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PERCEIVED PARENTING STYLE, MINDFULNESS, EXPERIENTIAL AVOIDANCE, AND VALUES-BASED ACTION: CONNECTIONS AND RELATIONS

by

Christianne Lynn Mobley

A Dissertation

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Abstract

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Transitioning to college life frequently requires making unique adjustments as individuals face new psychological demands such as adapting to a variety of social situations, financial worries, and increasing academic stress. Research suggests that three core intra and interpersonal processes of mindfulness, experiential avoidance, and values-based action (components of Acceptance and Commitment Therapy) provide valuable indications of one's ability to make necessary adjustments in stressful situations. Also known to contribute to an individual's ability to make important adjustments is the perceived parenting style in which the individual was raised. The purpose of this study was to examine the relationships between perceived parenting style and mindfulness, experiential avoidance, and values-based action. Data from 109 undergraduate student participants were analyzed using three separate one-way ANOVAs. Results indicated that no statistically significant relationship existed between perceived parenting style and mindfulness or experiential avoidance. A significant relationship was found, however, between perceived parenting style and values-based action, and post hoc comparisons using Tukey procedures indicated that individuals who perceive their parents to be indulgent are more likely to live in value-congruent ways than are individuals who perceive their parents to be neglectful. The implications for how these results may impact and inform college students, researchers, mental health professionals, and parents are provided.

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Chapter 1

Introduction

College life poses many challenges, most of which are new and unique to students as they make the necessary adjustments to prepare themselves to succeed. In addition to new academic challenges (Vaez & Laflamme, 2008), college students must also face the demands of new social situations (Swenson, Nordstrom, & Hiester, 2008), financial worries (Monk, 2004), and psychological and adjustment issues that arise (Cooke, Bewick, Barkham, Bradley, & Audin, 2006), as well as any pre-existing psychological difficulties that they bring with them to college (DeBerard, Spielmans, & Julka, 2004). Students adapt and adjust to these changes in a variety of ways, some of which are healthier than others. Among the more healthy paths to positive college adjustment are increased *mindfulness* (i.e., attention paid in the moment without judging one's own thoughts), decreased *experiential avoidance* (i.e., avoiding unpleasant thoughts or feelings), and increased *values-based action* (i.e., acting in a way that is consistent with one's deeply held values) – which together make up the component processes of Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999).

Many factors contribute to one's ability to adjust to the college environment, including interactions with peers (Swenson et al., 2008), academic history (Tinto, 1975), and family influences (Wintre & Yaffe, 2000). One such factor that has yet to be studied as it relates to mindfulness, experiential avoidance, and values-based action is one's relationship with his or her parents, and more specifically, the parenting style in which one was raised. The way in which an individual was parented can be a major determining factor in the likelihood that the individual will experience success, both in childhood and

adulthood (Yazedjian, Purswell, Sevin, & Toews, 2007). Although parenting behaviors can be conceptualized in many ways, such as conflict and communication style (Young et al., 2008), parental involvement (Cooper et al., 2000), or attachment style (Hiester, Nordstrom, & Swenson, 2009), parenting style is particularly relevant to college student adjustment because perceived parenting styles during childhood and adolescence have been shown to have a significant impact on many personal characteristics and behaviors including an individual's ability to adapt to stressful situations (Baumrind, 1978; Maccoby & Martin, 1983).

Whereas parenting style, mindfulness, experiential avoidance, and values-based action each contribute to one's adaptability under stressful circumstances; research has yet to determine whether there is a significant relationship between parenting style and the processes of mindfulness, experiential avoidance, and values-based action. Therefore, the current research will seek to determine whether a significant relationship exists between perceived parenting style and the ACT components of mindfulness, experiential avoidance, and values-based action within the college student population. This research will likely prove to be instrumental for understanding the effect that parenting style has on the processes of mindfulness, experiential avoidance, and values-based action and inform the development of interventions that may work to enhance college student adjustment through ACT and/or its individual components.

Acceptance and Commitment Therapy

Steven Hayes and colleagues (1999) conceptualized ACT as a therapeutic approach with three core elements (mindfulness, experiential avoidance, and values-based action) that interact with one another, and in doing so contribute to psychological

adjustment, or conversely, maladjustment. These three processes similarly contribute to an individual's ability to adapt to stressful situations, making them of particular interest to an investigation of college student adjustment. Although ACT as a therapeutic process has received empirical support for its effectiveness with a variety of populations including college students (Forman, Herbert, Moitra, Yeomans, & Geller, 2007), as well as clients with anxiety disorders (Kashdan, Barrios, Forsyth, & Steger, 2006), depression (Kuyken et al., 2008), and chronic pain (McCracken & Yang, 2006), it remains unknown whether certain background factors may impact the success of ACT for any given individual.

According to the theory underlying ACT, the primary reason individuals have difficulty adjusting to new situations is the lack of *psychological flexibility*. Forman and Herbert (2009) described psychological flexibility as the ability to choose a course of action from a variety of options in order to behave more consistently with personally held values, rather than constraining one's behavior by the avoidance of distressing thoughts, feelings, memories, etc. Therefore, by gaining an understanding of how the three primary processes of ACT impact psychological flexibility, individuals may become better able to make difficult adjustments. Mindfulness involves the active embracing of unpleasant (or pleasant) internal or external stimuli without attempting to change their frequency or severity (Hayes et al., 1999). When one is not willing to embrace the discomfort of such unpleasant circumstances, experiential avoidance occurs, which is described as an attempt to diminish suffering through the avoidance of unpleasant internal or external stimuli (Hayes et al., 2004). The goal of ACT is to engage in *values-based action,* or patterns of effective action that are consistent with an individual's chosen values, thus

increasing psychological flexibility (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). This is most likely to occur when individuals are mindful, taking stock of the urge to avoid unpleasant experiences, thereby choosing to accept the experience rather than avoid it (Bond, 2005).

Whether an individual engages in mindfulness or experiential avoidance is highly predictive of the ability to adjust to stressful situations, or conversely, to experience psychological distress when faced with necessary adaptation (Asberg, Bowers, Renk, & McKinney, 2008). Whereas the process of being mindful (or increasing mindfulness) is a necessary precursor to values-based action, experiential avoidance is construed as an ineffective or maladaptive method of coping with problems, and is detrimental to one's ability to act in accordance with important values (Bond, 2005). Although there is much evidence for the link between the three ACT processes and individual outcomes (e.g. Forman et al., 2007; Hayes et al., 2006), much remains to be learned regarding what predicts whether an individual will engage in mindfulness, experiential avoidance, or values-based action when faced with stressful or transitional situations.

Mindfulness

Mindfulness is described as a process through which an individual brings attention to moment-by-moment experience, allowing him or her to contact the present moment more completely as a conscious human being rather than avoiding unpleasant experiences (Bishop et al., 2004). Though mindfulness does not seem to be an inherent individual trait, it can be learned and practiced over time until it becomes second-nature. Baer (2003) described several processes through which mindfulness can be developed, such as meditation and attentional exercises. The purpose of mindfulness is not to

eliminate worry or stress, but rather to decrease the interference and distress associated with the stressful situation. Therefore, individuals must develop an acceptance of, or a willingness to tolerate, unpleasant internal experiences (Hayes, Orsillo, & Roemer, 2010). Although traditional definitions of mindfulness focus primarily on the attention to moment-by-moment experience (Kabat-Zinn, 2003), ACT emphasizes the active embracing of those internal private events without judgment or self-reproach (Hayes et al., 2006). It is this acceptance that enables individuals to endure uncomfortable internal private events, rather than choosing to avoid discomfort through experiential avoidance (Hayes et al., 2006), which will be discussed in more detail in the following sections.

Through mindfulness, it is believed that individuals will ultimately increase their awareness and will be able to respond more skillfully to mental processes that contribute to emotional distress and maladaptive behavior (Bishop et al., 2004). In the most abstract sense, ACT aims to help clients live rich and meaningful lives, which can only be accomplished by accepting the suffering that is an inevitable part of human existence (Wilson & Murrell, 2004). Mindfulness has been described as both a state and a trait characteristic, both of which lead to more positive emotional states (Brown & Ryan, 2003) while also improving the lives of individuals in many ways – especially their mental health, personal success, and academic success.

People who endeavor to be mindful in their everyday activities tend to report fewer psychological and somatic complaints in comparison to individuals who do not endeavor to be mindful (Brown, Ryan, & Creswell, 2007). Generally speaking, people who engage in mindfulness on a regular basis tend to be happier than their less mindful counterparts (Kabat-Zinn, 2003). Individuals who actively engage in mindfulness also

tend to have a solid understanding of their own abilities and disabilities, allowing them to set realistic goals and self-monitor along the way to goal attainment (Brown et al., 2007). As a result, such individuals are less likely to experience frustration as they come upon obstacles to goal attainment (Brown et al., 2007).

In addition to the ability of mindfulness to promote personal success, mindfulness also aids students in their striving for academic success and adjustment to the college environment. Whereas students who do not engage in mindfulness are likely to get caught up in unnecessary thought patterns, mindful students typically work through the distractions, getting their work done in a more efficient manner (Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). Furthermore, Astin (1997) found that college students who participate in a formal practice of mindfulness meditation are more able to respond to stressful life events, such as transitioning to the college environment. Astin reported that college students who engaged in mindfulness meditation experienced an overall greater sense of control, resulting in positive changes in their ratings of the college environment. These findings were echoed by Baer and colleagues (2008), who noted that in a college student population, those with higher levels of mindfulness were likely to experience fewer psychological symptoms and greater psychological well-being.

The benefits of being mindful are apparent. Individuals who engage in mindfulness are more likely than the average person to experience better mental health, as well as personal and academic success. Regarding college students specifically, mindfulness contributes substantially to positive adjustment to the college environment by decreasing psychological symptomatology (Astin, 1997; Baer et al., 2008). In addition, recent research suggests that individuals who endeavor to be mindful are less

likely than the average person to engage in maladaptive ways of coping, such as experiential avoidance (Hayes et al., 2006).

Experiential Avoidance

According to the theory underlying ACT, the process of experiential avoidance is the polar opposite of the process of mindfulness (Hayes et al., 2006). Chawla and Ostafin (2007) described experiential avoidance as consisting of two interconnected mechanisms. First, there is an unwillingness to remain in contact with an uncomfortable private experience, such as bodily sensations, emotions, thoughts, or memories. This is followed by taking action to minimize the discomfort associated with such experiences or the events that elicit them. Whereas mindfulness involves the acceptance of internal or external discomfort, experiential avoidance occurs as the result of a lack of acceptance (Hayes et al, 2004). Chawla and Ostafin (2007) reported that some classic examples of experiential avoidance behaviors include excessive drinking or drug use and risky sexual behaviors, as well as willful distraction. These are considered to be maladaptive behaviors and are thought to be critical to the development and maintenance of psychopathology (Hayes et al., 2006). The experiences of childhood trauma, as well as the tendency to experience intense negative affect are thought to be strong predictors of experiential avoidance (Kingston, Clarke, & Remington, 2010).

Experiential avoidance has been shown to be a stronger consistent predictor of emotional distress than other emotion regulation strategies such as behavior or emotion suppression and cognitive reappraisal (Kashdan et al., 2006). The psychological benefits for people who do not typically engage in experiential avoidance are clear. They tend to suffer less frequently from anxiety (Berman, Wheaton, McGrath, & Abramowitz, 2010),

depression (Hayes et al., 2004), and substance and behavioral addictions (Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). Further, these individuals exhibit more positive coping behaviors in many contexts (Carver, Scheier, & Weintraub, 1989). More specifically, they are psychologically equipped to endure stressful and uncomfortable circumstances in their environment because they tend to face problems head-on rather than avoiding the problematic situation (Hayes et al., 2006).

