The Perception of Caregiver Parenting Styles and its Association with Mental Health Functioning in College Students

by

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Abstract

This study examined the relationship between a caregiver's parenting style and a college-aged student's mental health functioning. The intention of this study was to directly connect parenting styles and an individual's mental health functioning. The current study used empirically defined parenting strategies based on Baumrind's authoritarian, authoritative, and permissive parenting styles, and self-report of individual's perceived university-related stress, depression, and anxiety. Importantly, with regard to the current study, the term "parent" references any caregiver who possesses guardianship of the child for which they are responsible. This term encompasses biological parents, adoptive parents, grandparents, legal guardians, and other potential primary caregivers in a child's life. The terms "parent," "guardian," and "caregiver" are used interchangeably. Participants consisted of college students (31 female, 10 male, 4 non-binary) recruited through Middle Tennessee State University's Department of Psychology research pool. A majority (80%) were between the ages of 18 and 21 and a majority (64.4%) were White/Caucasian. Participants completed an online self-report survey that consisted of a demographic section and four validated measures: the Parental Authority Questionnaire, the University Stress Scale, the Center for Epidemiologic Studies Depression Scale, and the Generalized Anxiety Disorder Scale. Bivariate correlations were run using all variables of interest in order to determine if there were any significant correlations in patterns of responses pertaining to the variables of interest. Hypotheses regarding perceived parenting style and symptoms of anxiety and depression were not supported.

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Literature Review

Parenting Styles

While under the age of 18, an individual living in the United States of America is considered a minor and must have a legal guardian. This guardian, usually a parent, is responsible for the child's personal well-being, offering them financial support, and making many decisions on their behalf. However, their role is more than just the legality of being held responsible for the child. Parents are expected to offer their children guidance and support through life's challenges and be there to celebrate with them during the good times. Their role is expected to promote a child's physical and emotional well-being through development. Since children spend an overwhelming majority of their childhood and adolescence with a caregiver, the caregiver naturally plays a role in children's overall development, socialization, and physical and mental health functioning (Ranson & Urichuk, 2008). Children learn from and are influenced by their parents through the feelings, behaviors, and thoughts they experience and are exposed to as they grow up (Gadsden et al., 2016).

The way in which parents raise their children (e.g., their attitudes and behaviors related to parenting) is referred to in the literature as their *parenting style* (Ren and Zhu, 2022). Baumrind (1967; 1971) was the first to identify and define different parenting styles, and they have since been widely researched and supported in the literature. Baumrind's parenting styles have been well supported in identifying and categorizing different parenting methods and patterns (Lamborn et al., 1991; Slicker, 1998). In her initial work, Baumrind (1967) proposed three primary parenting styles: authoritative parenting, authoritarian parenting, and permissive parenting. Later, a fourth parenting

style (negligent parenting) was added to describe parents who may be pathologically detached from their children's lives which results in the child's needs being neglected (Baumrind, 1971; Lee et al., 2006). These parents are inattentive to their child's behaviors, needs, and emotions and demonstrate little-to-no warmth and discipline (Gafoor & Kurukkan, 2014). For the purposes of the current study, the primary focus is on the three original parenting styles proposed by Baumrind (authoritative, authoritarian, and permissive).

Each of the defined parenting styles is primarily categorized by two underlying dimensions: parental responsiveness and parental demandingness. Parental responsiveness refers to the warmth, support, and acceptance given to a child by their caregiver. Parental demandingness refers to how a caregiver attempts to control a child's behavior or the caregiver's expectations for a child's behavior (Gafoor & Kurukkan, 2014). A designated parenting style is based on how parental values, practices, and behaviors balance these two main dimensions (Gafoor & Kurukkan, 2014). Essentially, each of the parenting styles proposed by Baumrind ranks a caregiver's values, practices, and behaviors according to how much responsiveness and demandingness they offer.

Those who are considered to use an authoritative parenting style provide a child with a disciplinary framework that is established yet flexible enough to accommodate their needs and still provide warmth along with support (Lee et al., 2006). This type of parenting showcases that the parent has an authoritative role while also giving the child a chance to express themselves. Authoritative parents demonstrate safe, firm, and consistent discipline strategies through clear and age-appropriate demands (Gafoor & Kurukkan, 2014). For example, they recognize that a 6-year-old requires different rules and expectations than a 16-year-old. As children increase in age, authoritative parents

encourage autonomy while still setting rules and healthy boundaries. Additionally, this parenting style offers a democratic climate where children are free to discuss how they feel about something (Gafoor & Kurukkan, 2014). If a rule or boundary is broken, there is an open discussion regarding the incident along with clear established consequences. Parents listen to the child's side of the situation with an attentive and forgiving nature while still offering a consequence to the action (Gafoor & Kurukkan, 2014). Their primary focus is attending to the needs and abilities of the child (Gafoor & Kurukkan, 2014). These parents exhibit high levels of warmth and responsiveness balanced with high levels of limit-setting.

On the other end of the scale, there are parents who emphasize a child's obedience and restrict their independence through an authoritarian parenting style (Lee et al., 2006). These parents emphasize their authority over a child and expect their child to unquestioningly obey that authority (Gafoor & Kurukkan, 2014). This often presents with high levels of demandingness. This results in very little communication between the parent and child. Authoritarian parents have firm control, but consequences can be inconsistent and unpredictable (Gafoor & Kurukkan, 2014). For example, a child may receive excessive punishment for breaking a rule but when the same rule is broken again, they receive a different punishment. Additionally, disobedience is often dealt with through forceful and ineffective techniques even for trivial mistakes (Gafoor & Kurukkan, 2014). Authoritarian parents focus primarily on dealing with behavior and this method can lead to a child's needs being unmet and restricted individuality of the child (Gafoor & Kurukkan, 2014). Parents with an authoritarian style demonstrate high levels of control, but low levels of responsiveness.

