow up. Following pre-intervention assessment, families were randomly assigned to one of three groups; 1) a group that received The Strengthening Families Program 10-14 (SFP 10-14); the original version of an empirically validated family strengthening curriculum (n = 160); 2) a group that received the Mindfulness-enhanced Strengthening Families Program 10-14 MSFP 10-14 (n = 154), or; 3) a group that received a home study course on adolescent development and family relationships

(n = 118) (Coatsworth et al., 2015). For the purposes of the current study, data from the assessments given to all participants at baseline were utilized. Only data from families with fathers included will be analyzed.

Intervention conditions

Empirically validated SFP 10-14 is a family-based, universal intervention intended to prevent the inception and intensification of problem behavior and substance use in adolescents (Molgaard, Spoth, & Redmond, 2000). Groups of parents and their children engaged in seven two hour sessions. Sessions generally took place once per week with parents and youth meeting in separate groups during the first half of the session and reconvening for a family session during the second half (Coatsworth et al., 2015). A full description of the intervention can be found in Molgaard, Spoth, and Redmond (2000). MSFP 10-14 is an adapted version of SFP 10-14 which followed the same format and included all components of SFP 10-14 with the addition of parental mindfulness interventions (Coatsworth et al., 2015).

In order to ensure that results were not influenced by conflicting family activities, both SFP 10-14 and MSFP conditions were provided at the same time, at separate locations (Coatsworth et al., 2015). These interventions took place once per week for a 7-week period (Coatsworth et al., 2015).

The third condition, home study, consisted of two booklets that were sent to the families' homes (Coatsworth et al., 2015). The information in the booklets was obtained from online resources. Each booklet contained information of a specific topic – the first focused on social emotional changes in adolescence (sent in the 2nd or 3rd week) and the second discussed family life with adolescents (sent in 5th or 6th week). The families who were assigned to this condition did not receive any additional interventions (Coatsworth et al., 2015).

Measures

Demographics

Demographics were measured utilizing items from a demographic questionnaire in which parents reported on child sex, age, race, and household annual income. Sex was coded as 1= male and 0 = female. Race was coded as 1 = Native American/American Indian; 2 = Black/African American; 3 = Asian; 4 = White; 5 = More than one of those listed; 6 = Otherspecify. Age was calculated from parent's entry of child's birthdate and annual income was a numerical entry. Given the relatively small percentages of non-European White participants, this variable was recoded as 1= white and 0 = non-white.

Interpersonal Mindfulness in Parenting (IM-P) Scale (Father and Youth Reports)

The IM-P Scale is a 31 item self-report and youth-report scale that measures the level of mindfulness in parenting (Duncan, 2007; de Bruin et al., 2014). Higher scores indicate higher levels of parental mindfulness. The items include statements regarding traits of mindfulness in parenting including attentiveness, level of judgement, emotional awareness, self-regulation, and compassion. Sample items on the father self-report include: *I notice how changes in my child's mood affect my mood; When I am upset with my child, I calmly tell him/her how I am feeling; I listen carefully to my child's ideas, even when I disagree with them.* Sample items on the youth-report include: *My father reacts right away when he is upset with me; Whenever I am upset about something, my father gets upset too; My father listens carefully to my ideas, even when he disagrees with me.* Items are rated from 1 (never true) to 5 (always true). The measure includes five subscales: Listening with full attention, emotional awareness of self and child, self-regulation, non-judgmental acceptance of self and child, and compassion for self and child, but can also calculate as a total score. Internal consistency reliability for the total score has been

shown to be very good ($\alpha = 0.89$) for a large sample of n=753 mothers and n=523 fathers (de Bruin et al., 2014). The IM-P was negatively correlated with depression and positively correlated with optimism, demonstrating convergent validity (de Bruin et al., 2014). The total score (mean of each scale) is used in this study and showed strong internal consistency reliability for this sample for both fathers ($\alpha = 0.89$) and youth ($\alpha = 0.87$).