The college student population is at a significantly greater risk for psychological distress as compared to populations of other ages and life stages (Adlaf, Gliksman, Demers, & Newton-Taylor, 2001). Asberg and colleagues (2008) suggested that this increase in psychological distress is the likely result of poor coping behaviors and the avoidance of unpleasant experiences, both internally and externally. Increased exposure to alcohol (Leigh & Neighbors, 2009) and drugs (Carver et al., 1989), freedom from restrictions they may have experienced in their childhood home (Rice, FitzGerald, Whaley, & Gibbs, 1995), and the need for independent decision-making (Kenyon & Koerner, 2009) make experiential avoidance an easy alternative to facing the new responsibilities that are inherent in the college environment. College students who engage in experiential avoidance are more likely to miss classes (Cooke et al., 2006), are less likely to spend adequate amounts of time doing homework and studying for tests, leading to lower grades, and are at an increased risk of dropping out or being asked to leave the school (DeBerard et al., 2004). Moreover, the amount to which college students engage in experiential avoidance is likely to have a negative impact on their ability to adjust to the college atmosphere (Asberg et al., 2008). For these reasons, students who do not engage in experiential avoidance are more likely to succeed in school, easily adjusting to

their environment and academic pressures (Asberg et al., 2008), earning higher grades (DeBerard et al., 2004), developing healthier lifestyles (Burris, Brechting, Salsman, & Carlson, 2009), experiencing lower levels of psychological distress (Lent, Taveira, Sheu, & Singley, 2009), and ultimately finishing their college degrees (Pritchard & Wilson, 2003). Empirical evidence now supports the thought that experiential avoidance is, indeed, a barrier to deriving pleasure and meaning from life, as well as a barrier to behaving in more valued directions in real-world contexts (Kashdan et al., 2006).

Values-Based Action

In order to be accepting of, and move through, stressors (i.e., to be mindful and not engage in experiential avoidance), there must be a reason for doing so, which is determined by one's deeply held values (Bond, 2005). When individuals engage in experiential avoidance, it is most often a result of vague and poorly articulated values. Therefore, according to Bond, a lack of mindfulness combined with experiential avoidance and a lack of clearly defined values work together to create an unmanageable stress response. As such, careful awareness and acceptance of uncomfortable private experiences allows for the removal of pathology, freeing an individual to more actively pursue valued life goals (Wilson & Murrell, 2004). The ultimate objective of ACT is a regular adherence to actions or behaviors that are consistent with one's deeply held values (Hayes et al., 2006). The clarification of one's values is essential to the task of increasing action towards those goals and values, which is the final step in the process of achieving psychological flexibility (Forman & Herbert, 2009). It is clear that a high level of mindfulness and a low level of experiential avoidance lead to increased values-based action (Hayes et al., 1996).

People who are high in values-based action typically experience greater life satisfaction (Park, Peterson, & Seligman, 2004), self-esteem and self-confidence (Ruiz, 2010), and less depression (McCracken & Yang, 2006). Individuals who tend to act in accordance with their values have a tendency to set higher personal goals and are more likely to meet those goals than are individuals who are low in values-based action or who do not have clearly defined values (Pratt, Hunsberger, Pancer, & Alisat, 2003). This occurs because such individuals make a conscious decision to choose goal-oriented behaviors as opposed to experiential avoidance (Pratt et al., 2003). People who exhibit high levels of values-based action also tend to be more fiscally responsible than the average individual (Ruiz, 2010).

Within the college student population, Taylor (2008) noted that developing values and being consistent about maintaining those values promotes personal growth and autonomy. Similarly, Chickering and Reisser (1993) found that congruency between one's values and behavior is a key developmental task for promoting personal growth and autonomy for college students. They noted that the clarification of one's values is a vital component in the development of integrity among college students (Chickering & Reisser, 1993). Taylor (2008) suggested that as autonomy and integrity develop, college students are likely to experience increasing adjustment to the college atmosphere. Further, Lounsbury and colleagues (2009) reported that college students who show great character strength and act in accordance with their values are likely to excel academically and are more satisfied with their accomplishments.

Generally speaking, individuals are thought to achieve psychological flexibility, which is considered to be optimal functioning when they are able to choose their actions

from a range of options, behaving more consistently with personally held values, rather than choosing a path of experiential avoidance (Forman & Herbert, 2009). Little is currently understood about predictors of mindfulness, experiential avoidance, and values-based action; however, Fetterman and colleagues (2010) suggested that high levels of neuroticism and emotion dysregulation may inhibit the development of mindfulness but increase experiential avoidance. Similarly, the findings of McLean, Strongman, and Neha (2007) indicated that individuals are more likely to engage in experiential avoidance if they externalize problems, placing blame on factors out of their control. Finally, individuals seem to be more likely to behave in value-congruent ways if a given situation requires abstract (vs. concrete) thinking (Torelli & Kaikati, 2009). Although studies have pointed to a number of predictors of mindfulness, experiential avoidance, and values-based action, they seem to provide only a snapshot of the factors that may contribute to the development of these processes.

Despite growing interest in the study of predictors of the three core ACT processes, as well as positive adjustment outcomes related to each process, relatively little of the existing research focuses on how these core processes impact college students' ability to adjust to stressful situations. In addition to outcomes associated with individuals' propensity to engage in mindfulness, experiential avoidance, and values-based action, the perceived parenting style in which one was raised is also associated with individual outcomes, and is therefore likely to influence mindfulness, experiential avoidance, and values-based action.

Parenting

Although many factors affect an individual's transition into the college environment (e.g. peer influences, academic motivation, etc.), Schwartz and colleagues (2009) suggested that the greatest influence may come from the relationship with one's parents during childhood and adolescence. Emerging adults' perceptions of their parents' past involvement are likely to influence their current behaviors, feelings, and thoughts, and those perceptions generally refer to parenting practices and behaviors collectively (Schwartz et al., 2009). Although research suggests that parental influences have a strong impact on a student's adjustment to college, as do mindfulness, experiential avoidance, and values-based action, a topic that has been relatively overlooked is the relationship between the perceived parenting style in which an individual is raised and the three ACT processes. Therefore, the purpose of this study is to examine the relationship between one's perceived parenting style and mindfulness, experiential avoidance, and values-based action.

Parenting style. A vast amount of research has been devoted to the concept of parenting styles in the past 40 years. Baumrind (1978) conceptualized parenting style as an intersection of two dimensions: *parental demandingness* and *parental responsiveness*. Parental demandingness refers to the degree to which parents expect and demand mature, responsible behavior from their children, whereas parental responsiveness refers to the extent to which parents attend to the needs of their children in an accepting, supportive manner. Maccoby and Martin (1983) described the fourfold typology of parenting styles that is created by the interaction of parental demandingness and responsiveness. The four styles - authoritative, authoritarian, indulgent, and neglectful - have been studied as they

pertain to emotional and behavioral outcomes for children and adolescents, as well as for adults (e.g., Baumrind, 1991a; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Rothrauff, Cooney and An, 2009).

Authoritative (highly demanding/highly responsive). Baumrind (1978, 1991a) and Maccoby and Martin (1983) described authoritative parents as rational, considerate, consistent, and demanding in terms of academic performance and motivation to excel. Children of authoritative parents tend to be competent, mature, individuated, and they perceive their parents as warm, loving, supportive, and influential. They are cognitively motivated, achievement oriented, and socially responsible.

Authoritarian (highly demanding/minimally responsive). According to Baumrind (1978, 1991a) and Maccoby and Martin (1983), authoritarian parents are obedience- and status-oriented, and expect strict adherence to rules and orders. Parents of the authoritarian type favor punitive, absolute, and forceful disciplinary measures. Independence and autonomy are not encouraged in this type of household. These parents are more restrictive, less supportive, and are likely to have more difficulty sustaining satisfying interpersonal relationships both with their spouses and with their offspring.

Indulgent (minimally demanding/highly responsive). Indulgent parents are usually nontraditional and lenient, value individuality, and are hesitant to set limits. Baumrind (1978, 1991a) and Maccoby and Martin (1983) described these parents as supportive but lax, not taking an active role in guiding or shaping their children's behavior. Children of indulgent parents are not expected to be outstandingly competent. They tend to be relatively nonconforming and experience their parents as nonrestrictive.

Neglectful (minimally demanding/minimally responsive). These parents do not want to be encumbered by childrearing responsibilities and tend to take a "hands-off" approach to parenting (Baumrind, 1978, 1991a; Maccoby & Martin, 1983). Neglectful parents show little warmth or discipline, and spend little time or energy in interactions with their children. They are also more likely than other parents to engage in physical or verbal abuse of their children. This type of parenting behavior typically produces children who lack social responsibility and cognitive competence. They are also likely to reject their parents as role models (Baumrind, 1978, 1991a).

Overall, evidence shows that individuals' mental health is significantly impacted by the way in which they were parented. For instance, people who were raised in authoritative households are likely to exhibit high levels of optimism, self-regulation, autonomy (Baumrind, 1991a), resiliency (Lamborn et al., 1991), low depression (Milevsky, Schlechter, Netter, & Keehn, 2007), and typically have higher self-esteem than their peers who have parents resembling one of the other parenting styles. Individuals with authoritarian parents tend to have moderate self-esteem (Maccoby & Martin, 1983) and are moderately optimistic (Baumrind, 1991b), although they are the most likely to exhibit internalizing problem behaviors and drug use (Baumrind, 1991b), and are the least self-reliant (Lamborn et al., 1991). People who were raised in indulgent homes are likely to be socially competent (Lamborn et al., 1991), have high self-esteem (Darling, 1999), and are highly autonomous (Baumrind, 1991b), but are less self-regulated than most of their peers (Maccoby & Martin, 1983). Individuals who have neglectful parents typically show the worst outcomes in terms of mental health. They are the most likely group to report antisocial behavior problems and the highest rate of

somatic symptoms when compared with individuals whose parents are not neglectful (Lamborn et al., 1991), and they lack self-regulation (Baumrind, 1991a).

When faced with a difficult transition, such as adjusting to the college atmosphere, the way in which individuals are parented continues to play an important role. Considering the conundrum of how best to parent an adolescent who is in the midst of transitioning to adulthood, Baumrind (1991b) stated, “Parents are caught on the horns of a dilemma—adolescents, in order to become self-regulated, individuated, competent individuals, require both freedom to explore and experiment, and protection from experiences that are clearly dangerous” (p. 748). This thought seems to clearly articulate the fine line that exists between raising children who will successfully navigate the transition to college and raising children who will experience great difficulty in the transition. Given the necessity of being able to adjust in times of difficult transitions and the impact of mindfulness, experiential avoidance, and values-based action on an individual’s ability to make such adjustments, there is a need for more information regarding what elements in one’s life contribute to these three mechanisms, such as one’s perceived parenting style.

Perceived parenting style in relation to mindfulness, experiential avoidance, and values-based action. There is currently no empirical evidence that directly implies a connection between perceived parenting style and the three ACT processes; however, evidence from several studies point to potential connections that may be made. For example, it is thought that individuals who experience responsive, attentive, sensitive, and autonomy-supportive caregiving (consistent with an authoritative parenting style) are likely to exhibit higher levels of mindfulness (Ryan, Brown, & Creswell, 2007).

Similarly, authoritative and authoritarian parenting has been found to predict higher levels of self-awareness (Yee & Flanagan, 1985), which may contribute to an individual's tendency toward mindfulness (Fletcher, 2010).

In terms of individuals' propensity to engage in experiential avoidance, Rosenthal and colleagues (2006) noted that experiential avoidance is associated with perceived criticism in the family of origin, consistent with an authoritarian parenting style. Baumrind's (1978, 1991a) research further supported the theory that parenting styles may be linked to one's tendency toward experiential avoidance. She noted that individuals who perceive their parents' parenting style as neglectful are most likely to have experienced childhood trauma and/or abuse, which Kingston and colleagues (2010) mentioned is a predictor of experiential avoidance. Also, Aunola and colleagues (2000) reported that individuals from neglectful homes showed the most task-irrelevant behavior - which is conceptually similar to experiential avoidance – followed by individuals from authoritarian, indulgent, and authoritative homes, respectively. Consistent with those findings, Pereira and de Melo Lopes (2005) reported that parenting styles contributed to individuals' tendency toward hedonism – choosing pleasure over pain, even if this causes long-term consequences – which is also conceptually similar to experiential avoidance. They found that the tendency toward hedonism is greatest for individuals from neglectful homes, followed by those from authoritarian, indulgent, and authoritative homes, respectively.

Finally, values-based action may be conceptually similar to self-determination, described by Pereira and de Melo Lopes (2005) as independent thinking, choices, and actions. Their results showed that authoritative parenting results in slightly higher levels

of self-determination than authoritarian parenting, followed by indulgent and neglectful parenting styles.