Parents who are labeled as having a permissive style are present in their child's life but offer little-to-no discipline or boundaries (Lee et al., 2006). Permissive parents focus on expressions of warmth, affection, support, and acceptance, at the expense of any boundaries or limit-setting (Gafoor & Kurukkan, 2014). These parents and their children tend to be viewed as equals with the caregiver possessing no clear authority, which allows the child to act with no limits. This lack of authority tends to present as caregivers who take on the role of a friend and rarely enforce rules or set limits. If occasionally a rule is enforced, the parents tend to give only minimal punishment or are ambiguous or do not follow through with stated consequences (Gafoor & Kurukkan, 2014). Instead, permissive parents focus on being involved in their child's life and adapting in the way they perceive makes their child the happiest. For example, the parents may attend every sporting event of their child but deliver no punishment if they are caught sneaking out. These parents offer high levels of responsiveness and warmth, but low levels of control or limit-setting.

Implications of Differing Parenting Styles on Child Functioning

In the literature, the authoritative parenting style is considered to have the most positive outcomes while the authoritarian style results in more negative outcomes (Alizadeh et al., 2011; Carlo et al., 2018; Majumder, 2015; Tapia et al., 2018). These outcomes have the potential to affect numerous characteristics in an individual's life during early childhood and beyond. Experienced parenting style has a role in later educational outcomes for children. Children with authoritative parents have a tendency to have better academic achievement than those with authoritarian parents (Carlo et al., 2018). According to Majumder (2015), children with authoritative parents are less likely to drop out of high school and are more likely to seek higher education than those with

uninvolved parents. While "uninvolved" does not necessarily equate to authoritarian parenting, uninvolved as described by Majumder (2015) is consistent with having low levels of responsiveness, which is consistent with how authoritarian parenting is defined. In contrast, supportive parenting styles, such as the authoritative style, lead to not only higher academic achievements but also higher levels of confidence, greater creativity, and better social skills (Alizadeh et al., 2011). Children who are persistently and consistently exposed to this parenting style generally demonstrate lower levels of problematic behavior while children of authoritarian parents have higher levels of problematic behavior (e.g., aggression, misbehavior, delinquent behavior; Alizadeh et al., 2011). The authoritarian parenting style is associated with higher levels of delinquent behaviors such as drug use (Tapia et al., 2018). While permissive parents tend to be highly responsive to their children, they tend to offer minimal guidance to their children.

The Role of Parenting in Cognitive Development

The expectation of responsibility that caregivers possess in a child's life should make it no surprise that they are a significant part of a child's development. Consider that our brains, particularly the frontal lobe, is not fully developed until approximately 25 years of age (University of Rochester Medical Center, 2022) and that children are considered minors and must have a legal guardian until they turn 18. As such, a parent or guardian is present during the majority of major developmental changes and has the potential to contribute to healthy development.

As children and adolescents continue to develop, the parenting styles they are exposed to can contribute to their psychological well-being. This well-being is vital in relation to helping an individual process various life transitions they may encounter (Abidin et al., 2022). Of course, these transitions also have the opportunity to increase

one's stress level which could contribute to future mental health problems (Johnson and Greenberg, 2013). Abidin and colleagues (2022) found that parenting styles are connected to a child's level of satisfaction with their psychological needs and their emotional well-being. Psychological need satisfaction and psychological need frustration are based on the established Self-Determination Theory which emphasizes an individual's need for relatedness, competence, and autonomy (Abidin et al., 2022). When these three needs are met, individuals may feel more connected to others, more productive, and have an ability to control their behavior (Ryan & Deci, 2017). However, when needs are unmet, an individual may feel alienated, inferior, or helpless, and try to control other people's behavior (Ryan & Deci, 2017). Supportive parenting styles (such as authoritative parenting) not only result in a child's basic psychological need satisfaction but also supports their emotional well-being (Abidin et al., 2022). Well-being is often associated with good physical and mental health, high academic achievement, interpersonal skills, and an increased ability to cope with life challenges (Abidin et al., 2022). Consequently, harsher parenting styles lead to basic psychological need frustration and decrease one's emotional well-being (Abidin et al., 2022). An individual's lack of emotional well-being can increase their risk for distress and negative feelings (Ryan & Deci, 2017).

Emotional regulation is an influential factor when it comes to an individual's stress levels and the development of depression and anxiety. In turn, this characteristic of emotional adjustment and a child's behavior is influenced by parenting styles (Haslam et al., 2020). Authoritative parenting style is associated with better emotional regulation than authoritarian parenting style where children have a decreased ability to regulate their emotions and an increase in behavioral problems (Haslam et al., 2020). Furthermore,

parenting styles can be associated with the development of maladaptive emotional regulation or with adaptive emotional regulation strategies. Maladaptive strategies tend to be associated with authoritarian parenting styles while adaptive strategies are associated with authoritative parenting styles (Haslam et al., 2020). Maladaptive strategies for regulating emotion primarily include disengagement from emotions through avoidance, distraction, and suppression whereas adaptive strategies promote the opposite: engagement with emotions (Holzman et al., 2022). An individual who engages with their emotions focuses on being mindful and reframing the situation in order to reduce negative emotions (Holzman et al., 2022). Research has demonstrated a significant connection between maladaptive strategies and mental health concerns (Holzman et al., 2022).