Child Behavior Checklist (Parent and Youth Reports)

The Child Behavior Checklist is a 45-item parent-report and youth-report scale that measures the level of child internalizing and externalizing behaviors (Achenbach, Dumenci, & Rescorla, 2003). Higher scores on both of these scales indicate more behavior problems. The items include statements regarding negative child behavior and emotion. Sample items include: Cruelty, bullying, or meanness to others; Complains of loneliness; Disobedient at home. Items are rated from 1 (Not True - as far as you know) to 2 (Very true or often true). Evidence for reliability and validity was collected from a sample of n = 1,605. Internal reliability for the scale was high at $\alpha = 0.83$. The Child Behavior Checklist is significantly associated with DSM-IV clinical diagnoses and other standardized rating scales, demonstrating convergent validity (Achenbach, Dumenci, & Rescorla, 2003). Internalizing and Externalizing scores from fathers, mothers and youth were used in this study. Reliability for Internalizing scores were strong for fathers ($\alpha = 0.85$), mothers ($\alpha = 0.87$) and youth ($\alpha = 0.88$). Likewise, the reliability for externalizing scores for fathers ($\alpha = 0.84$), mothers ($\alpha = 0.82$) and youth ($\alpha = 0.93$) were also strong. Correlations between fathers and mothers report of internalizing (r = .51) and externalizing (r = .65) were strong. Correlations between youth report and fathers report were weaker for both internalizing (r = .28) and externalizing (r = .40). Similarly, youth report of internalizing and externalizing were only modestly correlated with mothers' reports (r = .38 and

.42, respectively). Mothers' and fathers' reports of internalizing and externalizing were standardized and summed to create separate composite scores for parent-report of internalizing and externalizing.

Child Grades (Parent and Youth Reports)

The Child Grades scale is a 1 item parent-report and self-report scale that measures the parent's report of their child's grades in school and the youth's report of their grades in school. The single item includes 10 descriptive options and the parents and youth must each select one. Options include: $Mostly\ A's$; $Mostly\ A's$ and B's; $Mostly\ B's$ etc. The measure was coded from 0 (mostly F's) to 8 (mostly A's) with an asterisk if the child's school does not give letter grades. This measure is based on factual knowledge. It has not been evaluated for reliability and validity. Mother and father report of grades were strongly correlated (r = .67), whereas youth report of grades showed weak, non-significant correlations with mother (r = .05) and father report (r = .04). Mother and father reports were standardized and summed to create a single composite score for parent-report of youth grades.

General Parenting (Father and Youth Reports)

Parenting dimensions measured include consistency in discipline, harsh discipline, monitoring, positive affect, positive guidance, support, and inductive reasoning drawn from measures used to evaluate the original SFP 10-14 curriculum and showing good reliability and validity (Spoth, Redmond, & Shin, 1998). Higher scores indicated better parenting. Similar questions are asked from the fathers and youth perspective, with minor changes in wording. Consistency in discipline included 4 items such as: When you discipline your child, how often does the kind of discipline you use depend on your mood? Harsh discipline was measured utilizing a scale with 3 items including: When this child does something wrong, how often do you

shout, yell or scream at him or her? Inductive reasoning was measured using a 4 item scale including: When your son or daughter does not know why you make certain rules how often do you explain the reasons? Paternal monitoring was measured utilizing a 5 item scale including items such as: How often do you know when this child does not do things you have asked him or her to do? Paternal guidance was measured utilizing a 5 item scale including: I sit down with my child and discuss his or her problems. Paternal support was measured utilizing a 5 item scale with items such as: I show support when my child talks about what he or she wants to do when they grow up. Youth-report of positive parental guidance and support was measured utilizing a 9 item scale including items such as: When I am sad or mad, my dad talks to me and tries to understand why I am feeling that way and showed good reliability. Positive parental affect was measured utilizing a 6 item scale including: During the past month, when you and this child have spent time talking or doing things together, how often did you do the following. Negatively worded items were recoded so that high scores reflect positive affect.

Factor analysis was used to examine whether the number of parenting variables could be efficiently reduced. Preliminary analyses showed that father and youth reports on these variables were correlated at a trivial to moderate level (r = .03 - .42). Principal factor analysis with varimax rotation indicated that a two factor solution could parsimoniously account for associations among these variables. The variables loaded primarily on a "Father" factor and a "Youth" factor, with minor cross loadings for 3 youth-report items. Those items had stronger loadings on the "Youth" factor, so were retained only for composite scores for that factor. Composite scores were created by standardizing and summing values of variables loading on "Father" and "Youth" factors. Both composite scales showed good internal consistency reliability; $\alpha = .83$ for fathers and $\alpha = .76$ for youth.