Until now, research has not directly examined the relationship between the perceived style in which one was parented and the likelihood that an individual will exhibit mindfulness, experiential avoidance, and/or values-based action. There seems to be an intuitive connection, however, given the relationship between certain individual characteristics and parenting styles, and between certain individual characteristics and mindfulness, experiential avoidance, and values-based action. Therefore, the aim of this study is to examine whether there is a significant relationship between perceived parenting style and the three processes of mindfulness, experiential avoidance, and values-based action.

Any significant relationships that exist between perceived parenting style and mindfulness, experiential avoidance, and values-based action will inform future research and interventions for working with clients, and college students in particular, who struggle with adjustment issues. More specifically, the findings of this study may lead to the evolution of therapeutic techniques aimed at helping clients understand how the perceived parenting style in which they were raised contributes to the development of mindfulness, experiential avoidance, and values-based action, or the lack thereof. The findings may also point to ways in which clinicians may be able to anticipate difficulties with particular clients after assessing for perceived parenting style.

Research Questions and Hypotheses

The research questions and corresponding hypotheses that direct this study are as follows:

1. Is there a significant difference in levels of mindfulness between the four groups of perceived parenting styles?

Hypothesis 1: It is hypothesized that there will be significant differences in amounts of mindfulness between the four groups of perceived parenting styles.

2. Is there a significant difference in levels of experiential avoidance between the four groups of perceived parenting styles?

Hypothesis 2: It is hypothesized that there will be significant differences in amounts of experiential avoidance between the four groups of perceived parenting styles.

3. Is there a significant difference in levels of values-based action between the four groups of perceived parenting styles?

Hypothesis 3: It is hypothesized that there will be significant differences in amounts of values-based action between the four groups of perceived parenting styles.

For each research question, a separate ANOVA will be used to compare the means of the four parenting style groups with scores on one of the measures of the three outcome variables: mindfulness, experiential avoidance, and values-based action. Post-hoc analyses (Tukeys) will be used to determine where significant group differences exist between each of the four parenting style groups along each of the three dependent variables.

Chapter 2

Review of Literature

Overview

The following chapter will review the current literature on the three ACT processes – mindfulness, experiential avoidance, and values-based action – and parenting styles as they relate to college students. Mindfulness, experiential avoidance, and values-based action are particularly relevant to the college population because these factors have been linked to a variety of outcomes such as mental health (Hayes et al., 2006), personal success (Bond, 2005), and academic success (Mitsmangruber, Beck, Höfer, & Schüßler, 2009). The adjustments that are necessary in order to function optimally during college create a vast need for further research into the factors that promote college student psychological health, as well as factors that decrease students' ability to achieve academic and personal success. Necessary adjustments include increased academic demands (Vaez & LaFlamme, 2008), changes in social atmosphere (Swenson et al., 2008) financial worries (Monk, 2004), and psychological issues that may arise (Cooke et al., 2006).

Adjustment issues and mental health are especially important considering college students are at an increased risk for psychological difficulties when compared to the general population (Adlaf et al., 2001). In a study of psychological distress among college students, Adlaf and colleagues found that not only is psychological distress elevated among college students, it is significantly higher than the general population - especially in the first year of college. In addition, Cooke and colleagues (2006) reported that although anxiety is a pervasive part of many college students' experiences, even

those students who would not typically be considered "vulnerable" could succumb to significant psychological impairment. This heightened state of anxiety becomes a primary concern when considering the data show that approximately two-thirds of the most "vulnerable" college students in their study did not access university counseling services (Cooke et al., 2006). For students who do access supports, such as counseling services, gains are realized in academic functioning and academic adjustment, ultimately contributing to overall student satisfaction (Lent et al., 2009). Because successful adjustment to the college atmosphere is imperative to college student success (Martin, Swartz-Kulstad, & Madson, 1999), further research regarding interventions aimed at easing this transition is needed.

ACT shows great promise as an intervention to be used with college students as evidenced by recent empirical support. For example, in a study comparing ACT and cognitive therapy, Forman and colleagues (2007) found that ACT is an effective treatment for combating symptoms of anxiety and depression in the college student population. In addition, Paez-Blarrina and colleagues (2008) developed a study examining the usefulness of ACT when working with the college student population, and found ACT to be superior to cognitive control as a coping strategy. Further, the three ACT processes are thought to be related to the ability to cope with and adjust to stressful situations (Hayes et al., 2006), and individuals' tendencies toward processes related to mindfulness, experiential avoidance, and values-based action are known to predict college student success (Asberg et al., 2008).

Although there is much evidence to support parenting style as being another predictor of academic success (e.g., Aunola et al., 2000; Baumrind, 1978), a gap exists in

the research regarding the relationship between perceived parenting styles and mindfulness, experiential avoidance, and values-based action. This chapter will provide further justification for the need to examine these factors by reviewing the current literature on mindfulness, experiential avoidance, values-based action, and parenting styles.

Mindfulness

Mindfulness has been described as close attention given to moment-by-moment experiences, allowing an individual to have complete contact with the present moment as a conscious human being (Bishop et al., 2004). Its potential to alleviate human suffering has been described by Kabat-Zinn (2003) and involves decreasing the interference and distress associated with stressful situations. The experience of diminished distress, however, depends upon an individual's accepting and becoming willing to experience unpleasant internal or external experiences (Hayes et al, 2010). This acceptance of discomfort provides a distinction between ACT and most other mindfulness-based treatments (Baer, 2003). Mindfulness has received a great deal of empirical support for its use with varied populations and a number of psychological, as well as physical, complaints (e.g., Astin, 1997; Kabat-Zinn et al., 1992; Shapiro et al., 2008).

In a study aimed at clarifying the role that mindfulness plays in psychological well-being, Brown and Ryan (2003) examined both state and trait mindfulness. They discovered that state mindfulness is related to trait mindfulness, and that both predict positive emotional states and self-regulated behavior. In addition, they noted that individuals who had higher trait mindfulness were more likely to engage in mindful behaviors on a regular basis. Trait mindfulness has also been associated with low levels

of emotional disturbance (e.g., anxiety, depressive symptoms, and stress), and higher levels of well-being (e.g., satisfaction with life, higher positive affect, and self-actualization; Brown et al., 2007). Shapiro and colleagues (2007) similarly found that trait mindfulness could be increased through mindfulness training, indicating the potential long-term benefits of mindfulness practices.

Baer, Smith, Hopkins, Krietemeyer, and Toney (2006) studied the ability of several facets of mindfulness to predict psychological attributes, such as self-compassion, alexithymia, dissociation, thought suppression, and difficulties with emotion regulation. Their findings indicated that mindfulness does successfully predict a wide range of psychological symptoms, providing support for the theory that mindfulness is a multifaceted construct that involves the ability to observe, describe, and act with awareness, nonjudgment, and nonreaction.

Support for the use of mindfulness-based interventions with clinical populations was provided by Kuyken and colleagues' (2008) research regarding patients with recurring depression. Data showed that a mindfulness intervention eased the transition for patients discontinuing antidepressant medication. This parallel 2-group randomized controlled trial found that 75% of the treatment group successfully discontinued medication, while 60% of the control group relapsed within 15 months.

In a study of 22 patients whose diagnoses included generalized anxiety disorder, panic disorder, and panic disorder with agoraphobia, participants were trained in mindfulness techniques during an 8-week long course (Kabat-Zinn et al., 1992). The researchers reported that participants experienced statistically significant improvements in ratings of anxiety and depression and fewer panic symptoms at post-treatment, and that

these treatment gains were maintained at a three-month follow-up. In a three-year follow-up study of this same clinical sample (Miller, Fletcher, & Kabat-Zinn, 1995), a repeated measures analysis indicated a maintenance of the gains obtained in the original study in terms of anxiety, depression, panic, and fear.

The effectiveness of mindfulness-based interventions for use with a college student population was similarly found in Astin's (1997) eight-week stress reduction program that involved mindfulness meditation. Results showed that, as compared with the participants assigned to a non-intervention control group, students in the experimental group reported a significant decrease in overall psychological symptomatology and significant increases in an overall domain-specific sense of control through the utilization of an accepting mode of control. More importantly, students in the experimental group reported significant gains in ratings of their environment. These findings suggest that students who engage in mindfulness techniques experience greater ease in transitioning and making the adjustment to the college environment than students who do not engage in mindfulness activities.

Additional support for the link between mindfulness and experiential avoidance was provided by Leigh and Neighbors (2009) in their study of the association between mind/body awareness and college student drinking behaviors. Data from their study of 212 undergraduate students indicated that while ruminating on stressors was associated with increased drinking behaviors, nonjudgmental awareness/acceptance contributed to a decrease in drinking behaviors. Thus, mindfulness in the absence of acceptance can, at times, increase the likelihood that an individual will participate in experiential avoidance;

whereas mindfulness and acceptance together tend to diminish the probability that an individual will choose experiential avoidance in the face of psychological distress.

It is evident from this collection of studies that mindfulness, when paired with non-self-judging acceptance, supports psychological health, well-being, and personal and academic success. On the other hand, individuals who do not engage in mindful behaviors are more likely to participate in experiential avoidance as a means of replacing internal or external discomfort with more pleasurable experiences (Hayes et al., 2004).

Experiential Avoidance

Whereas mindfulness is considered to be a healthy method of attending to stressful situations, experiential avoidance is described as a maladaptive form of dealing with stress, and is known to contribute to psychological distress (Hayes et al., 2006). According to ACT, experiential avoidance is inversely related to mindfulness, and indeed, it counteracts the process of being mindful (Hayes et al., 2006). Experiential avoidance directly implies a lack of acceptance of uncomfortable internal or external experiences, and therefore, the two processes – mindfulness and experiential avoidance - cannot co-occur (Mitmansgruber et al., 2009). Although one process does not occur in the presence of the other, the absence of one does not necessarily imply the presence of the other, meaning that both processes should be measured in order to obtain complete information regarding the likelihood that an individual will exhibit mindfulness or experiential avoidance when faced with a stressful situation.

In a study aimed at predicting anxiety by measuring experiential avoidance, Berman et al. (2010) found that individuals' sensitivity to anxiety as measured by their beliefs about the feared consequences of anxiety symptoms, along with experiential

avoidance successfully predicted anxiety disorders, such as obsessive-compulsive disorder, panic disorder, social phobia, and specific phobia. Furthermore, experiential avoidance was found to be significantly associated with anxiety symptoms above and beyond the control of cognitive concerns related to anxiety sensitivity.

In a similar study using only participants who were previously diagnosed with obsessive-compulsive disorder, Najmi, Riemann, and Wegner (2009) discovered that using cognitive control techniques such as thought suppression is a counterproductive method of dealing with unwanted intrusive thoughts. Although the suppression (focused distraction) group and the acceptance group reported similarly low levels of distress during the assigned task, distress increased significantly for the suppression group once the task was completed and mental control was relinquished. These findings provide support for the idea that despite the short-term relief from distress that experiential avoidance allows, the long-term outcome is likely to involve the return of distress, if not an increase in the level of distress experienced.

Additional support for the negative impact of experiential avoidance was provided by Kashdan and colleagues (2006). This study of 382 undergraduate students compared two emotion regulation strategies – suppression and reappraisal – and their relationship to experiential avoidance. Kashdan and colleagues reported that experiential avoidance is a strong reliable predictor of daily anxiety-related pathology such as social anxiety. It was also more strongly associated with emotional distress compared to thought suppression and cognitive reappraisal. Further, experiential avoidance, or inversely acceptance, better accounted for psychological functioning over time in comparison with cognitive reappraisal.

The idea that acceptance accounts for positive psychological functioning was further corroborated in studies completed by Bond and Bunce (2003) and by Donaldson-Feilder and Bond (2004). First, Bond and Bunce (2003) examined acceptance processes among a group of 412 customer service center workers. They found that not only did acceptance (and conversely, experiential avoidance) predict mental health over and above negative affect, job control, and locus of control; they also noted that higher levels of acceptance enhanced the beneficial effects of having job control. Further, in a study involving 290 workers, Donaldson-Feilder and Bond (2004) reported that acceptance, rather than experiential avoidance through controlling one's thoughts and feelings, predicted mental health in general, as well as physical well-being. The authors noted that individuals are likely to experience greater mental health benefits by accepting the thoughts and feelings than by making a conscious attempt to regulate or avoid them.