The Role of Parenting Strategies and Later College Stress

College students have an increased vulnerability to mental health issues and multiple stress exposures can further their risk of developing these mental challenges over the course of their study (Liu et al., 2018). Students are also no stranger to the concept of procrastination, the process of continuously putting off coursework until the last minute. According to the literature, a student's tendency to procrastinate is influenced at least partially by their parents' primary parenting style (Khalid et al., 2019). Furthermore, it has been shown that higher levels of procrastination contribute to higher levels of stress among students (Khalid et al., 2019). In other words, experienced parenting style could, theoretically, influence perceived academic stress and level of procrastination in an academic context.

A study by Khalid and colleagues (2019) demonstrated the mediating effect procrastination has in relation to parenting styles and stress levels. This study analyzed

parenting styles, but dichotomized parenting as either positive or negative parenting styles (as opposed to Baumrind's definitions). Here, positive parenting refers to a warm, affectionate, and favorable environment (akin to authoritative parenting) while negative parenting is categorized as a punishing, rejecting, and severe environment along with being overly demanding (similar to authoritarian parenting as defined by Baumrind; Khalid et al., 2019). It can be inferred that based on Khalid's definition, authoritative and permissive styles are representative of positive parenting while the authoritarian style is representative of negative parenting.

The work conducted by Khalid and colleagues (2019) showed that positive parenting styles established a more stable environment for students which lowered their risk for future procrastination and stress. The researchers also found that negative parenting styles had a positive correlation with procrastination (i.e., experience of negative parenting style was associated with higher levels of procrastination), which was also associated with an increased in a student's stress levels. Therefore, parenting styles not only contribute to a student's procrastination level but their stress levels as well. High-stress levels greatly impact a student's mental health and could lead to other mental health conditions such as depression and anxiety (Liu et al., 2018).

Parenting Styles and Mental Health Functioning in College-Aged Children

Prior research has demonstrated that students who are raised with an authoritarian parenting style experience more depressive symptoms than those whose parents used an authoritative style (Romero-Acosta et al., 2021; Lipps et al., 2012). Additionally, children of parents who used authoritative or permissive styles reported lower depressive symptoms than individuals with an authoritarian style (Romero-Acosta et al., 2021). An authoritarian parenting style is associated with various internalizing and externalizing

problems, such as poor social skills, anxiety, and aggression, which increase an individual's risk for depression (Brassell et al., 2016). With this parenting style, children and adolescents might not have the opportunity to develop psychological flexibility, which is the ability to regulate negative emotions in a way that does not control their actions (Brassell et al., 2016). Psychological flexibility serves as a protective factor against depression because children receive nurturance and regulatory strategies and develop a tolerance for negative emotions (Gottman et al., 1996; Brassell et al., 2016; Romero-Acosta et al., 2021).

College students who experience greater parental warmth were less likely to develop symptoms of depression and anxiety (Hou et al., 2020). This experience of parental warmth is a characteristic of authoritative parenting styles. Generally, the authoritarian parenting style demonstrates less warmth, and this lack of parental warmth increases an individual's risk of later depression and anxiety symptoms (Hou et al., 2020). While students with caregivers who possess a permissive parenting style report a lower level of depression symptoms, they report higher levels of anxiety (Yousaf, 2015).

The current literature provides evidence for the possible relationship between the perception of a caregiver's parenting style and the mental health functioning of students. Generally, parenting styles are associated with the development of an individual's emotional well-being and emotional regulation. Parents who possess an authoritative style raise their children in a manner that allows them to have better emotional well-being and emotional regulation skills than children raised by authoritarian parents (Abidin et al., 2022; Brassell et al., 2016; Haslam et al., 2020; Holzman et al., 2022). The ability to handle negative emotions and situations allows individuals to cope more effectively with stress in college. This psychological flexibility students gain through authoritative

parental practices not only combats stress but also decreases a student's risk of developing symptoms of depression and anxiety (Brassell et al., 2016; Holzman et al., 2022; Hou et al., 2020; Johnson & Greenberg et al., 2013; Khalid et al., 2019; Lipps et al., 2012; Romero-Acosta et al., 2021).

The Current Study

The study focuses on the following hypotheses. First, college student reports of caregivers with an authoritarian parenting style will be positively associated with levels of stress, depression, and anxiety compared to other parenting styles, as evidenced by higher scores on validated measures assessing university stress, anxiety, and depressive symptoms. Second, college students who perceive their caregivers as possessing a permissive parenting style will report low levels of stress and depression, but scores will be positively associated with symptoms of anxiety. Third, college students who perceive their caregivers as possessing an authoritative parenting style will be negatively associated with levels of stress, depression, and anxiety in comparison to the other two parenting styles.

Methods

Participants

Participants of this study included 45 students enrolled at Middle Tennessee State University (31 female, 10 male, 4 non-binary). Participants were recruited through Middle Tennessee State University's Department of Psychology research pool. The majority of participants (80%) were between the ages of 18 and 21. An additional 11.1% of participants were between the ages of 22 and 25. The remaining 8.9% of participants were 26 or older. Most participants (64.4%) identified as White/Caucasian while the next highest racial/ethnic group consisted of individuals who identified as Black/African American (17.8%). Furthermore, 6.7% of participants self-identified as Asian, 6.7% of participants said their racial/ethnic group was not listed, and the remaining 4.4% self-identified as Hispanic. There was no financial compensation for participating in this study, however, participants received extra credit in a psychology course for their participation. Institutional Review Board (IRB) approval was obtained for the current study through Middle Tennessee University's IRB (see Appendix A).