ANALYSES

The hypothesis that fathers' parental mindfulness is associated with adolescent behavioral problems and academic functioning, beyond father's general parenting and demographic characteristics, was tested using two-step hierarchical multiple regression analyses. Separate analyses were conducted for youth and father reports, and for each of three dependent variables; internalizing behaviors, externalizing behaviors and academic functioning. In the first step of each regression analysis, the dependent variable (internalizing behavior, externalizing behavior or academic functioning) was regressed on background parenting and demographic characteristics. In the second step, fathers' mindfulness in parenting was added to the regression equation to test whether it added significantly to the association with adolescent developmental outcomes. Across the sets of regression analyses, the hypothesis that fathers' parental mindfulness significantly predicts youth outcomes was tested twelve times. To control the false discovery rate for independent test statistics, the Benjamini-Hochberg alpha adjustment procedure was applied (Benjamini & Hochberg, 1995).

RESULTS

Preliminary analyses examined distributions of all variables and bivariate correlations across variables. Bivariate correlations for all variables, as well as means and standard deviations are presented in Table 1. All variables showed approximate normal distributions with values of skewness/standard error of skewness less than the critical value of 1.96.

Correlations across variables were generally in the small to moderate range. Youth and father reports of both mindful and general parenting had only small associations with each other. Fathers' mindful parenting from both youth and father perspectives was moderately associated with parent and youth reports of externalizing and internalizing behaviors. Fathers' mindful parenting was also moderately associated with fathers' general parenting across reporter and strongly associated within reporter. Income was negatively associated with parent and youth-reports of youth behavior problems, and positively associated with parent-reported grades.

Income was not significantly associated with fathers' general parenting variables. Fathers' general parenting was significantly negatively correlated with externalizing and internalizing behaviors. Youth report of grades was not significantly correlated with any of the other variables of interest.

Testing Whether Fathers' Mindfulness Predicts Youth Development

Hierarchical regression analyses were conducted to test the hypothesis that fathers' mindfulness predicts youth internalizing behaviors, externalizing behaviors, and grades after controlling for important demographics and fathers' general parenting. Because this study included both youth and parent report of predictor and outcome variables, I conducted four sets of analyses to examine whether: 1) youth-reported fathers' mindfulness in parenting predicted

Table 1

Correlations, means, and standard deviations for outcome and control variables

	-	2	9	4	5	9	7	00	6	10	11	12	13	14
1. Sex	-													
2. Age	10	1												
3. Race	14*	01												
4. Income	90-	60:	.32**											
5. Grades YR	03	.02	90:	90:	п									
6. Grades PR	-00	13*	60:	30**	50:	-								
7. Externalizing YR	80:	60:	02	18**	00:	23**	1							
8. Externalizing PR	.16*	.05	50:	20**	90:-	41**	.43**	-						
9. Internalizing YR	15*	00:	80:	14*	04	09	.64**	.26**						
10. Internalizing PR	04	90.	.17**	16*	07	23**	.19**	.56**	.33**	-				
11. Mindful Parenting YR	90-	04	.13**	02	00:	.16*	32**	-31**	32**	27**	1			
12. Mindful Parenting PR	03	01	07	04	00:-	.10	18**	-33**	11.	-15*	.28**	-		
13. Parenting YR	01	07	05	02	.04	.10	29**	20**	23**	-13*	.62**	.19**	1	
14. Parenting PR	12	08	03	50.	10	.22**	-27**	45**	60:-	22**	.31**	.72**	.21**	1
M	.48	12.14	1.80	76,503	8.44	6.74	6.41	8.91	6.16	8.37	2.65	2.50	1.77	1.92
as	.50	89:	.40	45,456	11.59	1.19	6.62	6.63	5.89	90.9	0/.	.43	99:	.45
* = n < 05 ** = n < 01														

parent-reported outcomes; 2) youth-reported fathers' mindfulness in parenting predicted youth-reported outcomes; 3) father-reported mindfulness in parenting predicted parent-reported outcomes, and; 4) father-reported mindfulness in parenting predicted youth outcomes. In each regression equation, step 1 included fathers' general parenting and control variables of sex, age, race, and income and step 2 included fathers' mindfulness, either from the youth perspective or father perspective.

Do Youth Reports of Fathers' Mindful Parenting Predict Parent-reported Youth Outcomes?

Results from the hierarchical regression model utilizing youth reports of parenting and fathers' mindful parenting, and parent reports of behavior and grades are presented in Table 2. When added in step 2 of the analysis, controlling for sex, age, race, income, and fathers' general parenting, mindful parenting in fathers was a largely significant predictor of externalizing and internalizing behaviors but not grades. Fathers' mindful parenting showed a significant negative association with externalizing and internalizing behaviors indicating that when youth reported more mindful parenting by their father, their parents tended to report lower levels of externalizing and internalizing behaviors ($\beta = -.29$; $\beta = -.31$, respectively). These associations remained significant after applying the Benjamini-Hochberg adjustment (Benjamini & Hochberg, 1995).