A study by Hoffmann, Heering, Sawyer, and Asnaani (2009) found that the physiological arousal caused by anxiety is effectively moderated by cognitive reappraisal and acceptance, and that acceptance is a more effective process than suppression strategies in a group of 202 volunteer participants. Specifically, participants who attempted to cognitively suppress anxious arousal actually experienced a greater increase in heart rate than did the participants who willingly accepted the anxiety.

Because experiential avoidance is so prevalent in the college population, Asberget al. (2008) examined the effect of avoiding unpleasant experiences on college student stress and adjustment. In their study of 239 undergraduate students, they found that an individual's stress level is directly related to adjustment, and that the tendency to avoid discomfort predicts the amount of stress a person experiences. Therefore, individuals who

exhibit avoidance behaviors in the face of stressors have a more difficult time making important adjustments, such as the adjustment to a college environment, than individuals who do not engage in experiential avoidance.

Additionally, experiential avoidance has been linked to poor academic performance among the college student population. DeBerard and colleagues (2004) found that avoidance behaviors, such as drinking alcohol and smoking, contributed to lower academic performance, as measured by college students' GPAs. Also, according to Leigh and Neighbors (2009), college students who engage in frequent avoidance by drinking alcohol impaired the ability to engage appropriately in academic activities, resulting in low academic success.

Burris and colleagues (2009) studied how experiential avoidance impacts the psychological well-being and distress of university students. They found that students who frequently engage in drinking alcohol and promiscuous sexual activity as a way of coping with academic pressures were more likely to experience psychological distress, and students who behave in ways that are consistent with general health values, such as engaging in physical activity and avoiding alcohol, experienced greater well-being and less distress.

These studies collectively show the differences in outcomes in terms of mental health and psychological distress for individuals who accept feelings of anxiety and distress without attempting to fight them, as opposed to individuals who opt for experiential avoidance in the face of a distressing situation. It is evident that while experiential avoidance predicts psychological distress and maladjustment, the absence of experiential avoidance predicts psychological health and well-being. Recall that

mindfulness is also related to psychological health and well-being, and is inversely associated with experiential avoidance. Therefore, individuals who frequently engage in mindfulness and infrequently engage in experiential avoidance are likely to act in ways that are consistent with their deeply held values, otherwise known as values-based action.

Values-Based Action

The ultimate goal of ACT is clearly defining what is most important to an individual and living a life that is consistent with those personal values (Hayes et al., 2006). When this occurs, an individual is likely to experience high levels of personal success and satisfaction. As mentioned previously, acting in a way that is consistent with one's deeply held personal values, or values-based action, is made possible by engaging in mindfulness and resisting experiential avoidance (Bond, 2005). In this way, individuals are able to handle stressful situations more effectively, eliminating psychological distress and pathology (Wilson & Murrell, 2004). Although values-based action in and of itself has received fairly minimal empirical attention, the research that exists supports this construct as one that warrants further study for its potential to explain a process that promotes well-being across many populations and circumstances.

Hayes et al. (2010) provided support for the removal of experiential avoidance in favor of values-based action in their study of 43 patients with generalized anxiety disorder. Through the use of Acceptance-Based Behavior Therapy, a relatively new therapeutic modality that draws its technique from ACT, Hayes and colleagues tested acceptance of internal experiences and engagement in meaningful activities as mechanisms of change toward decreased worry. Their results indicated that these two processes predicted change above and beyond worry. Indeed, even when worry did still

exist, participants reported being able to move forward with meaningful activities, rather than getting caught up in unpleasant internal experiences.

A study of experiential avoidance as a generalized psychological vulnerability supplied further support for the negative impact of avoidance on the ability to act in values-consistent ways (Kashdan et al., 2006). Experiential avoidance impaired the study participants' ability to participate fully in daily positive experiences. Further, this study found experiential avoidance to be a barrier to deriving meaning and pleasure from life and behaving in ways that are more consistent with one's valued directions.

McCracken and Yang (2006) have also made a contribution to understanding the process through which experiential avoidance inhibits values-based action in their study regarding chronic pain. Participants for this study were 140 pain management patients who completed assessments related to disability, depression, pain-related anxiety, acceptance of pain, and a values inventory related to chronic pain. Results indicated that the success with which individuals live value-directed lives was associated with emotional functioning, as well as with acceptance of pain. The researchers also took into account the discrepancy between participants' values and their success in living according to these values, and they found that small discrepancies were correlated with less physical disability, depression, depression-related interference with functioning, pain-related anxiety, and fewer psychosocial issues. In other words, individuals are likely to experience relative improvement in levels of daily activity and better emotional functioning when values function as guides for actions. Furthermore, McCracken and Yang noted that measures of acceptance and values both contribute to the prediction of overall well-being.

In their study of college student well-being, Burris and colleagues (2009) also found evidence that general well-being is related to living in a way that is consistent with one's core values. The authors suggested that clarifying and concentrating on one's values generates an interest in participating in behaviors that promote psychological well-being and prevent psychological distress. Their advice to mental health professionals was to work with college students to define and clarify their deeply held values and help them to develop behaviors that are consistent with those values.

Finally, Lounsbury, Fisher, Levy, and Welsh (2009) made the connection between character strengths, values, college adjustment, and academic success in a college population. This study noted that character strengths are positively related to college student academic success in terms of both student satisfaction and academic performance. More importantly to the current study, Lounsbury and colleagues found that character strength was significantly associated with congruence with one's values. These findings imply that not only does values-based action relate to character strength; it also predicts the likelihood that an individual will experience satisfaction as a college student and that one will perform well academically. Lounsbury and colleagues' work provides empirical support for Chickering and Reisser's (1993) statement that the development of integrity among college students depends upon individuals' clarification of values. Chickering and Reisser suggested that integrity and character strength are necessary traits of psychologically healthy adults. Furthermore, Lounsbury and colleagues (2009) reported that character strengths and values were positively related to college student well-being and adjustment.

Although values-based action lacks a wealth of empirical evidence as an independent process of healthy mental functioning, the implications that it holds for contributing to the explanation of mental health, or the lack thereof, are abundant. Therefore, in considering the evidence presented here for the ability of mindfulness, experiential avoidance, and values-based action to work together to predict differing levels of mental functioning, it seems pertinent to analyze the relationship between these three core processes and other individual factors that predict various levels of mental functioning. One factor that is known to contribute to individual characteristics in many areas across the lifespan – including how an individual adjusts in the face of stressful situations (e.g. Nijhof & Engels, 2007; Wolfradt, Hempel, & Miles, 2003) - is the perceived behaviors of one's parents during childhood and adolescence (Maccoby & Martin, 1983).

Parenting Styles

Over the years, researchers have shown that parenting behaviors influence their children's subsequent mental health and coping skills, such as competence, autonomy, self-esteem, self-control, substance abuse, problem behaviors, and decision-making (e.g., Baumrind, 1991; Nijhof & Engels, 2007; Wintre & Yaffe, 2000). Wintre and Yaffe (2000) also suggested that parenting behaviors indirectly affect one's ability to adapt under stressful circumstances. Transitioning to college is, for most people, the type of stressful situation that requires such adaptation, marking the first time away from familiar supports and resources (Rice et al., 1995). Whereas children and adolescents frequently look to their parents for support and help when problems arise, the increased autonomy

inherent in the transition to college requires students to solve problems and address adjustment issues independently of their parents (Nijhof & Engels, 2007).

Research over the past several decades has contributed to our understanding of the exact mechanisms through which parents' behaviors affect the development of certain characteristics and behaviors of their children. One widely accepted construct of parenting behavior is Diana Baumrind's (1978) theory regarding parenting styles. According to this theory, parenting styles are conceptualized as existing along the two dimensions of parental demandingness and parental responsiveness. The intersection of these two dimensions creates four distinct parenting styles: authoritative, authoritarian, neglectful, and indulgent, which were originally described by Maccoby and Martin (1983). These four styles have been studied extensively as they pertain to the emotional and behavioral outcomes of individuals at all life stages from infancy through late adulthood (e.g., Baumrind, 1991a; Rothrauff et al., 2009; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994). The studies that are most pertinent to college student characteristics and behaviors are those studies that examined the effects of parenting styles on adolescents as they prepared for the transition to college and adulthood, as well as studies of individuals during college and young adulthood.

For example, Milevsky et al. (2007) compared the effect of parenting styles on adolescents' self-esteem, depression, and life satisfaction. Authoritative parenting was related to the highest levels of self-esteem and life satisfaction, and contributed to the lowest levels of depression, while the opposite was true for neglectful parenting, which was associated with the lowest scores on self-esteem and life satisfaction, and the highest scores on depression. Individuals with authoritarian or indulgent parents scored in the

middle on all three outcome measures. These outcomes related to self-esteem, depression, and life satisfaction point to the importance of the role of parenting styles in adolescent mental health.

Lamborn et al. (1991) studied 14- to 18-year old adolescents' perceptions of their parents' styles of parenting and how the adolescents were affected in terms of psychosocial development, school achievement, internalized distress, and problem behavior. Their results indicated that adolescents raised by authoritative parents had the highest scores on measures of psychosocial competence and the lowest scores on measures of behavioral and psychological dysfunction. Adolescent children of neglectful parents exhibited the opposite constellation of scores: high scores in the areas of behavioral and psychological dysfunction, and low scores on psychosocial competence. Adolescents who perceived their parents to be authoritarian had moderate scores on conformity to the standards of adults and obedience, and low self-concept scores. Finally, adolescents from indulgent homes portrayed a strong sense of self-confidence, but reported significantly more substance abuse and school misconduct, and were less academically engaged. Although significant concerns are apparent for adolescents who are raised by indulgent parents, Lamborn and colleagues noted that these adolescents have a surprising tendency to be psychologically adjusted.

In a one-year follow-up, Steinberg et al. (1994) collected data from the same group of adolescents, then between 15 and 19 years old. Their purpose was to examine whether the differences that had been previously observed by Lamborn et al. (1991) were maintained over time. Steinberg and colleagues found that some observed differences had changed in the course of the year. Adolescents from authoritative homes expressed an

improvement in academic self-concept, and a decline in school misconduct. Steinberg and colleagues suggested that the benefit of authoritative parenting is the maintenance of high adjustment rather than the continued development of competence. For adolescents raised by neglectful parents, orientation toward work and school continued to decline while significant increases were apparent in delinquency and substance use. Authoritarian parenting resulted in the maintenance of self-confidence, but also had the effect of significant increases in the internalized distress of their adolescent offspring. Steinberg et al. stated that this may be reflective of continued exposure to a home environment that is developmentally inappropriate and psychologically overpowering. Indulgent parenting similarly provided mixed results for their adolescent offspring, who tended to become more positive in academic self-concept and had lower somatic distress. Conversely, these adolescents also exhibited significant declines in school orientation and significant increases in school misconduct. The authors noted that although some improvements were observed at the one-year follow-up, there were also many concerning declines. If these trends are maintained each year of the adolescent’s life, there is sufficient reason to be concerned for the long-term outcomes of adolescents in each group, with the exception of those raised by authoritative parents (Steinberg et al., 1994).

In the only study to date regarding the effect of perceived parenting styles on adjustment in middle and late adulthood, Rothrauff, Cooney, and An (2009) found evidence that remembered parenting styles continue to relate to functioning across the lifespan. Using random digit dialing, data was gathered from 2,232 American adults aged 40 or older. Measures were related to the perceived parenting style in which they were raised, along with psychological well-being, depressive symptoms, and substance abuse.

Rothrauff and colleagues determined that, similar to other studies of parenting style, individuals who perceived their parents to be authoritative had the most positive outcomes, with high scores on psychological well-being, and low scores on both depression and substance abuse. Individuals with indulgent parents followed the same pattern, exhibiting less extreme scores than individuals with authoritative parents. Adults who remembered their parents as being authoritarian had the highest scores on depression, and those who remembered their parents as being neglectful scored the lowest on the measure of psychological well-being and the highest on substance abuse.