Measures

Demographics. After informed consent was obtained, participants responded to a series of demographics questions related to gender, age, and racial/ethnic background. Questions were presented in multiple choice format. Participants were asked to select what gender they identify as (i.e., *male*, *female*, *not listed*, *non-binary*, or *I prefer not to respond)*. Next, participants were prompted to report their age within a range (i.e., ranges *18-21*, *22-25*, *26 and older*, or *I prefer not to respond)*. Then participants were asked to provide their racial/ethnic background and answered based on the following responses:

Black/African American, *White/Caucasian*, *Hispanic*, *Asian*, *Not Listed* (with a space for free response), and *I prefer not to respond*.

Parental Authority Questionnaire. The Parental Authority Questionnaire (PAQ; Buri, 1991) is a 30-item scale that assesses parental authority in relation to three subscales. These subscales are authoritative, authoritarian, and permissive parenting styles with 10 questions dedicated to each of the subscales. It is applicable to both men and women as well as older adolescents and young adults (Buri, 1991). This instrument has demonstrated good internal consistency and reliability (Cronbach alphas = .75 for mother's permissiveness, .85 for mother's authoritarianism, .82 for mother's authoritativeness, .74 for father's permissiveness, .87 for father's authoritarianism, and .85 for father's authoritativeness; Buri, 1991). The measure also has strong test-retest reliability (.81 for mother's permissiveness, .86 for mother's authoritarianism, .78 for mother's authoritativeness, .77 for father's permissiveness, .85 for father's authoritarianism, and .92 for father's authoritativeness; Buri, 1991). For the purposes of the current study, the PAQ was adapted to say "caregiver" instead of "mother" or "father." Thus, participants responded to one set of items based on their experience with a caregiver, and specific caregivers were not identified. The items for this scale as well as the specific items that represent each subscale can be found in Appendix B.

Participants were asked to rate each item on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree* (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) according to how accurate the statement is based on their perspectives. The questionnaire was scored by summing the individual items that comprise the established subscale. A high score for a subscale is indicative of a high level of that parenting style.

University Stress Scale. The University Stress Scale is a 21-item scale (USS; Stallman, 2008) that was used to measure the severity of stress college students experience. These items are intended to examine general stress as well as stress specific to students in a university setting (Stallman & Hurst, 2016). Each item is intended to focus on stress related to a specific category. Some of these categorizations include academic/coursework demands, university environment, study/life balance, discrimination, and more. It is applicable to all university students despite their age, gender, ethnicity, or their attending university (Stallman & Hurst, 2016). This scale has demonstrated impressive internal consistency (Cronbach's alpha = .83; Stallman & Hurst, 2016). The measure also has good convergent validity as evidenced by a positive correlation with the Depression Anxiety Stress Scale, $r = .47$, $p < .001$ (Stallman & Hurst, 2016).

Participants were asked to rate each item on a 4-point Likert scale ranging from *not at all* to *constantly* according to how often each category has caused stress within the past month. Each item received a score according to the response selected: 0 = not at all, 1 = sometimes, 2 = frequently, and 3 = constantly. The scale is measured by summing the scores from all items. A higher score is representative of higher stress levels.

Center for Epidemiologic Studies Depression Scale. The Center for Epidemiologic Studies Depression scale (CES-D scale; Radloff, 1977) is a 20-item scale that measures depressive symptomology among the general population. This self-report scale assesses depressive symptomology based on the following components: depressed mood, feelings of guilt and worthlessness, feelings of helplessness and hopelessness, loss of appetite, sleep disturbance, and psychomotor delay (Radloff, 1977). This scale is not designed or intended for a clinical diagnosis of depression but can indicate a need for

further assessment (Radloff, 1977). The CES-D yielded a coefficient alpha of .85 in the general population (.90 in the patient/clinical population) and the test-retest reliability over a 2 to 8-week period was .57 (Radloff, 1977).

To complete this measure, individuals were asked to rate each statement according to how they have felt in the past week with responses ranging from *rarely or none of the time* to *most or all of the time*. This is on a 4-point Likert scale where 0 = Rarely or None of the Time, 1 = Some or a Little of the Time, 2 = Occasionally or a Moderate Amount of Time, and 3 = Most or All of the Time. To score the measure, positively worded items (i.e., 4, 8, 12, and 16) are reverse-coded, and then the total score is calculated by summing the scores. A higher score is indicative of a greater presence of depressive symptomology.

Generalized Anxiety Disorder Scale. The Generalized Anxiety Disorder scale (GAD-7; Spitzer et al, 2006) is a 7-item scale that was developed to assess potential cases of generalized anxiety disorder (GAD) and associated severity. This measure focuses on items specific to an individual's anxiety levels and in this study is not used as a diagnostic tool for GAD. The GAD-7 has demonstrated good internal consistency (Cronbach's alpha = .92) and test-retest reliability (intraclass correlation = .83; Spitzer et al., 2006). The construct validity is strong based on the correlation between the GAD-7 and the Beck Anxiety Inventory (r = 0.72) as well as the GAD-7's correlation with the anxiety subscale of the Symptom Checklist-90 (r = .74; Spitzer et al., 2006). These results provide evidence that the scale is reliable and valid.

To complete the GAD-7, individuals were asked to rank symptoms of anxiety on a 4-point Likert scale ranging from *not at all* to *nearly every day* based on how often they

experienced the symptom in the past 2 weeks. The scale is scored by summing the score of each individual item (0 = not at all, 1 = several days, 2 = more than half days, 3 = nearly every day) to get a total score. Their level of anxiety is then classified as minimal, mild, moderate, or severe according to the total score. The range for each severity level is as follows: 0-4 is minimal, 5-9 is mild, 10-14 is moderate, and 15-21 is severe (Spitzer et al., 2006). The higher an individual's total score is then the more severe their anxiety is expected to be.