For each of the three outcomes of interest, the variables included in step 1 accounted for a significant amount of variance, with R² ranging from .10 to .12. Changes in R² after adding mindful parenting in step 2 showed small to large increments (.01 - .06) and were statistically significant for externalizing and internalizing behavior. Demographic variables showed an uneven pattern of prediction across outcomes. Income showed a significant negative association with internalizing and externalizing behavior and a positive association with grades in step 1, and

these associations were retained when fathers' mindful parenting was added in step 2. Fathers' general parenting was a significant negative predictor in step 1 for externalizing behavior, but did not remain as a significant predictor in step 2. Age was significantly negatively associated with grades, sex was significantly positively associated with externalizing behavior, and race was significantly positively associated with externalizing behavior in both steps 1 and 2.

Table 2
Hierarchical Regression Analyses of Youth-Reported Father's Mindful Parenting Predicting Parent-Reports of Youth Internalizing, Externalizing and Grades

	Parent-R	eported Ex	ternalizing E	Behavior		Parent-R	eported Inte	rnalizing Be	havior		Parent-R	deported Gra	ades		
	Step 1			Step 2		Step 1			Step 2		Step 1			Step 2	
Variable	ΔR ²	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR ²	B (SE B)	β	B (SE B)	β
Step 1	.12***					.10***					.12***				
Sex (1 = male, 0 = female)		2.13 (.82)	.16**	1.92 (.80)	.15*		41 (.76)	03	63 (.74)	05		14 (.15)	06	12 (.15)	05
Age		.41 (.60)	.04	.43 (.59)	.04		.66 (.56)	.07	.68 (.54)	.08		25 (.11)	14*	25 (.11)	14*
Race		2.31 (1.06)	.14*	2.08 (1.03)	.13*		3.48 (.98)	.23***	3.25 (.96)	.22**		.03 (.20)	01	.00 (.19)	00
Income		.00 (.00)	24***	.00 (.00)	24***		.00 (.00)	24***	.00 (.00)	24***		.00 (.00)	.31***	.00 (.00)	.31**
Parenting		-1.9 (.61)	19**	17 (.75)	02		-1.06 (.57)	12	.66 (.70)	.07		.18 (.11)	.10	.01 (.14)	.01
Step 2 - Mindful Parenting	.05***			-2.71 (.71)	29***	.06***			-2.6 (.66)	31***	.01			.26 (.13)	.15
Total R ²			.17***					.15***					.14***	:	
Adjusted R ²			.15					.13					.12		

[†] p < .10, * p < .05, ** p < .01, *** p < .001

Do Youth Reports of Fathers' Mindful Parenting Predict Youth-reported Youth Outcomes?

Results from analyses including youth reports of fathers' general parenting and fathers' mindful parenting, and youth reports of behavior and grades are presented in Table 3. When added in step 2 of each regression analysis, youth report of fathers' mindful parenting was a moderate-largely significant predictor for externalizing and internalizing behaviors but not grades. Fathers' mindful parenting showed a significant negative association with externalizing and internalizing behaviors indicating that when youth reported more mindful parenting by their father, they also reported lower levels of externalizing and internalizing behaviors ($\beta = -.22$; $\beta = -.22$;

.30, respectively). These associations remained significant after applying the Benjamini-Hochberg adjustment (Benjamini & Hochberg, 1995).

The control variables included in step 1 accounted for a significant amount of variance for externalizing and internalizing behaviors, but not for grades, with R² of .13, .11 and .01 for externalizing, internalizing and grades, respectively. Changes in R² after adding mindful parenting in step 2 showed small to large increments (.00 - .05) and were statistically significant for externalizing and internalizing behavior. Demographic variables showed an uneven pattern of prediction across outcomes. Income showed a significant negative association with internalizing and externalizing behavior in step 1, and these associations were retained when fathers' mindful parenting was added in step 2. Fathers' general parenting, a significant negative predictor in step 1 for externalizing and internalizing behavior did not retain as a significant predictor in step 2. Sex was shown to be significantly negatively associated with internalizing behavior in step 1, and retained this association in step 2. Age and race were not significant predictors for any of the three outcomes.