Although each of the previously mentioned studies on perceived parenting styles measures outcomes along a different set of constructs, the results are similar. The offspring of authoritative parents generally fare the best along many outcome variables, typically followed by those from indulgent, authoritarian, and neglectful homes, respectively. Among the many studies that Baumrind (1991a) contributed to the body of knowledge regarding parenting styles is her research regarding the influence of parenting style on individuals' subsequent competence and substance abuse. She reported that although authoritative parenting seems to provide for the most positive outcomes among the four parenting styles, it is not a necessary condition to produce competent offspring. In many cases, the benefits of authoritative parenting are apparent on outcome measures, but seldom to a significant degree. For example, the offspring of indulgent parents are almost as socially conscious, and are slightly more autonomous than the offspring of authoritative parents. Therefore, despite the fact that authoritative parenting is generally regarded as the style that provides the most advantages, each of the three other parenting

styles seem to have its own set of consequences, making it difficult to determine which one is most likely to contribute to certain characteristics and behaviors.

Although perceived parenting styles have a distinct impact on individuals' coping behaviors and the ability to adjust to stressful situations, research has yet to investigate the nature of the relationship between each of the four parenting styles during childhood/adolescence and mindfulness, experiential avoidance, and values-based action. Studies do exist, however, that point to connections that can be made through constructs that are similar to the variables used in the current study: parenting styles and the three ACT processes.

In terms of parenting style's ability to predict mindfulness, evidence can be found in Yee and Flanagan's (1985) study regarding parenting styles, adolescents' attributions, and educational outcomes. The results of this study showed that the high parental control associated with authoritative and authoritarian parenting frequently contributes to the self-awareness of their offspring. According to Fletcher (2010), self-awareness is a key component in the process of mindfulness.

In contrast, Rosenthal, Polusny, and Follette (2006) assessed perceived criticism in the family of origin as it relates to avoidant coping, experiential avoidance, and psychological distress during adulthood. Despite the fact that this study did not specifically measure parenting style, the perceived criticism scale includes numerous items that are similar to descriptors of authoritarian parenting. The results of this study showed that perceived criticism contributed to higher experiential avoidance, greater distress, and therefore, greater psychological maladjustment. It may be inferred from

these findings that authoritarian parenting is likely to contribute to experiential avoidance.

Kingston and colleagues (2010) studied the ability of childhood trauma and negative affect intensity to predict experiential avoidance. Participants included 290 individuals from a clinical opportunity sample, and their results indicated that both childhood trauma and negative affect intensity were linked to the tendency to engage in experiential avoidance behaviors. Baumrind (1978, 1991a) described individuals from neglectful parenting styles as being more likely to inflict abuse upon their children than parents who are authoritative, authoritarian or indulgent.

In another related study, Schwartz and colleagues (2009) examined the effect of perceived parental relationships on health-risk behaviors, similar to experiential avoidance, in college students. Perceptions of relationships with parents were measured by assessing acceptance and psychological control, which are conceptually similar to Baumrind’s (1978) constructs of responsiveness and demandingness, respectively. Schwartz et al. found that parental acceptance was a protective factor against most of the health-risk behaviors assessed, such as drug abuse, casual sex, and, to a moderate extent, alcohol abuse. Based on these findings, it may be inferred that parenting styles demonstrating high responsiveness (authoritative and indulgent) are most likely to serve as protective against health-risk behaviors, and therefore, experiential avoidance.

A study of parenting styles and the achievement strategies of adolescents (Aunola, et al., 2000) may provide support for the ability of parenting styles to predict experiential avoidance. Achievement strategies were assessed using a measurement of task-irrelevant behavior, and the items resembled descriptors of experiential avoidance, such as willful

distraction and putting off homework until a later time. The authors found that task-irrelevant behavior was most prevalent among adolescents with neglectful and authoritarian parents, followed by those with indulgent and authoritative parents, respectively. These findings are similar to the findings of Schwartz and colleagues (2009), and suggest that individuals whose parents demonstrate high responsiveness are less likely to engage in experiential avoidance.

Evidence can also be found linking parenting style to concepts similar to values-based action. For instance, in a study of 896 high school students, Pratt et al. (2003) found that adolescents who act in accordance with their moral values are likely to experience an increase in the relative emphasis on those moral values. Authoritative parenting was associated with the highest levels of values-congruent behavior, followed by authoritarian parenting.

Similarly, Pereira and Lopes (2005) found evidence for a connection between parenting styles, experiential avoidance, and motivation toward living congruently with one's values during the college years. The values assessed included hedonism (similar to experiential avoidance and involves the pursuit of pleasure and avoidance of pain) and self-determination (similar to values-based action and includes independent thinking, choices, and actions). Their results suggested that college students with neglectful parents valued hedonism the most, followed by individuals with authoritarian, indulgent, and authoritative parents, respectively. Scores on self-determination as a value were highest among those from authoritative, followed by authoritarian, indulgent, and neglectful homes, respectively.

Although these studies do not directly confirm a relationship between parenting styles and mindfulness, experiential avoidance, and values-based action, the implications are clear: parenting styles have been found to be directly related to constructs that are conceptually similar to the three ACT processes. Therefore, further research is warranted to determine whether or not parenting styles are directly related to these processes.

Summary

Several conclusions can be drawn from this review of the current literature. First, many studies suggest that college students are at a significantly greater risk for difficulties related to psychological health and adjusting to the university atmosphere. Students experiencing such difficulties may benefit from a variety of positive outcomes associated with interventions aimed at combating issues related to anxiety and adjusting to change, such as ACT. Secondly, the existing research suggests that the additional examination of variables that contribute to mindfulness, experiential avoidance, and values-based action would enhance scientific understanding and inform future intervention efforts in this area. Further, research has shown that parenting styles contribute to personal outcomes in a number of areas. Finally, parenting style shows promise as potentially being related to mindfulness, experiential avoidance, and values-based action, yet these variables have never been examined together in a college student population. Therefore, the current study will assess whether there is a significant relationship between parenting styles and mindfulness, experiential avoidance, and values-based action.

Chapter 3

Methods

The methods section is divided into three subsections. The participants will be described in the first section followed by a section describing the instruments used, and concluding with a section identifying the procedures that were used to collect the data. The instruments that were used for this study were the Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006), the Acceptance and Action Questionnaire (AAQ; Hayes et al., 2004), the Brief Values Inventory (BVI; McCracken & Yang, 2006), a measure of parenting style (Rossi, 2001), and the Marlowe-Crowne Social Desirability Scale – Short Form C (M-C SDS Form C; Reynolds, 1982).

Participants

Data for this study were selected from archival data collected from August 2010 through October 2010, originally obtained for use in a study related to mindfulness, experiential avoidance, values-based action, and college student well-being. Participants selected for inclusion in the current study were those who met the following criteria: they self-identified as undergraduate students between the ages of 18 and 24 years old, scored lower than or equal to 10 out of 13 on the social desirability measure, and completed all demographic information as well as instruments related to mindfulness, experiential avoidance, values-based action, and parenting style. Of the 232 participants who began taking the survey, 75 were not between the ages of 18 to 24, 5 more were eliminated because they indicated being graduate students, and 43 were eliminated because they scored higher than 10 out of 13 on the social desirability measure. The dataset provided useable data for 109 out of the initial pool of 232 participants after eliminating data for

participants who did not meet this study's inclusion criteria. No participants were identified as outliers in the preliminary analysis.

As mentioned previously, only currently-enrolled undergraduate students between the ages of 18 and 24 were included (*M* = 19.43, *SD* = 1.54). Eighty-three participants (76%) were female, and twenty six (24%) were male. The majority of participants identified as Caucasian (63%), while 22% were African-American, 7% were Asian, 4% were multiracial, 1% were Latino/a, and 3% did not identify with the ethnicities listed. Approximately half of the participants (51%) reported being in their first year of college, 23% were in their second year, 17% were in their third year, 6% were fourth year students, 2% were in their fifth year, and 1% was in the sixth year of undergraduate education. The average GPA among participants was 3.22 on a 4-point scale, with a standard deviation of .67. The mean reported annual family income was between $40,000 and $49,999. Participants indicated that their primary caregivers during childhood and adolescence were as follows: 62% were raised by two biological or adoptive parents, 28% were raised by a single parent, and 9% were raised by one biological parent with a step-parent.

Instruments

Demographic data was collected via a questionnaire including: participant's age, gender, ethnicity, number of years in college, grade point average, socio-economic status of family (measured by estimated family income level), and primary caregiver(s) during childhood and adolescence.

Mindfulness. The *Five Facet Mindfulness Questionnaire* (FFMQ; Baer et al., 2006) is a 39-item measure of mindfulness derived from a multidimensional

conceptualization of mindfulness. The instrument consists of sentence items alternating among the five facets of mindfulness: observing ("I notice the smells and aromas of things"), describing ("I am good at finding words to describe my feelings"), acting with awareness ("I find myself doing things without paying attention" – reverse coded), nonjudging of inner experience ("I think some of my emotions are bad or inappropriate and I should not feel them" – reverse coded), and nonreactivity to inner experience ("I perceive my feelings and emotions without having to react to them"). Items are answered on a 5-point Likert-type scale with answer choices ranging from 1 (Never or very rarely true) to 5 (Very often or always true). Five existing measures of mindfulness were used in the development of the FFMQ: the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003), the Freiburg Mindfulness Inventory (FMI; Buchheld, Grossman & Walach, 2001), the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004), the Cognitive and Affective Mindfulness Scale (CAMS; Feldman, Hayes, Jumar, & Greeson, 2004, as cited in Baer et al., 2006), and the Mindfulness Questionnaire (MQ; Chadwick, Hember, Mead, Liley, & Dagnan, 2005, as cited in Baer et al., 2006).

Intercorrelations for the five mindfulness questionnaires indicated significant positive correlations among the instruments with *r*s ranging from .31 (MAAS with FMI) to .67 (KIMS with CAMS), and good internal consistency with alpha coefficients above .81 (Baer et al., 2006). Baer and colleagues suggested that each of the five measures demonstrated adequate validity in relation to similar and divergent measures of interest. An exploratory factor analysis yielded a scree plot that suggested a five-factor solution, accounting for 33% of the variance. Items were analyzed, and only those items with

minimum factor loadings of .40 on one factor, with a difference of at least .20 between the highest and the next highest factor loadings were included. Subscales were created for each mindfulness facet using the items with the highest factor loadings: nonreactivity to inner experience, observing/noticing/attending to sensations/perceptions/thoughts/ feelings, acting with awareness/automatic pilot/concentration/nondistraction, describing/ labeling with words, and nonjudging of experience. Alpha coefficients for each of the subscales indicated adequate to good internal consistency: nonreactivity = .75, observing = .83, acting with awareness = .87, describing = .91, and nonjudging = .87.

Bear and colleagues (2006) then replicated the five-factor structure using another sample to assess for discriminant and convergent validity. They found positive correlations between the five mindfulness facets and emotional intelligence and self-compassion, and three of the mindfulness facets were positively correlated with openness to experience. Significant negative correlations were found between the FFMQ subscales and alexythymia, dissociation, absent-mindedness, psychological symptoms, neuroticism, thought suppression, difficulties with emotion regulation, and experiential avoidance.

A follow-up study replicated the adequate-to-good internal consistency of the FFMQ with alpha coefficients of all facets in four samples ranging from .72 to .92, with the exception of the nonreactivity to internal experience facet in an undergraduate student sample which produced an alpha of .67 (the alpha coefficients of other three samples ranged from .81 to .86; Baer et al., 2008). Baer and colleagues found intercorrelations among the five facets ranging from .32 to .56. The follow-up study also tested a hierarchical model and found that the five facets were representative of the overall construct of mindfulness. The FFMQ also has incremental validity in predicting

psychological well-being among both meditators and nonmeditators, accounting for 39% of the variance between the two groups (Baer et al., 2008). The current study found internal consistency reliabilities (Cronbach's alpha) similar to those found in previous studies for each of the subscales: nonreactivity = .75, observing = .77, acting with awareness = .89, describing = .88, and nonjudging = .87.

Experiential Avoidance. The *Acceptance and Action Questionnaire* (AAQ; Hayes et al., 2004) is a 9-item Likert-type measure of experiential avoidance with answer choices ranging from 1 (Never true) to 7 (Always true). It was designed to assess for the avoidance of negative private events, a high need for emotional and cognitive control, an inability to take needed action in the face of uncomfortable private events, and forms of cognitive entanglement, such as negative self-references or excessively negative evaluations of private experiences. Thirty-two items were included in initial scale construction, an exploratory analysis yielded the nine item model, and a confirmatory factor analysis supported this model as the best fit to the data (Hayes et al., 2004).