Procedure

The survey was created through Qualtrics and distributed through SONA to recruit participants from Middle Tennessee State University's Department of Psychology subject pool. Participants were prompted to provide informed consent prior to initiating the study. Once informed consent was obtained, participants were prompted to complete the survey. Once they completed the survey, they reviewed the debriefing statement and were then provided with the contact information of the researchers for future questions, comments, or concerns.

Results

Following data collection, data was imported to SPSS from Qualtrics and prepared for data cleaning. A visual analysis of the raw data showed that some data needed to be removed before analyses could take place. Participants who did not provide informed consent at the beginning of the survey had their data removed. Additionally, participants who left all or a significant amount of the survey blank had their data removed due to incompletion. Due to a technical error within the SONA system, there were duplicate submissions where the survey had been completed by the same participant more than once. Duplicate data was identified by identifying data that had the same ID number (i.e., there were a number of completed surveys in which the same ID number was used, indicating they were completed by the same participant). These duplicate submissions were reviewed, and researchers elected to retain the first survey submission from any data that had the same ID number (based on the completeness of submissions) while other submissions were removed from the final dataset. After data cleaning, there were a total of 45 participants remaining with usable data.

Once the data was cleaned, the data was recoded as necessary and total scores for measures were calculated. Further descriptive statistics were run to assess the normality of the data. Skewness was found to be within the acceptable limits of -2 and +2 as stated by George and Mallery (2010). The descriptive statistics of data can be found in Table 1.

Table 1

Descriptive Statistics of Variables of Interest

	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness Statistic
USS	4.00	41.00	19.8889	10.01413	.622
GAD	.00	19.00	9.2000	5.48386	.075
CES-D	2.00	41.00	21.1860	10.73547	.004
PAQ Permissive	10.00	37.00	23.8444	7.00635	.072
PAQ Authoritarian	14.00	50.00	34.0222	8.51867	-.507
PAQ Authoritative	14.00	48.00	29.8889	8.38077	-.223

Note: the total score of each measurement was categorized according to their specific measure. The Parental Authority Questionnaire was separated into the total score corresponding to each subscale of the measure.

Bivariate correlations were calculated for all variables of interest. These variables of interest include all of the ones mentioned above (USS, GAD-7, CES-D, PAQ Permissive, PAQ Authoritarian, and PAQ Authoritative). As seen in Table 2, there were no significant Pearson correlations found between the PAQ subscales and the USS, GAD-7, or CES-D. Importantly, there was a non-significant, yet positive correlation between authoritarian parenting and perceived university stress (r = .291, p = .052).

Table 2

Correlations Between PAQ subscales and Other Measures

	USS	GAD-7	CES-D
PAQ Permissive	.085	.150	.148
PAQ Authoritarian	.291	.161	.076
PAQ Authoritative	-.058	-.019	-.129

While not included in the primary hypotheses of this study, Pearson correlations were conducted among the other variables of interest. Table 3 showcases the Pearson's r values found among the GAD-7, CES-D, and the USS. There was a significant positive

correlation between the GAD-7 and the USS ($r = .736$, $p < .001$). The USS also demonstrated a significant correlation with the CES-D ($r = .558$, $p < .001$). Finally, there was a significant correlation between the GAD-7 and the CES-D ($r = .756$, $p < .001$).

Table 3

Correlational data for the USS, GAD-7, and CES-D

	USS	GAD-7	CES-D
USS	1	.736**	.558**
GAD	.736**	1	.756**
CES-D	.558**	.756**	1

*Note: ** correlation is significant at the 0.01 level (2-tailed)*

Lastly, a Pearson correlation was run between each of the subscales on the PAQ. A significant negative correlation was demonstrated between the permissive and authoritarian parenting styles ($r = -.565$, $p < .001$). A moderate positive correlation was found between the permissive and authoritative parenting styles ($r = .376$, $p = .011$).

Table 4

Correlational Data for the PAQ Subscales

	PAQ Permissive	PAQ Authoritarian	PAQ Authoritative
PAQ Permissive	1	-.565**	.376*
PAQ Authoritarian	-.565**	1	-.273
PAQ Authoritative	.376*	-.273	1

*Note: ** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed)*

Discussion

Responses on the USS were not significantly correlated with any of the PAQ's subscales, which is inconsistent with the findings of Khalid and colleagues (2019). Those findings indicated that parenting styles were positively correlated with a student's level of stress (Khalid et al., 2019). While insignificant, the USS did produce the highest correlation with an authoritarian parenting style. Notably, the resulting *p*-value of .052 indicates the relationship is trending toward significance. In other words, had the study had more power or a larger sample size, it is possible that the data could have resulted in a significant relationship among the variables. The current study cannot draw conclusions regarding a significant relationship between a student's stress level and an authoritarian parenting style, but there is reason to believe there could still be a connection with further research.

The results of the current study demonstrated no significant correlations among the CES-D with any of the PAQ's subscales which contradicts the findings of Romero-Acosta and colleagues (2021) and Lipps and colleagues (2012). Their research found that students who had a caregiver with an authoritarian parenting style experienced more depressive symptoms than students who were raised with an authoritative parenting style (Romero-Acosta et al., 2021; Lipps et al., 2012). It is even more interesting to consider that the current study found that those with a caregiver who used an authoritarian parenting style endorsed fewer symptoms on the CES-D. This contradicts previous evidence that shows that individuals raised with a permissive or authoritative parenting style should have lower levels of depression than those raised with an authoritarian parenting style (Romero-Acosta et al., 2021). However, since there were no significant

correlations between the CES-D and the parenting style subscales, no definitive conclusions can be drawn.