Table 5
Hierarchical Regression Analyses of Youth-Reported Father's Mindful Parenting Predicting Youth-Reports of Youth Internalizing, Externalizing and Grades

	Youth-R	eported Ext	ternalizing E	Behavior		Youth-R	eported Inter	nalizing Bel	havior		Youth-F	Reported Gr	ades		
	Step 1			Step 2		Step 1			Step 2		Step 1			Step 2	
Variable	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β
Step 1	.13***					.11***					.01				
Sex (1 = male, 0 = female)		.75 (.81)	.06	.58 (.80)	.04		-1.74 (.73)	15*	-1.94 (.71)	17**		81 (1.51)	04	86 (1.52)	04
Age		.76 (.60)	.08	.78 (.59)	.08		.15 (.54)	.02	.16 (.52)	.02		.23 (1.12)	.01	.24 (1.12)	.01
Race		.60 (1.06)	.04	.42 (1.04)	.03		1.60 (.95)	.11	1.39 (.92)	.10		-2.50 (1.97)	09	-2.55 (1.97)	09
Income		.00 (.00)	20**	.00 (.00)	20**		.00 (.00)	19**	.00 (.00)	19**		.00	.08	.00	.08
Parenting		-2.82 (.61)	28***	-1.44 (.76)	14		-2.04 (.54)	23***	43 (.67)	05		.60 (1.13)	.03	1.05 (1.44)	.06
Step 2 - Mindful Parenting	.03**			-2.17 (.72)	22**	.05***			-2.47 (.64)	30***	.00			70 (1.36)	04
Total R ²			.16***	:				.17***					.01		
Adjusted R ²			.14					.14					01		

[†] p < .10, * p < .05, ** p < .01, *** p < .001

Do Father-reports of Mindful Parenting Predict Father-reported Youth Outcomes?

Results from analyses utilizing fathers reports of parenting and mindful parenting, and parent reports of behavior and grades are presented in Table 4. When added in step 2 of the analysis to test the study hypothesis, fathers' mindful parenting was not a significant predictor for any of the three outcomes.

In contrast, for each of the three outcomes of interest, the control variables included in step 1 accounted for a significant amount of variance, with R² of .26, .13 and .15 for externalizing, internalizing and grades respectively. Changes in R² after adding mindful parenting in step 2 were not statistically significant. Demographic variables showed an uneven pattern of prediction across outcomes. Fathers' general parenting and income both showed a significant negative association with internalizing and externalizing behavior and a positive association with grades in step 1, and these associations were retained when fathers' mindful parenting was added in step 2. Age was significantly negatively associated with grades, sex was significantly positively associated with externalizing behavior, and race was significantly positively associated with externalizing and internalizing behavior in both steps 1 and 2.

Table 4

Hierarchical Regression Analyses of Father-Reported Father's Mindful Parenting Predicting Parent-Reports of Youth Internalizing, Externalizing and

	Parent-R	eported Ex	ternalizing E	Behavior		Parent-R	eported Inte	malizing Be	havior		Parent-R	eported Gra	ıdes		
	Step 1			Step 2		Step 1			Step 2		Step 1			Step 2	
Variable	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β
Step 1	.26***					.13***					.15***				
Sex (1 = male, 0 = female)		1.53 (.76)	.12*	1.54 (.76)	.12*		69 (.75)	06	70 (.75)	06		09 (.15)	04	08 (.15)	04
Age		.25 (.55)	.03	.26 (.56)	.03		.60 (.55)	.07	.58 (.55)	.07		24 (.11)	13*	23 (.11)	13*
Race		2.04 (.98)	.12*	2.0 (.99)	.12*		3.37 (1.0)	.23**	3.42 (.98)	.23**		01 (.19)	00	02 (.19)	01
Income		.00 (.00)	21***	.00 (.00)	21**		.00 (.00)	23***	.00 (.00)	23**		.00 (.00)	.30***	.00 (.00)	.30***
Parenting		-6.17 (.83)	42***	-5.88 (1.22)	40***		-2.80 (.82)	21**	-3.17 (1.21)	24**		.49 (.16)	.19**	.59 (.23)	.22*
Step 2 - Mindful Parenting	.00			41 (1.30)	03	.00			.54 (1.23)	.04	.00			13 (.24)	05
Total R ²			.26***					.13***					.15***		
Adjusted R ²			.24					.11					.13		

[†] p < .10, * p < .05, ** p < .01, *** p < .001

Do Father-reports of Mindful Parenting Predict Youth-reported Youth Outcomes?