This instrument exhibits strong convergent validity with several conceptually similar scales, such as those measuring thought suppression, coping, thought control, and post-traumatic stress (Hayes et al., 2004). The AAQ displayed low significant correlations with these measures, indicating related, but distinct, constructs. Hayes and colleagues further noted that the AAQ showed positive correlations with negative outcomes (e.g., depression and anxiety) and negative correlations with positive outcomes (e.g., quality of life and life satisfaction). Internal consistency of this measure yielded a Cronbach's alpha of .70, and test-retest reliability of .64 over a 4-month period (Hayes et al., 2004). The current study observed an internal consistency reliability (Cronbach's

alpha) of only .56 on this instrument, which may be the result of the sensitivity of Cronbach's alpha scores in short scales (i.e., less than 10 items; Pallant, 2007).

Values-based action. The *Brief Values Inventory* (BVI) is adapted from the *Chronic Pain Values Inventory* (McCracken & Yang, 2006) and measures individuals' values in six domains: family (defined as "Participation in your relationships with your parents, children, other close relatives, people you live with, or whoever is your 'family'"), intimate relations ("Being the kind of partner you want to be for your husband/wife or closest partner in life"), friends ("Spending time with friends, doing what you need to maintain friendships, or providing help and support for others as a friend"), work ("Engaging in whatever is your occupation, your job, volunteer work, community service, education, or your work around your own home"), health ("Keeping yourself fit, physically able, and healthy just as you would most want to do"), and growth and learning ("Learning new skills or gaining knowledge, or improving yourself as a person as you would most want"), which are derived from the values-based treatment techniques of ACT. The measure asks participants to rate each of the six broad domains using two separate, 6-item, Likert-type scale to measure the *importance* of living in a manner that is consistent with one's deeply-held values and individuals' perceived *success* at living in a manner that is consistent with their values. Response choices range from 0 (Not at all important/successful) to 5 (Extremely important/successful) for each item (McCracken & Yang, 2006).

Concurrent and discriminant validity has been established with several relevant constructs, with a negative correlation between the BVI success scale and a measure of avoidance, and positive correlations between the success scale and measures of activity

engagement and total acceptance (McCracken & Yang, 2006). Although three different scale scores can be produced by the BVI: importance, success, and the discrepancy between the two, only scores on the success scale will be used for the current study. The Cronbach's alpha coefficient indicated very good internal consistency at .82 for the BVI success scale. Internal consistency reliability (Cronbach's alpha) for the current study was .68 for the BVI success scale which may result from the brevity of the scale.

Parenting style. Information regarding perceived parenting style was obtained using a questionnaire developed by Rossi (2001). This instrument was developed based on Maccoby and Martin's (1983) dimensions of parental responsiveness and demandingness. The two distinct parenting dimensions were confirmed by Rothrauff and colleagues (2009) using a factor analysis conducted on the items in the scale developed by Rossi et al. The 20-item instrument includes four subscales: maternal responsiveness, maternal demandingness, paternal responsiveness, and paternal demandingness. For the purposes of the current study, scores for both parents were averaged across the two subscales, responsiveness and demandingness, for a perceived parenting style total score since parents were considered together as a dyad. This provided consistency in scoring among participants raised in one-parent homes and participants raised in two-parent homes. Item responses are 4-point Likert-type options ranging from 1 (A lot) to 4 (Not at all). Items are reverse coded, and scale scores are calculated by averaging means across the maternal and paternal responsiveness subscales and across the maternal and paternal demandingness subscales. For participants raised by a single parent, scale scores are obtained by calculating the means separately across items in the responsiveness subscale and the demandingness subscale for the one parent. High and low levels of

responsiveness and demandingness are typically determined using a median split on each scale, resulting in the four distinct parenting styles: authoritative (high responsiveness/ high demandingness), authoritarian (low responsiveness/high demandingness), indulgent (high responsiveness/low demandingness), and neglectful (low responsiveness/low demandingness).

Support for this instrument's construct validity was provided by Rothrauff and colleagues' (2009) study of perceived parenting styles and adjustment. They tested the relationship between perceived parenting styles in childhood and levels of psychological well-being, depressive symptoms, and substance abuse in adulthood. Results indicated that hypothesized relationships exist between each of the three outcome variables and differences in perceived parenting style as measured by this instrument, suggesting this instrument adequately assesses the construct of perceived parenting style. Rossi (2001) suggested that this instrument exhibits strong internal consistency with Cronbach's alpha coefficients ranging from .77 (maternal demandingness) to .93 (paternal responsiveness). Internal consistency reliabilities for the current study were similar, with alpha coefficients ranging from .72 (maternal demandingness) to .90 (paternal responsiveness). Using the median split, the four parenting style groups were established as follows: 39% were authoritative, 17% were authoritarian, 19% were indulgent, and 25% were neglectful, percentages that were similar to those found by Rothrauff and colleagues (2009).

Similar results have previously been found using a tertile split, dividing scores on the responsiveness and demandingness scales into low, medium, and high levels of each (Lamborn et al., 1991; Rothrauff et al., 2009). Using this method, only the upper and lower tertiles are used to create the four parenting styles, with participants being

eliminated from the study if their score on either scale falls into the medium tertile. The benefit of this method is that the four parenting style groups are more highly distinguished than when using the median split, although the tertile split results in a large number of study participants being eliminated (nearly 50% according to Rothrauff et al., 2009). In the current study, the use of a tertile split yielded a pool of only 53 participants whose perceived parenting style scores fell in the upper or lower tertiles. Results based on a tertile split indicated that there are no statistically significant relationships between perceived parenting style and mindfulness, experiential avoidance, or values-based action. Because results exhibit similarly strong validity using both the median split and the tertile split, the median split was used for the purposes of this study to maintain a more complete sample and increased statistical power.

Social Desirability. The *Marlowe-Crowne Social Desirability Scale – Short Form C* (M-C SDS Form C; Reynolds, 1982) is a 13-item measure of socially desirable responding. It was derived from a previous 33-item measure with the same purpose (M-C SDS; Marlowe-Crowne Social Desirability Scale; Crowne & Marlowe, 1960). Participants respond “True” or “False” to statements regarding culturally approved behaviors. Each item on the short form was taken directly from the M-C SDS, and included based on a factor loading of .40 or higher in a principle components factor analysis.

This instrument exhibits an acceptable level of internal consistency reliability, with a coefficient of .76 (Reynolds, 1982). The current study exhibited similar internal consistency reliability with a Cronbach’s alpha coefficient of .72. Reynolds also found that the M-C SDS Form C demonstrated concurrent validity with the original M-C SDS,

with significant correlations between the two ($r = .93$, $r^2 = .86$) and with the Edwards Social Desirability Scale ($r = .41$, $r^2 = .17$). Further support for the use of this scale was provided by Zook and Sipps (1985), who described psychometric properties of the M-C SDS Form C that were similar to those found by Reynolds (1982), and test-retest reliability with a correlation coefficient of .74 at 6-week follow-up.

Procedures

After receiving approval from the Institutional Review Board, participants voluntarily completed an online survey. The sample was primarily recruited from two institutions in the Mid-South – one of which is a large public university, and the other is a private liberal arts college. Additional participants were recruited via Facebook, a social networking website. Interested participants were directed to an internet address containing the survey, and they agreed to the informed consent by checking a box marked "I have read the informed consent and agree to participate in this study" statement. After checking the box and agreeing to the informed consent, participants were directed to the demographic page, followed by the remainder of the survey. All responses were aggregated to protect the anonymity of participants.

Chapter 4

Results

Preliminary Analyses

The data were first examined for assumptions of normality (skewness and kurtosis). Scores on the FFMQ were positively skewed and leptokurtic, while scores on the AAQ were positively skewed and platykurtic. Scores on the BVI success subscale were negatively skewed and platykurtic. The two scales that exhibited negative kurtosis (i.e. platykurtic) indicate the possibility of a large number of extreme cases (Pallant, 2007). Although outliers were identified on the FFMQ these outliers were found to have an insignificant effect on the results of analyses and were therefore included in the primary analyses.

Primary Analyses

Three separate one-way ANOVAs were used to analyze the relationships between perceived parenting style and the three ACT processes. Tests of the three hypotheses were conducted using Bonferroni adjusted alpha levels of .0175 per test (.05/3).

Research question 1. *Is there a significant difference in levels of mindfulness between the four groups of perceived parenting styles?* For question 1, a one-way Analysis of Variance (ANOVA) was used to examine the question of whether statistically significant differences exist in amounts of mindfulness between the four groups of perceived parenting styles. The independent variable represented the four parenting style groups: authoritative, indulgent, authoritarian, and neglectful. The dependent variable was a scale measuring several facets of mindfulness, the FFMQ. See Table 1 for the means and standard deviations for each of the four groups.

The test for homogeneity of variance was not significant (*Levene F* (3, 105) = .380; $p > .05$) indicating that this assumption underlying the application of ANOVA was met. The one-way ANOVA of participants' reported mindfulness did not reveal a statistically significant main effect (F (3, 105) = .479; $p > .017$) indicating that the four parenting style groups did not report significantly different amounts of mindfulness.

Table 1

Means and Standard Deviations of Mindfulness

Perceived Parenting Style	*Mean*	*SD*	*n*
Authoritative	123.814	18.818	43
Indulgent	129.667	18.845	21
Authoritarian	127.389	20.566	18
Neglectful	125.852	18.652	27

Research question 2. Is there a significant difference in levels of experiential avoidance between the four groups of perceived parenting styles? For question 2, an ANOVA was used to examine the question of whether statistically significant differences exist in amounts of experiential avoidance between the four groups of perceived parenting styles. The independent variable represented the four parenting style groups: authoritative, indulgent, authoritarian, and neglectful. The dependent variable was a scale measuring acceptance and avoidance, the AAQ. See Table 2 for the means and standard deviations for each of the four groups.

The test for homogeneity of variance was not significant (*Levene F* (3, 105) = .280; $p > .05$) indicating that this assumption underlying the application of ANOVA was met. The one-way ANOVA of participants' reported experiential avoidance did not reveal a statistically significant main effect (F (3, 105) = 1.788; $p > .017$) indicating that the four parenting style groups did not report significantly different amounts of experiential avoidance. These results should be interpreted with caution, however, due to the low reliability score of the AAQ in the current study.

Table 2

Means and Standard Deviations of Experiential Avoidance

Perceived Parenting Style	*Mean*	*SD*	*n*
Authoritative	3.917	.772	43
Indulgent	3.487	.633	21
Authoritarian	3.747	.628	18
Neglectful	3.856	.750	27

Research question 3. Is there a significant difference in levels of values-based action between the four groups of perceived parenting styles? For question 3, an ANOVA was used to examine the question of whether statistically significant differences exist in amounts of values-based action between the four groups of perceived parenting styles. The independent variable represented the four parenting style groups: authoritative, indulgent, authoritarian, and neglectful. The dependent variable was a scale measuring

how successful one is at living within one's deeply held values, the success subscale of the BVI.

See Table 3 for the means and standard deviations for each of the four groups along the success subscale. The test for homogeneity of variance was not significant (*Levene F* (3, 105) = .983; $p > .05$) indicating that this assumption underlying the application of ANOVA was met. The one-way ANOVA of participants' reported success at living within their deeply held values revealed a statistically significant main effect (F (3, 105) = 5.467; $p < .017$) indicating that the four parenting style groups did not report the same amount of success at living within their deeply held values. The $\omega^2 = .135$ indicated that approximately 13.5% of the variation in perception of success at living within values is attributable to differences in perceived parenting style.

Post hoc comparisons using Tukey procedures were used to determine which pairs of the four group means differed. These results are given in Table 4 and indicate that participants who perceive their parents to be indulgent ($M = 27.429$) reported greater success at living within their values than did participants who perceived their parents to be neglectful ($M = 22.333$). The effect size for this significant effect was 1.418, indicating the group differed by almost 1.5 standard deviations. Significant differences were not found between authoritative and indulgent, authoritative and authoritarian, authoritative and neglectful, indulgent and authoritarian, and authoritarian and neglectful perceived parenting styles.