The GAD-7 produced no correlation with any of the PAQ subscales which contradicts the findings that individuals with a caregiver who has an authoritarian parenting style are more likely to experience high levels of anxiety (Hou et al., 2020). The current study did not find any significant correlation to support previous findings that an individual who experienced a caregiver with a permissive parenting style will report higher levels of anxiety (Yousaf, 2015). While students who scored high on the permissive or authoritarian parenting style subscale did show a larger correlation than students who scored on high the authoritative parenting style subscale, no conclusions can be drawn as results were non-significant.

Overall, the study was unable to find support for the proposed hypotheses. However, the comparisons are still interesting to look at in relation to the hypotheses of the study. Those who scored higher on the authoritarian parenting style subscale tended to have higher correlation with the GAD-7 and the USS compared to the other subscales but had the lowest correlation with the CES-D. The permissive parenting style subscale had the highest correlation with the CES-D. It also had a fairly high correlation, comparatively, with the GAD-7. The authoritative parenting style subscale had a fairly low correlation, comparatively, with the USS and GAD-7, but had a correlation similar to the permissive parenting style subscale with the CES-D.

Limitations and Future Directions

Notable limitations of the current study include the small/limited pool from which data was drawn and the small sample size of the study. The pool from which the sample

was recruited was limited to psychology majors at a large public university. Furthermore, due to technical errors that occurred during the data collection process, data collection had to be halted midway through, and as such, a limited number of participants were recruited. A larger sample size provides more information regarding connection between parenting styles and a college student's mental health functioning.

Future research should include replication of the study with a larger, more generalized sample. The direct relationship between parenting styles and a student's mental health should continue to be researched due to the existing research that states that parenting styles do impact an individual's emotional regulation and emotional well-being. Especially since these two factors are shown to be influential in an individual's mental health.

The demographics present another limitation of the study. A majority (68.9%) of the participants were female which affects the generalization of the results. Additionally, a majority (64.4%) of participants were White/Caucasian which limits the generalization of results to a broader population. It would be important for future research to examine the possible connection between parenting styles and a student's mental health functioning across demographic groups with a larger sample. This also offers an opportunity to study the cultural implications of parenting styles and mental health. Various cultures have different values regarding the role parents/caregivers play in an individual's life as well as the way mental health issues are acknowledged and treated. It could be an interesting future direction to this study to investigate the role of culture on the association between parenting styles and mental health or perception of university-related stress in college students.

Conclusion

The purpose of this study was to examine the relationship between a caregiver's parenting style on the mental health of college-aged students. Prior research has demonstrated that parenting styles can impact an individual's mental processes in various ways. Primarily, research has demonstrated the impact of parenting styles on cognitive development, emotional regulation, and stress. Parenting styles are also especially important in meeting an individual's psychological needs and assisting their emotional well-being, which are both influential. Furthermore, the mental processes affected by parenting styles have been shown to impact mental health as well. Emotional regulation is important in maintaining positive mental health and if a caregiver does not aid in the development of emotional regulation, then maladaptive strategies can lead to mental health concerns (Holzman et al., 2022). The current study intended to directly connect the possible correlation between a caregiver's parenting style and a college student's mental health.

References

Abidin, F. A., Yudiana, W., & Fadilah, S. H. (2022). Parenting Style and Emotional Well-Being Among Adolescents: The Role of Basic Psychological Needs Satisfaction and Frustration. *Frontiers in Psychology*, 13, 1–10. https://doi.org/10.3389/fpsyg.2022.901646

Alizadeh, S., Abu Talib, M. B., Abdullah, R., & Mansor, M. (2011). Relationship between parenting style and children's behavior problems. *Asian Social Science*, 7(12). https://doi.org/10.5539/ass.v7n12p195

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75(1), 43-88.

Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*, 4(1, Pt.2), 1–103. https://doi.org/10.1037/h0030372

Bouffard, L. (2017). Ryan, R. M. et Deci, E. L. (2017). Self-determination theory. Basic psychological needs in motivation, development and wellness. New York, NY: Guilford Press. *Revue Québécoise de Psychologie*, 38(3), 231. https://doi.org/10.7202/1041847ar

Brassell, A. A., Rosenberg, E., Parent, J., Rough, J. N., Fondacaro, K., & Seehuus, M. (2016). Parent's psychological flexibility: Associations with parenting and child psychosocial well-being. *Journal of Contextual Behavioral Science*, 5(2), 111– 120. https://doi.org/10.1016/j.jcbs.2016.03.001

Buri, J.R. (1991). Parental Authority Questionnaire. *Journal of Personality and Social Assessment*, 57(1), 110-119. https://doi.org/10.1207/s15327752jpa5701_13

Carlo, G., Streit, C., Zeiders, K. H., White, R. M. B., & Knight, G. P. (2018). Longitudinal Relations Among Parenting Styles, Prosocial Behaviors, and Academic Outcomes in U.S. Mexican Adolescents. *Child Development*, 89(2), 577-592. https://doi.org/10.1111/cdev.12761

Ehnvall, A., Parker, G., Hadzi-Pavlovic, D., & Malhi, G. (2008). Perception of rejecting and neglectful parenting in childhood relates to lifetime suicide attempts for females – but not for males. *Acta Psychiatrica Scandinavica*, 117(1), 50–56. https://doi.org/10.1111/j.1600-0447.2007.01124.x

Gadsden, V. L., Ford, M., & Breiner, H. (2016). Parenting Knowledge, Attitudes and Practices. In *Parenting matters: Supporting parents of children ages 0-8*. The National Academies Press. https://doi.org/10.17226/21868

Gafoor, K. A., & Kurukkan, A. (2014). Construction and validation of scale of parenting style. *Guru Journal of Behavioral and Social Sciences*, 2(4), 315-323.