Results from analyses including father reports of parenting and mindful parenting, and youth reports of behavior and grades are presented in Table 5. When added in step 2 of the analysis, to test the study's hypothesis, fathers' mindful parenting was not a significant predictor for any of the three outcomes.

The control variables included in step 1, however, accounted for a significant amount of variance for internalizing and externalizing behaviors but not for grades, with an R² of .11, .07 and .01 for externalizing, internalizing and grades respectively. Changes in R² after adding mindful parenting in step 2 were not statistically significant. Demographic variables showed an uneven pattern of prediction across outcomes. Income showed a significant negative association with internalizing and externalizing behavior in step 1, and these associations were retained when mindful parenting was added in step 2. Fathers' general parenting was significantly negatively associated with externalizing behavior and sex was significantly negatively associated with internalizing behavior in both steps 1 and 2.

Table 5
Hierarchical Regression Analyses of Father-Reported Father's Mindful Parenting Predicting Youth-Reports of Youth Internalizing, Externalizing and Grades

	Youth-R	eported Ext	ernalizing E	Behavior		Youth-R	eported Inter	nalizing Be	havior		Youth-F	Reported G	rades		
	Step 1			Step 2		Step 1			Step 2		Step 1			Step 2	
Variable	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β
Step 1	.11***					.07**					.01				
Sex (1 = male, 0 = female)		.43 (.83)	.03	.42 (.83)	.03		-1.84 (.75)	16*	-1.80 (.75)	15*		73 (1.52)	03	66 (1.53)	03
Age		.79 (.61)	.08	.78 (.61)	.08		.23 (.55)	.03	.26 (.55)	.03		.23 (1.12)	.01	.29 (1.12)	.02
Race		.58 (1.07)	.04	.59 (1.08)	.04		1.68 (.97)	.12	1.58 (.98)	.11		-2.50 (1.97)	09	-2.67 (1.99)	09
Income		.00 (.00)	18**	.00 (.00)	18**		.00 (.00)	19**	.00 (.00)	19**		.00 (.00)	.07	.00 (.00)	.08
Parenting		-3.64 (.91)	25***	-3.72 (1.33)	25**		-1.3 (.83)	10	48 (1.21)	04		.85 (1.67)	.03	2.28 (2.45)	.09
Step 2 - Mindful Parenting	.00			.11 (1.39)	.01	.00			-1.11 (1.26)	08	.00			-2.05 (2.55)	08
Total R ²			.11***	ı				.07**					.02		
Adjusted R ²			.08					.05					01		

[†] p < .10, * p < .05, ** p < .01, *** p < .001

Additional Analyses

Do Youth Reports of Fathers' Mindful Parenting Predict Beyond Father Report of General Parenting?

Additional analyses, conducted to test whether youth's report of fathers' mindful parenting is significant above and beyond fathers' report of general parenting, are presented in Table 6. In the previous analyses, reporter was the same for fathers' mindful parenting and fathers' general parenting and this additional analysis tested for significant effects across reporter. Youth report of father's mindful parenting, when added in step 2 of the analysis, after controlling for sex, age, race, income, and fathers' general parenting, was a moderately significant predictor for each of the three outcomes, with grades being marginally significant. Fathers' mindful parenting showed a significant negative association with externalizing and internalizing behaviors indicating that when youth reported more mindful parenting by their father, their parents reported lower levels of externalizing and internalizing behaviors ($\beta = -.19$; $\beta = -.22$, respectively). Fathers' mindful parenting showed a weak positive association with grades such that for youth who reported more mindful parenting, their parents reported better grades ($\beta = .11$).

For each of the 3 outcomes of interest, the control variables included in step 1 accounted for a significant amount of variance with R² of .26 for externalizing behavior, .13 for internalizing behavior and .15 for grades. Changes in R² after adding mindful parenting in step 2 showed small to moderate increments (.01 - .04) and were statistically significant for externalizing and internalizing behavior, and marginally significant for grades. Fathers' general parenting and income both showed a significant negative association with internalizing and externalizing behavior and a positive association with grades in step 1, and these associations

were retained when fathers' mindful parenting was added in step 2. Age was significantly negatively associated with grades, sex was significantly positively associated with externalizing (marginal in step 2), and race was significantly positively associated with externalizing (marginal in step 2) and internalizing behavior in both steps 1 and 2.