Table 3

Means and Standard Deviations of BVI Success Subscale

Perceived Parenting Style	*Mean*	*SD*	*n*
Authoritative	25.535	4.548	43
Indulgent	27.429	4.296	21
Authoritarian	23.000	5.667	18
Neglectful	22.333	5.226	27

Table 4

Tukey Post Hoc Results of BVI Success Subscale

Perceived Parenting Style	*Mean*	*Pairwise Q Values*		
		Authoritative	Indulgent	Authoritarian
Authoritative	25.535			
Indulgent	27.429	1.894		
Authoritarian	23.000	2.535	4.429	
Neglectful	22.333	3.202	5.100*	.667

* $p < .017$; $Q_{.017;\ 3,\ 105} \approx 4.20$

Further Analyses

As a result of the modest significant findings, correlational analyses were undertaken to further describe the relationship between each of the two individual dimensions of parenting (demandingness and responsiveness) that ultimately distinguish

between the four parenting styles, and each of the three ACT variables (mindfulness, experiential avoidance, and values-based action).

Mindfulness. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was no statistically significant correlation between mindfulness and perceived parental responsiveness, $r = .005$, $n = 109$, $p > .05$. There was also no statistically significant correlation between mindfulness and perceived parental demandingness, $r = -.096$, $n = 109$, $p > .05$.

Experiential avoidance. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was no statistically significant correlation between experiential avoidance and perceived parental responsiveness, $r = -.011$, $n = 109$, $p > .05$. There was also no statistically significant correlation between experiential avoidance and perceived parental demandingness, $r = .146$, $n = 109$, $p > .05$.

Values-based action. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. There was a small, positive correlation between scores on the BVI success subscale and perceived parental responsiveness, $r = .250$, $n = 109$, $p < .05$. There was no statistically significant correlation between scores on the BVI success subscale and perceived parental demandingness, $r = -.052$, $n = 109$, $p > .05$.

Although the overall results presented here provide minimal evidence for the existence of a significant relationship between one's perceived parenting style and one's tendency toward mindfulness, experiential avoidance, and values-based action, many

conclusions can be drawn and suggestions can be made for future research in this topic area. These will be further discussed in the following chapter.

Chapter 5

Discussion

Previous research has shown that the parenting style in which individuals believe they were raised has a strong influence on the individual's ability to adapt to stressful situations. This is particularly true for college students since parental behaviors during childhood and adolescence have a significant impact on many personal characteristics, including how one adjusts during stressful times (Baumrind, 1978; Maccoby & Martin, 1983) such as transitioning to the college environment. Because some ways of adapting are more advantageous than others, much research has focused on the development of healthy adaptation (e.g., Asberg et al., 2008). Mindfulness, experiential avoidance, and values-based action have been linked to positive outcomes in one's potential for making healthy adjustments when faced with stressful situations (Hayes et al., 1999). Although perceived parenting style, mindfulness, experiential avoidance, and values-based action have all previously been shown to impact one's ability to make necessary adjustments, current research has not directly addressed whether a connection exists between perceived parenting style and the three latter constructs. Therefore, the purpose of the current study was to examine whether there is a connection between college students' perceptions of the behaviors exhibited by their parents and their propensity to engage in mindfulness, experiential avoidance, and values-based action.

Research Question 1

The hypothesis that there is a significant difference in amounts of mindfulness between the four groups of perceived parenting styles was not supported, indicating that the perceived parenting style in which one was raised did not significantly impact the

individual's inclination to engage in mindfulness activities in this sample. Further analyses revealed that the correlations between the two parenting dimensions (responsiveness and demandingness) and mindfulness were also not significant.

These results are not consistent with previous research by Ryan and colleagues (2007) which stated that individuals who grow up in households that offer loving, autonomy-supportive caregiving (consistent with authoritative and indulgent parenting styles) provide the most optimal environments for individuals to develop mindful awareness. Similarly, Yee and Flanagan (1985) suggested that parenting styles exhibiting higher amounts of parental control consistent with the authoritative and authoritarian parenting styles contribute to higher amounts of self-awareness, which is a key component of mindfulness, according to Fletcher (2010).

An explanation for this finding may lie in the process of developing mindfulness, given its nature as an internal process rather than an external behavior that may be modeled by caregivers. Baer (2003) suggested that mindfulness is typically developed through meditation and attentional exercises. Although parents may explain such activities to their offspring, the cognitive processes involved in mindfulness cannot be "seen", and therefore, cannot be mimicked. Individuals must choose to work toward developing mindfulness, but this choice may not be affected by the individual's perception of the parenting style in which they were raised.

Research Question 2

The hypothesis that there is a significant difference in amounts of experiential avoidance among the four groups of perceived parenting styles was not supported, indicating that the perceived parenting style in which one was raised does not

significantly impact the likelihood that the individual will engage in experiential avoidance in this sample. Further analyses revealed that the correlations between the two parenting dimensions (responsiveness and demandingness) and experiential avoidance were also not significant. These results are also not consistent with previous research, which indicated that individuals who perceived their parents to be highly critical (consistent with the authoritarian parenting style) were more likely than other individuals to use avoidant coping when faced with stressors (Rosenthal et al., 2006), and that individuals who perceived their parents to be less responsive (authoritarian and neglectful parenting styles) were more likely to engage in experiential avoidance (Schwartz et al., 2009).

The lack of a significant relationship between perceived parenting style and experiential avoidance may be explained by the low reliability of the AAQ, particularly within this sample. Currently, the AAQ is the most widely accepted measure of experiential avoidance as defined by ACT (Hayes et al., 2006), but the low reliability score is less than ideal. The alpha computed for the AAQ in the current study is even lower than typical, indicating that these results may be unreliable.

The lack of significant differences among the four parenting style groups in terms of experiential avoidance indicates that individuals from each group are just as likely as individuals from any other group to avoid uncomfortable internal and external experiences. This may imply that individuals from each group simply have different reasons for avoiding uncomfortable experiences – perhaps people who perceive their parents to be less demanding (indulgent and neglectful parenting styles) are likely to feel less determined or obligated to withstand discomfort for the sake of a desired outcome,

while people who perceive their parents to be more demanding (authoritative and authoritarian parenting styles) might avoid uncomfortable thoughts, feelings, and activities altogether if there is a certain likelihood of “failing”.

Research Question 3

The hypothesis that there is a significant difference in amounts of values-based action among the four groups of perceived parenting styles was supported, indicating that the perceived parenting style in which one was raised impacts the likelihood that individuals will live in ways that are congruent with their deeply held values in this sample. The results indicated that a relationship may exist between high and low levels of perceived parental responsiveness and values-based action. More specifically, individuals who perceive their parents to be indulgent tend to experience significantly greater ability to live in value-congruent ways than do individuals who perceive their parents to be neglectful. The correlation between high and low levels of perceived parental demandingness and values-based action was not significant.

These results are partially consistent with the findings of Pratt and colleagues (2003), which suggested individuals who experience their parents as exhibiting high responsiveness are more likely to engage in higher levels of value-congruent behavior, although their results indicated that this is most true for parents perceived to be authoritative. The authoritative and indulgent parenting styles are, however, both marked by high levels of responsiveness, and both encourage many of the same prosocial behaviors in their offspring, such as empathy and reciprocity (Lamborn et al., 1991). Therefore, the tendency of children who perceive their parents to be highly responsive to engage in values-based action may be due in part to the idea that a warmer approach to

parenting potentially involves a different value socialization process than does the approach offered by parents who are more detached, as suggested by Pratt and colleagues (2003). For example, Maccoby and Martin (1983) suggested that parents who are perceived as more responsive (i.e., authoritative or indulgent) tend to be considerate, consistent, and influential, and their offspring are typically more socially responsible than children of less responsive parents (i.e., authoritarian or neglectful).

Maccoby and Martin's (1983) suggestion that parents who are more responsive are more likely to shape their children's behavior through positive reinforcement may lend some insight as to why individuals who perceive their parents to be responsive are more likely to act in ways that are consistent with their deeply held values. Through support and praise, responsive parents may provide their offspring with a sense of achievement when challenges are overcome, instilling in the offspring a sense of pride in completing actions that are important to them. To be clear, this does not imply that these individuals hold the same values as do their parents; it simply suggests that these individuals are more likely to stand firm when their personal values are challenged.

Individuals who exhibit high levels of value-congruent behaviors are likely to experience greater personal success and satisfaction, according to Park and colleagues (2004). Also, the ability to act in ways that are consistent with deeply held values is known to contribute to overall well-being and psychological adjustment (Wilson & Murrell, 2004). Therefore, through the responsive, supportive behaviors of indulgent parents, it is likely that individuals are encouraged to clarify their values and hold true to them, leading to higher levels of psychological adjustment and personal satisfaction.

Limitations

Although the current study adds to the existing understanding of perceived parenting styles, mindfulness, experiential avoidance, and values-based action, there are several limitations to this study. First, studies such as this one that use self-report data rely on the subjective view of the participant rather than concrete evidence. Similarly, perceived parenting style was measured in retrospect, so the participants' perceptions may have changed over time. The use of a median split for identifying the four parenting style groups, rather than the tertile split, resulted in a grouping of scores around the mean rather than providing four distinct categories. Therefore, the difference between participants assigned to differing groups may have been as small as one point on one of the two parenting dimension scales.

Also, the Acceptance and Action Questionnaire and the Brief Values Inventory Success subscale exhibited low internal consistency reliabilities. Both scales are relatively new to the study of experiential avoidance and values-based action, so further research into ways of improving the scales' reliabilities would be beneficial. It is important to note, however, that short scales (the AAQ has 9 items and the BVI Success subscale has 6 items) have an inherent tendency of providing low internal consistency reliability scores (e.g., .5; Pallant, 2007).

Additionally, the inclusion criteria for this study resulted in a large percentage of the original dataset being eliminated from analysis. It is also important to note that approximately 75% of the participants were female, so the generalizability of this study is limited at best. Finally, the demographic information gathered lacked a question aimed at determining which parent was the primary caregiver for participants raised in a single-

parent home. This distinction may have given a clearer picture of which perceived parenting style the participant encountered most frequently.

Implications

The current study has a number of implications for the field of psychology. First, the results of this study may be applied to the prevention of psychological distress in students adjusting to the college environment. Through college adjustment courses or outreach programming, students can explore how family dynamics may have influenced the ways they manage stressful situations and whether their actions tend to fall in line with their deeply held values, or whether their stress response compromises their values. This awareness will enable them to make intentional adjustments in their coping behaviors to ward off distress before it becomes unmanageable.

Also, an important part of therapy is psycho-education and skill building. The relationship between perceived parenting style and values-based action may provide a framework through which clients can come to understand how their parents' behaviors have impacted the ability to live in value-congruent ways. Rice and colleagues (1995) suggested that for many college students, it is most beneficial to address adjustment issues in the "here and now". Understanding how parental behaviors have shaped the individual offers a context through which such in-the-moment interventions can provide valuable insight for the struggling college student. In this way, a counselor may also be able to provide a reparative experience in which the student can interact with a role model who will provide responsiveness, support, and positive reinforcement.

Finally, parents can also benefit from understanding how impactful interactions with their children can be throughout their children's lives. By carefully choosing to be

responsive, supportive, and offering positive reinforcement, parents can intentionally influence their children's determination to act in ways that are consistent with their deeply held values, thus resulting in well-adjusted offspring.

Although mindfulness has gained quite a bit of attention in recent publications in the field of psychology and counseling, experiential avoidance and values-based action are still relatively new constructs. As continued research sheds new light on the predictors and outcomes for individuals with varying amounts of these characteristics, the implications can be numerous. The development of in-session interventions, as well as preventative measures, may prove to be a very useful tool for many clinicians.