George, D. & Mallery, M. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update (10a ed.) Boston: Pearson.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental metaemotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, 10(3), 243– 268. https://doi.org/10.1037/0893-3200.10.3.243

Haslam, D., Poniman, C., Filus, A., Sumargi, A., & Boediman, L. (2020). Parenting style, child emotion regulation and behavioral problems: The moderating role of cultural values in Australia and Indonesia. *Marriage & Family Review*, 56(4), 320–342. https://doi.org/10.1080/01494929.2020.1712573

Holzman, J. B. W., Kennedy, S. M., Grassie, H. L., & Ehrenreich-May, J. (2022). Associations between dispositional parental emotion regulation and youth mental health symptoms: A systematic review and meta-analysis. *Clinical Psychology Review*, 95, 1–20. https://doi.org/10.1016/j.cpr.2022.102174

Hou, Y., Xiao, R., Yang, X., Chen, Y., Peng, F., Zhou, S., Zeng, X., & Zhang, X. (2020). Parenting style and emotional distress among Chinese college students: A potential mediating role of the Zhongyong thinking style. *Frontiers in Psychology*, 11. https://doi.org/10.3389/fpsyg.2020.01774

Johnson, L. E., and Greenberg, M. T. (2013). Parenting and early adolescent internalizing: the importance of teasing apart anxiety and depressive symptoms. *J. Early Adolescence*, 33(2), 201–226. https://doi.org/10.1177/0272431611435261

Khalid, A., Zhang, Q., Wang, W., Ghaffari, A. S., & Pan, F. (2019). The relationship between procrastination, perceived stress, saliva alpha-amylase level and parenting styles in Chinese first year medical students. *Psychology Research and Behavior Management*, 12, 489–498. https://doi.org/10.2147/prbm.s207430

Lamborn, S. D., Mounts, N. S., Steinberg, L., & Dornbusch, S. M. (1991). Patterns of Competence and Adjustment among Adolescents from Authoritative, Authoritarian, Indulgent, and Neglectful Families. *Child Development*, 62(5), 1049. https://doi.org/10.2307/1131151

Lee, S. M., Daniels, M. H., & Kissinger, D. B. (2006). Parental Influences on Adolescent Adjustment: Parenting Styles Versus Parenting Practices. *The Family Journal*, 14(3), 253–259. https://doi.org/10.1177/1066480706287654

Lipps, G., Lowe, G. A., Gibson, R. C., Halliday, S., Morris, A., Clarke, N., & Wilson, R. N. (2012). Parenting and depressive symptoms among adolescents in four Caribbean societies. *Child and Adolescent Psychiatry and Mental Health*, 6(1), 31. https://doi.org/10.1186/1753-2000-6-31

Liu, C. H., Stevens, C., Wong, S. H. M., Yasui, M., & Chen, J. A. (2019). The prevalence and predictors of mental health diagnoses and suicide among US College students: Implications for addressing disparities in service use. *Depression and Anxiety*, 36(1), 8–17. https://doi.org/10.1002/da.22830

Majumder, M. A. (2015). The impact of parenting style on children's educational outcomes in the United States. *Journal of Family and Economic Issues*, 37(1), 89–98. https://doi.org/10.1007/s10834-015-9444-5

Radloff, L. S. (1977). The CES-D Scale. *Applied Psychological Measurement*, 1(3), 385–401. https://doi.org/10.1177/014662167700100306

Ranson, K. E., & Urichuk, L. J. (2008). The effect of parent–child attachment relationships on Child Biopsychosocial Outcomes: A Review. *Early Child Development and Care*, 178(2), 129–152. https://doi.org/10.1080/03004430600685282

Ren, W., & Zhu, X. (2022). Parental Mediation and Adolescents' Internet Use: The Moderating Role of Parenting Style. *Journal of Youth and Adolescence*, 51(8), 1483–1496. https://doi.org/10.1007/s10964-022-01600-w

Romero-Acosta, K., Gómez-de-Regil, L., Lowe, G. A., Lipps, G. E., & Gibson, R. C. (2021). Parenting styles, anxiety and depressive symptoms in child/adolescent.

International Journal of Psychological Research, 14(1), 12–32. https://doi.org/10.21500/20112084.4704

Sang Mi Lee, Daniels, M. H., & Kissinger, D. B. (2006). Parental Influences on Adolescent Adjustment: Parenting Styles Versus Parenting Practices. *Family Journal*, 14(3), 253–259. https://doi.org/10.1177/1066480706287654

Slicker, E. K. (1998). Relationship of parenting style to behavioral adjustment in graduating high school seniors. *Journal of Youth and Adolescence*, 27(3), 345-372. https://doi.org/10.1023/a:1022855104236

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. https://doi.org/10.1001/archinte.166.10.1092

Stallman, H. M. (2008). *University Stress Scale*. Brisbane: Queensland University of Technology

Stallman, H. M., & Hurst, C. P. (2016). The University Stress Scale: Measuring domains and extent of stress in university students. *Australian Psychologist*, 51(2), 128-134. https://doi.org/10.1111/ap.12127

Tapia, M., Alarid, L. F., & Clare, C. (2018). Parenting styles and juvenile delinquency: Exploring gendered relationships. *Juvenile and Family Court Journal*, 69(2), 21–36. https://doi.org/10.1111/jfcj.12110

University of Rochester Medical Center. (n.d). *Understanding the Teen Brain.* University of Rochester Medical Center Health Encyclopedia. Retrieved October 10, 2022, from

https://www.urmc.rochester.edu/encyclopedia/content.aspx?ContentTypeID=1&ContentID=3051

Yousaf, S. (2015). The Relation between Self-Esteem, Parenting Style and Social Anxiety in Girls. *Journal of Education and Practice*, 6(1), 140–142.