Table 6
Hierarchical Regression Analyses of Father-Reported Parenting and Youth-Reported Father's Mindful Parenting Predicting
Parent-Reports of Youth Internalizing, Externalizing and Grades

	Parent-Re	ported Exte	rnalizing Be	havior		Parent-R	deported Int	ernalizing B	ehavior		Parent-R	eported Gr	ades		
	Step 1			Step 2		Step 1			Step 2		Step 1			Step 2	
Variable	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β	ΔR^2	B (SE B)	β	B (SE B)	β
Step 1	.26***					.13***					.15***				
Sex (1 = male, 0 = female)		1.53 (.76)	.12*	1.45 (.74)	$.11^{\dagger}$		69 (.75)	06	77 (.73)	06		09 (.15)	04	08 (.15)	03
Age		.25 (.55)	.03	.22 (.54)	.02		.60 (.55)	.07	.57 (.54)	.06		24 (.11)	13*	23 (.11)	13*
Race		2.04 (.98)	.12*	1.85 (1.0)	.11†		3.37 (1.0)	.23**	3.17 (.95)	.21**		01 (.19)	00	.01 (.19)	.01
Income		.00 (.00)	21***	.00 (.00)	22***		.00 (.00)	23***	.00 (.00)	23***		.00 (.00)	.30***	.00 (.00)	.30**
Parenting		-6.17 (.83)	42***	-5.33 (.85)	36***		-2.79 (.82)	21**	-1.91 (.84)	14*		.49 (.16)	.19**	.41 (.17)	.16*
Step 2 - Mindful Parenting	.03**			-1.78 (.54)	19**	.04**			-1.88 (.54)	22**	.01 [†]			.18 (.11)	.11 [†]
Total R ²			.29***					.17***	:				.16**	**	
Adjusted R ²			.27					.15					.14		

[†] p < .10, * p < .05, ** p < .01, *** p < .001

DISCUSSION

In this study, I examined the association between fathers' mindful parenting and adolescent internalizing behaviors, externalizing behaviors, and academic grades. I hypothesized that fathers' mindfulness in parenting would be negatively associated with adolescent internalizing and externalizing behavior and positively associated with academic grades after controlling for fathers' general parenting (consistency in discipline, harsh discipline, monitoring, positive affect, positive guidance and support, and inductive reasoning) and background demographic characteristics. I conducted four separate sets of regression analyses using parent and youth reports of the main constructs because of the relative lack of correspondence between the two (Korelitz & Garber, 2016). The results from these analyses provide a mixed pattern of support for my global hypothesis, with support being contingent on whether variables were youth- or parent-reported. Specifically, mindful parenting in fathers was associated with youth outcomes above and beyond fathers' general parenting and demographics, but only for youth report of fathers' mindful parenting. In addition, youth report of fathers' mindful parenting predicted both youth report of outcomes and parent report of outcomes. Fathers' mindful parenting showed significant associations with externalizing and internalizing behavior but not for grades.

When utilizing youth reports, mindful parenting in fathers was shown to be negatively associated with youth internalizing and externalizing behaviors. This finding indicates that when youth reported more mindful parenting by their father, they were shown to have lower levels of externalizing and internalizing behaviors. This outcome is consistent with past literature in which researchers found mindful parenting to be negatively associated with adolescent

behavioral problems (Turpyn & Chaplin, 2015). Mindful parenting did not show a significant association with grades. This may be due to the accuracy of the self-reports or the specific characteristics of mindful parenting, such as non-reactivity and non-judgement, that may have a greater influence on other aspects of development such as behavior.

The findings on behavior are important, because the results were significant despite data being controlled for demographics and fathers' general parenting. The general parenting behaviors that were controlled for in this study have been shown in past research to be associated with lower rates of problem behaviors (Cabrera et al., 2014; Carlson, 2006; Pougnet et al., 2011; Williams & Kelly, 2005), yet the findings of this study indicate that mindful parenting is associated with externalizing and internalizing behavior above and beyond these other positive parenting practices. Although fathers' mindful parenting had a fairly strong association with fathers' general parenting, the finding that it also predicted after controlling for fathers' general parenting indicates that mindfulness in parenting contains distinct characteristics from "good parenting" (Duncan et al., 2009). One possible interpretation for this finding is that practicing mindful parenting influences a parent's way of thinking and focuses more on emotions rather than focusing solely on positive behavioral change (Singh et al., 2006). Additional studies could explore distinct aspects of mindful parenting, such as compassion, or attention, to examine the mechanisms of the association between mindful parenting and youth behaviors.