Future research

The lack of significant findings in the relationships between perceived parenting style and mindfulness and experiential avoidance may provide a direction for future inquiry. Other instruments could be used to verify the lack of relationships found in this study. Indeed, the Acceptance and Action Questionnaire was revised during the course of the current study, and the AAQ-II appears to exhibit stronger reliability than does the version used here (Bond et al., 2011). Various instruments also measure different facets of mindfulness not analyzed by the current study and may provide additional perspectives on ways in which one's perceived parenting style can impact one's propensity to engage in mindfulness. It is still plausible, however, that family of origin variables play a role in influencing one's tendency to engage in mindfulness activities and experiential avoidance. Future research could focus on the impact of other family of origin or background factors on the likelihood that one will engage in mindfulness, experiential avoidance, as well as in values-based action. Regarding values-based action, whereas the

current study analyzed only the success subscale of the BVI, future research could investigate the discrepancy subscale of the BVI as it relates to perceived parenting style. Such research may provide a better understanding of not only one’s ability to live in ways that are congruent with one’s deeply held values, but also how the level of success corresponds to the relative importance of individual life values.

Additionally, since the current study focused on college students, future research may involve analyzing relationships between perceived parenting style and mindfulness, experiential avoidance, and values-based action in populations who still live within their parents’ home, such as adolescents. As mentioned previously, the use of retrospective data leaves open the possibility of individuals remembering parental behaviors differently than what they would have reported during adolescence. Therefore, the collection of data among a population who still experience their parents’ behaviors on a regular basis may provide a more accurate picture of participants’ perceptions of the parenting style in which they were raised.

Furthermore, because a large percentage of the participants in this study reported being raised by single parents or mixed families, it would be interesting to study the interactions of perceived parenting style, mindfulness, experiential avoidance, and values-based action for individuals with differing familial structures. Studying these factors may provide more detailed information to help college students understand the constellation of factors that are impeding their success at adjusting to stressful situations. An interesting addition to future research may also include controlling for various demographic variables, such as racial/ethnic background, socioeconomic status, parents’ gender/sexual orientations, or the individual’s birth order placement among siblings.

Finally, future research in this area would likely benefit from outcome studies. For instance, given the finding of the current study that individuals who perceive their parents to be indulgent are more likely to live in value-congruent ways than are individuals who perceive their parents to be neglectful, do these factors somehow combine to promote psychological well-being?

Conclusions

Overall, the results of this study indicate that perceived parenting behaviors, namely parental responsiveness, impact the likelihood that one will behave in ways that are consistent with their deeply held values. Perceived parenting styles did not significantly influence individuals' tendency to participate in mindfulness activities or experiential avoidance. This is the first study to examine the relationships between perceived parenting style, mindfulness, experiential avoidance, and values-based action, providing a new understanding of variables that contribute to, or detract from, the ability of college students to adjust to stressful situations. These results have clinical implications for counselors and individuals to better understand how parental behaviors can impact one's ability to live in ways that are consistent with their values.

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Appendix A

Demographic Questionnaire

1. Your Age:

2. How many years have you taken classes in a college or university:

3. Gender

- o Female
- o Male
- o Other

4. What is your current grade point average (GPA)?

5. What type of degree are you seeking?

- o Undergraduate
- o Graduate
- o Doctorate
- o Other

6. Which of the following best describes your ethnicity?

- o African American
- o Asian American
- o Caucasian
- o Latino/Latina
- o Native American
- o Multiracial:
- o Other:

7. Please estimate your family of origins yearly income level in U.S. dollars before taxes?

- o Under $10,000
- o $10,000 - $19,999
- o $20,000 - $29,999
- o $30,000 - $39,999
- o $40,000 - $49,999
- o $50,000 - $74,999
- o $75,000 - $99,999
- o $100,000 - $150,000
- o Over $150,000

8. Who was/were your primary caregiver(s) during the majority of your childhood and adolescence?

- Two biological parents
- Single parent
- One biological parent and one step-parent
- Other (please specify relation)

Appendix B

Mindfulness Questionnaire

The Five Factor Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietmeyer, & Toney, 2006).

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

_____ 1. When I'm walking, I deliberately notice the sensations of my body moving.
_____ 2. I'm good at finding words to describe my feelings.
_____ 3. I criticize myself for having irrational or inappropriate emotions.
_____ 4. I perceive my feelings and emotions without having to react to them.
_____ 5. When I do things, my mind wanders off and I'm easily distracted.
_____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.
_____ 7. I can easily put my beliefs, opinions, and expectations into words.
_____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.
_____ 9. I watch my feelings without getting lost in them.
_____ 10. I tell myself I shouldn't be feeling the way I'm feeling.
_____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.
_____ 12. It's hard for me to find the words to describe what I'm thinking.
_____ 13. I am easily distracted.
_____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
_____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
_____ 16. I have trouble thinking of the right words to express how I feel about things
_____ 17. I make judgments about whether my thoughts are good or bad.
_____ 18. I find it difficult to stay focused on what's happening in the present.
_____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
_____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
_____ 21. In difficult situations, I can pause without immediately reacting.
_____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
_____ 23. It seems I am "running on automatic" without much awareness of what I'm doing.

______24. When I have distressing thoughts or images, I feel calm soon after.
______ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
______ 26. I notice the smells and aromas of things.
______ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
______ 28. I rush through activities without being really attentive to them.
______ 29. When I have distressing thoughts or images I am able just to notice them without reacting.
______ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
______ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
______ 32. My natural tendency is to put my experiences into words.
______ 33. When I have distressing thoughts or images, I just notice them and let them go.
______ 34. I do jobs or tasks automatically without being aware of what I'm doing.
______ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
______ 36. I pay attention to how my emotions affect my thoughts and behavior.
______ 37. I can usually describe how I feel at the moment in considerable detail.
______ 38. I find myself doing things without paying attention.
______ 39. I disapprove of myself when I have irrational ideas.

Appendix C

Experiential Avoidance Questionnaire

The Acceptance and Action Questionnaire (AAQ; Hayes, S. C., Strosahl, K. D., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D., et al., 2004)

Instructions:
Below you will find a list of statements. Please rate the truth of each statement as it applies to you. Use the following scale to make your choice.

1	2	3	4	5	6	7
Never true	Very seldom true	Seldom true	Sometimes true	Frequently true	Almost always true	Always true

_______ 1. I am able to take action on a problem even if I am uncertain what is the right thing to do.
_______ 2. When I feel depressed or anxious, I am unable to take care of my responsibilities.
_______ 3. I rarely worry about getting my anxieties, worries, and feelings under control.
_______ 4. I'm not afraid of my feelings.
_______ 5. Anxiety is bad.
_______ 6. If I could magically remove all the painful experiences I've had in my life, I would do so.
_______ 7. I often catch myself daydreaming about things I've done and what I would do differently next time.
_______ 8. When I evaluate something negatively, I usually recognize that this is just a reaction, not an objective fact.
_______ 9. When I compare myself to other people, it seems that most of them are handling their lives better than I do.

Appendix D

Values-Based Action Questionnaire

Brief Values Inventory (BVI; McCracken & Yang, 2006)

Many people have **"VALUES"** but are not living according to their values.
For example, you may want to be a loving partner, a warm and supportive parent, a helpful and reliable friend, a person who keeps physically fit and able, or a person who is always learning new skills, but you may find yourself in circumstances where you are not living that way.

For each of the areas listed below consider how you most want to live your life. Then rate how IMPORTANT each domain is for you. This is NOT about how well you are doing in each area – it is about how important it is to you. Rate the importance you place in each domain using any number on the scale from 0 (not at all important) to 5 (extremely important). Each area need not be important to you - **rate an area low if it is not important to you personally**.

0 **Not at all Important**	**1** **Slightly Important**	**2** **Somewhat Important**	**3** **Moderately Important**	**4** **Very Important**	**5** **Extremely Important**

Consider each area according to your values, the important ways that you most want to live your life in each domain.	IMPORTANCE **Of This Domain To You**
1. FAMILY: Participation in your relationships with your parents, children, other close relatives, people you live with, or whoever is your "family."	
2. INTIMATE RELATIONS: Being the kind of partner you want to be for your husband/wife or closest partner in life.	
3. FRIENDS: Spending time with friends, doing what you need to maintain friendships, or providing help and support for others as a friend.	
4. WORK: Engaging in whatever is your occupation, your job, volunteer work, community service, education, or your work around your own home.	
5. HEALTH: Keeping yourself fit, physically able, and healthy just as you would most want to do.	
6. GROWTH AND LEARNING: Learning new skills or gaining knowledge, or improving yourself as a person as you would most want.	

In this section we want you to look at how much SUCCESS you have had in living according to your values. Many times, people find it difficult to live their lives as they want to live them.

For each of the areas of life listed below consider again how you most want to live your life. Then rate how SUCCESSFUL you have been living according to your values during the past two weeks. These questions are not asking how successful you want to be but how successful you have been. Rate your success using any number on the scale from 0 (not at all successful) to 5 (extremely successful).

0 **Not at all Successful**	**1** **Slightly Successful**	**2** **Somewhat Successful**	**3** **Moderately Successful**	**4** **Very Successful**	**5** **Extremely Successful**

Consider each area according to your values, the important ways that you most want to live your life in each domain.	SUCCESS **At Living Your Values**
1. FAMILY: Participation in your relationships with your parents, children, other close relatives, people you live with, or whoever is your "family."	
2. INTIMATE RELATIONS: Being the kind of partner you want to be for your husband/wife or closest partner in life.	
3. FRIENDS: Spending time with friends, doing what you need to maintain friendships, or providing help and support for others as a friend.	
4. WORK: Engaging in whatever is your occupation, your job, volunteer work, community service, education, or your work around your own home.	
5. HEALTH: Keeping yourself fit, physically able, and healthy just as you would most want to do.	
6. GROWTH AND LEARNING: Learning new skills or gaining knowledge, or improving yourself as a person as you would most want.	

Appendix E

Parenting Style Questionnaire

Parenting Style Questionnaire (Rossi, A., 2001)

Please consider your mother or primary female caregiver when answering the following questions:

How would you rate your relationship with your mother during the years you were growing up?
1 Excellent 2 Very good 3 Good 4 Fair 5 Poor

1 A Lot	2 Some	3 A Little	4 Not at All

1. How much did she understand your problems and worries?
2. How much could you confide in her about things that were bothering you?
3. How much love and affection did she give you?
4. How much time and attention did she give you when you needed it?
5. How much effort did she put into watching over you and making sure you had a good upbringing?
6. How much did she teach you about life?
7. How strict was she with her rules for you?
8. How consistent was she about the rules?
9. How harsh was she when she punished you?
10. How much did she stop you from doing things that other kids your age were allowed to do?

Please consider your father or primary male caregiver when answering the following questions:

How would you rate your relationship with your father during the years you were growing up?
1 Excellent 2 Very good 3 Good 4 Fair 5 Poor

1. How much did he understand your problems and worries?
2. How much could you confide in him about things that were bothering you?
3. How much love and affection did he give you?
4. How much time and attention did he give you when you needed it?
5. How much effort did he put into watching over you and making sure you had a good upbringing?
6. How much did he teach you about life?
7. How strict was he with his rules for you?
8. How consistent was he about the rules?

9. How harsh was he when he punished you?
10. How much did he stop you from doing things that other kids your age were allowed to do?

Appendix F

Social Desirability Questionnaire

Marlowe-Crowne Social Desirability Scale – Short Form C (M-C SDS Form C; Crowne & Marlowe, 1960; Reynolds, 1982)

Directions: Please mark the answer to every question in the way that fits you best.

T = True F = False

Item	T	F
1. It is sometimes hard for me to go on with my work if I am not encouraged.	Ⓣ	Ⓕ
2. I sometimes feel resentful when I don't get my way.	Ⓣ	Ⓕ
3. On a few occasions, I have given up doing something because I thought too little of my ability.	Ⓣ	Ⓕ
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.	Ⓣ	Ⓕ
5. No matter who I'm talking to, I'm always a good listener.	Ⓣ	Ⓕ
6. There have been occasions when I took advantage of someone.	Ⓣ	Ⓕ
7. I'm always willing to admit it when I make a mistake.	Ⓣ	Ⓕ
8. I sometimes try to get even rather than forgive and forget.	Ⓣ	Ⓕ
9. I am always courteous, even to people who are disagreeable.	Ⓣ	Ⓕ
10. I have never been irked when people expressed ideas very different from my own.	Ⓣ	Ⓕ
11. There have been times when I was quite jealous of the good fortune of others.	Ⓣ	Ⓕ
12. I am sometimes irritated by people who ask favors of me.	Ⓣ	Ⓕ
13. I have never deliberately said something that hurt someone's feelings.	Ⓣ	Ⓕ