APPENDICES

APPENDIX A: Institutional Review Board Approval

Office of Research Compliance
2269 Middle Tennessee Blvd.
Sam H. Ingram Bldg (ING) Room 010A
Box 124
Murfreesboro, TN 37132
www.mtsu.edu/irb

Date: February 7, 2023

PI: Ciera Schoonover

Department: Middle Tennessee State University, Psychology

Re: Initial - IRB-FY2023-40

The Perception of Caregiver Parenting Styles and its Association with Mental Health Functioning in College Students

The Middle Tennessee State University Institutional Review Board has rendered the decision below for The Perception of Caregiver Parenting Styles and its Association with Mental Health Functioning in College Students. The approval is effective starting February 6, 2023.

Decision: Approved

Category: 7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Findings:

Research Notes:

Please note:

Any modifications to the approved study must be submitted for review through Cayuse IRB. Please note, as well, that according to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to complete the required training. If you add researchers to an approved project, please add them to the project within Cayuse IRB for approval before they begin to work on the project.

Any unanticipated harm to participants or adverse events must be reported to the Office of Compliance, and any subsequent changes to the protocol must be submitted to the IRB for review before implementing this change.

You must submit an end-of-project form to the Office of Compliance upon completion of your research. Completed research means that you have finished collecting data.

All research materials must be retained by the PI or faculty advisor (if the PI is a student) for at least three (3) years after study completion and then destroyed in a manner that maintains confidentiality and anonymity.

All approval letters and study documents are located within the Study Details in Cayuse IRB.

We wish you a successful research project,

Middle Tennessee State University Institutional Review Board

APPENDIX B: Parental Authority Questionnaire (PAQ; Buri, 1991)

Instructions: For each of the following statements, indicate the number of the 5-point scale (1= strongly disagree, 5 = strongly agree) that best describes how that statement applies to you and your primary caregiver. Try to read and think about each statement as it applies to you and your caregiver during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one site. We are looking for your overall impression of each statement. Be sure not to omit any items.

	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly Agree
1. While I was growing up my caregiver felt that in a well-run home the children should have their way in the family as often as the parents do.					
2. Even if their children didn't agree with them, my caregiver felt that it was for our own good if we were forced to conform to what they thought was right.					
3. Whenever my caregiver told me to do something as I was growing up, they expected me to do it immediately without asking any questions.					
4. As I was growing up, once family policy had been established, my caregiver discussed the reasoning behind the policy with the children in the family.					
5. My caregiver has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.					
6. My caregiver has always felt that what their children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.					
7. As I was growing up my caregiver did not allow me to question any decision they had made.					

8. As I was growing up my caregiver directed the activities and decisions of the children in the family through reasoning and discipline.					
9. My caregiver has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.					
10. As I was growing up my caregiver did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.					
11. As I was growing up I knew what my caregiver expected of me in my family, but I also felt free to discuss those expectations with my caregiver when I felt that they were unreasonable.					
12. My caregiver felt that wise parents should teach their children early just who is boss in the family.					
13. As I was growing up, my caregiver seldom gave me expectations and guidelines for my behavior.					
14. Most of the time as I was growing up my caregiver did what the children in the family wanted when making family decisions.					
15. As the children in my family were growing up, my caregiver consistently gave us direction and guidance in rational and objective ways.					
16. As I was growing up my caregiver would get very upset if I tried to disagree with them.					
17. My caregiver feels that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they are growing up.					
18. As I was growing up my caregiver let me know what behavior they expected of me, and if I didn't meet those expectations, they punished me.					
19. As I was growing up my caregiver allowed me to decide most things for myself without a lot of direction from them.					

20. As I was growing up my caregiver took the children's opinions into consideration when making family decisions, but they would not decide for something simply because the children wanted it.					
21. My caregiver did not view themself as responsible for directing and guiding my behavior as I was growing up.					
22. My caregiver had clear standards of behavior for the children in our home as I was growing up, but they were willing to adjust those standards to the needs of each of the individual children in the family.					
23. My caregiver gave me direction for my behavior and activities as I was growing up and they expected me to follow their direction, but they weren't always willing to listen to my concerns and to discuss that direction with me.					
24. As I was growing up my caregiver allowed me to form my own point of view on family matters and generally allowed me to decide for myself what I was going to do.					
25. My caregiver has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.					
26. As I was growing up my caregiver often told me exactly what they wanted me to do and how they expected me to do it.					
27. As I was growing up my caregiver gave me clear direction for my behaviors and activities, but they were also understanding when I disagreed with them.					
28. As I was growing up my caregiver did not direct the behaviors, activities, and desires of the children in the family.					
29. As I was growing up I knew what my caregiver expected of me in the family and they insisted that I conform to those expectations					

simply out of respect for their authority.					
30. As I was growing up, if my caregiver made a decision in the family that hurt me, they were willing to discuss that decision with me and to admit it if they had made a mistake.					

Permissive (items 1, 6, 10, 13, 14, 17, 19, 21, 24 and 28)

Authoritarian (items 2, 3, 7, 9, 12, 16, 18, 25, 26 and 29)

Authoritative (items 4, 5, 8, 11, 15, 20, 22, 23, 27, and 30)