Another significant finding was that youth report of fathers' mindful parenting predicted both youth and parent report of outcomes. This cross-reporter finding indicates that the associations are not simply due to a reporter bias. When youth reported on the mindful parenting of their fathers, significant associations were seen between fathers' mindful parenting and youth outcomes, above and beyond fathers' general parenting, regardless of whether parent or youth

reported on the outcomes. This indicates that when youth view their fathers as displaying mindful parenting, they have fewer behavioral issues; from both the parent and youth perspective.

It is important to note that the prediction of youth outcomes only occurred when youth reported on mindful parenting of their fathers, and not when fathers reported on themselves. These discrepancies may be due to differences in the way that youth view their parents versus how parents view themselves. The inconsistency in results between youth and parent reports is supported by previous research that has found youth and parent reports of parenting to differ, attributed to differing perceptions of the parenting behaviors (Korelitz & Garber, 2016). Prior research also indicates that reports remain equally inconsistent when reporting on both positive and negative parenting behaviors (Korelitz & Garber, 2016), corresponding with the current study where youth and parent reports of mindfulness were only moderated correlated. It may be argued that parent perceptions of their parenting may be subject to self-report bias (Morsbach & Prinz, 2006) which is not present in youth reports. These results indicate that future studies should further evaluate discrepancies in parent and youth reports and may find value in looking at different aspects of parenting separately to determine which parenting characteristics may be subject to these biases. For example, less mindful fathers may be less aware of how to report on themselves and more susceptible to self-bias.

A critical emphasis of this study is the focus on fathers. Current parenting literature emphasizes mothers, and although research on fathers is growing, there are still significant areas that need to be explored (Coley et al., 2011; Kim & Hill, 2015; Lewis & Lamb, 2003). The research that has been conducted on fathers, including this study, has highlighted the impact that fathers have on child development and behavioral outcomes (Cabrera et al., 2014; Carlson, 2006;

Coley et al., 2011; Karbach et al., 2013; Pougnet et al., 2011; Williams & Kelly, 2005). Mindful parenting is a new finding to this growing area of research, and supports the trend to emphasize the positive influence of fathers who are fully and emotionally available to their youth (Goleman, Declaire, & Gottman, 2011). Fathers who are more emotionally connected and engaged may provide a protective mechanism beyond the behavioral aspects of parenting, such as monitoring, that allows for youth to feel more comfortable opening up and being vulnerable with their fathers.

Limitations and Future Directions

Limitations

The current study provided valuable insights into the associations between fathers' mindful parenting and youth outcomes. However, there are areas that still need to be further explored. First, these analyses only utilized reports from fathers in a two-parent (father-mother) home and did not include data on single fathers, divorced fathers, or homosexual fathers, which may limit generalizability. Second, self-reported and parent-reported grades showed low correspondence raising questions of accuracy. As a result, it would have been valuable to obtain academic records from the schools as a means to ensure accuracy. Also, additional reports from other sources such as teachers or siblings would have provided supplementary insight into youth behaviors and parenting styles as well as help validate results reported by parent and youth. The current study utilized cross-sectional data, so true "prediction" is not possible. Longitudinal data would allow analyses to examine if fathers' mindfulness in parenting predicts to youth behavior over time. Lastly, this study examined only the direct effects of fathers' mindfulness in parenting, but potential indirect effects of assisting youth with developing personal self-regulation skills is a viable pathway between parenting and youth outcomes that could be tested.

Future Directions

Although the current study did not find a strong association between fathers' mindful parenting and grades, there was a discrepancy between parent and youth reports that was not validated. Future studies should look at differences in parent and youth reports of grades to further explain the variances and to help determine which reports are most accurate; comparing reports to school records could assist in such determinations. In addition to reports of grades, future studies should also look at differing reports of parenting. Although current research shows that reports between youth and parenting differ (Korelitz & Garber, 2016), further research should explore alternative ways of assessing parenting style, including observational methods. Future studies might consider a more active recruitment of fathers to produce a more representative study of fathers and avoid a sample limited to fathers in a heterosexual married relationship.

Conclusion

Despite these limitations, the findings from the current study adds to the growing literature on mindful parenting in important ways. First, it emphasizes the importance of mindful parenting for fathers and highlights the need for ongoing father focused research. Second, it illustrates the notion that mindful parenting is empirically distinct from general positive parenting and is distinctly associated with youth internalizing and externalizing behaviors and may serve as a protective process for the development of these behavior problems.

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