

VALIDATION OF HELICOPTER PARENTING: AN EXAMINATION OF
MEASURES AND PSYCHOLOGICAL OUTCOMES

by

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A Dissertation Submitted in Partial Fulfillment of the
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Doctor of Psychology

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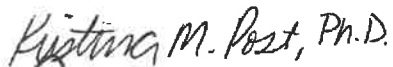
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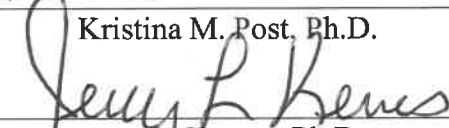
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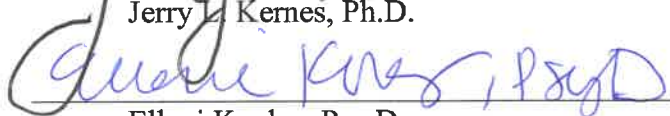
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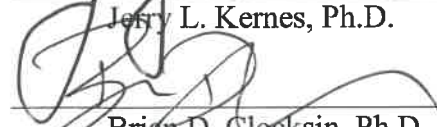
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ABSTRACT

The purpose of this study was to gain a deeper understanding of helicopter parenting, a parenting style characterized by parents' overinvolvement in their adult children's lives. Specifically, this study evaluated existing measures of helicopter parenting, whether helicopter parenting relates to negative psychological outcomes, and tested for gender and ethnic differences across the negative outcomes associated with helicopter parenting. Participants ($N = 185$) were college students aged 18-25 years living in the United States who were recruited through a small, private university in Southern California and online through Facebook. Four existing measures of helicopter parenting were identified and found to be significantly positively correlated to one another. All helicopter parenting measures were also found to significantly positively correlate to negative psychological outcomes including depression, anxiety, and stress, while also negatively correlating with a measure of self-efficacy. Gender was identified as a moderator in some of the relationships between helicopter parenting and self-efficacy, while ethnicity did not significantly moderate these relationships. This study adds to the literature by exploring helicopter parenting as a unique parenting construct and examining existing measures as to how they relate to psychological outcomes.

I dedicate this dissertation to each and every member of my family. Without their support completion of this dissertation, and my journey through graduate school, would not have been possible. To my parents- Thank you for every way in which you have helped me continue to push forward and for believing that I could do this. Obstacles that have risen through this process had the power to throw me off course, time and time again, but I have always had you as pillars of strength. To my sisters- we are a tribe. Through it all you have kept me laughing, which was needed more than you will ever realize. Kathleen- your willingness to include me in your cohort and impart your graduate school wisdom has always guided me to success. To Brittany- You have been a peer, a teacher, and a friend. You have dedicated time above and beyond to help me complete this dissertation and have always stayed patient with me, regardless of how many times I needed you to re-explain some statistical concept to me. This really would not have been possible without you. To Nolan and James- You both came into my life at a moment when I needed to be lifted up and motivated to continue and you continue to do that every day. I love and appreciate you all.

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CHAPTER I

LITERATURE REVIEW

Introduction

Imagine a college student, registering for classes in their junior year. Because this student has procrastinated and missed their registration time, when they try to register for classes a week before they start, there is a waiting list for one of their classes. The student attends the first day of class, but is told they are unable to enroll in the class that semester and will have to postpone taking that class until the next semester, altering their course agenda for the next year. The student calls their parent, who then takes it upon themselves to email the professor on behalf of the student. Once the professor denies entrance to the class based on the parent's email, the parent then files an appeal with the registrar's office. This parent's concern for their child's ability to complete all the necessary classes for a degree and resulting intervention into their adult child's academic arena to bypass the problem originally created by the student's procrastination, can best be described by a phenomenon known as helicopter parenting. Originally coined by Cline and Fay (1990), a helicopter parent is characterized as an overly involved parent who hovers over their college-aged child, serving as a protector against and resolving any problems or obstacles that their child might face.

In recent years, the phenomenon of helicopter parenting has received much attention, as the phenomenon appears to be rampant among Millennial-aged college students. Although there are no known prevalence rates of helicopter parenting, there are reports of helicopter parents having contacted university officials and professors, disputing their child's grades and doing such things as attending job fairs and interviews

with their children (Vinson, 2013). The increasing awareness of these intrusive behaviors and the worry that helicopter parenting is damaging the development of Millennials as they transition from adolescence to early adulthood, calls for greater empirical and conceptual understanding of this phenomenon.

Helicopter parenting is a rather new term that has emerged. According to LeMoyne and Buchanan (2011), this parenting approach does not fit well within traditional conceptualizations of different types of parenting styles or dimensions. Helicopter parenting specifically refers to a level of involvement in emerging adulthood that is developmentally inappropriate (LeMoyne & Buchanan, 2011). It is associated with the good intention of aiding a young adult to ensure their success. Helicopter parents tend to remain in close proximity to their child as well as to aspects of their child's life, including their academic, occupational and even social endeavors. They tend to intervene when any obstacle, conflict, or required action arises in an effort to eliminate any setbacks for their child (LeMoyne & Buchanan, 2011). However, despite the usually good intent of parents, when this type of parenting is used with college-aged children, it is considered developmentally inappropriate over-parenting (LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). College-age emerging adults are transitioning from adolescence to being independent adults. Therefore, the lack of control given to college-aged children by helicopter parents may prohibit children from navigating their world, including their academic/professional world independently. Indeed, studies suggest that helicopter parenting is linked with negative psychological outcomes and poorer overall well-being of young adults as they navigate their ascent into adulthood

(Givertz & Segrin 2014; Heider et al., 2008; Meites et al., 2012; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014; Spokas & Heimberg, 2009; van Ingen et al., 2015).

As the literature on helicopter parenting, especially the literature linking it to negative outcomes grows, the importance of understanding the phenomenon becomes increasingly important. While the literature has grown, a consistent operational definition of helicopter parenting is lacking. Without a clear agreement on the definition of the construct, it is difficult to integrate and compare results from different studies and to make progress forward.

The purpose of this study was to shed more light on the definition and measurement of helicopter parenting. Specifically, the purpose was to evaluate the validity of measures of helicopter parenting and to examine how these existing measures of helicopter parenting relate to each other. How these measures of helicopter parenting relate to outcomes of depression, anxiety, stress, and self-efficacy was also explored. Identifying a measure that best captures the unique parenting behaviors of helicopter parenting and predicts a relationship with negative outcomes has clinical utility in enabling clinicians to more confidently screen for students who might be experiencing psychological distress due to larger issues within the family system, namely parenting behaviors. Lastly, gender and ethnic differences in the negative outcomes of helicopter parenting were also examined.

Parenting Styles

Researchers and clinicians have long been interested in the influence of parenting behaviors on child development. Behaviorists focus on how patterns of reinforcement in a child's environment shape their development, and Freudian theorists believe there are

biological determinants of development that conflict with parental desires and societal requirements (Darling & Steinberg, 1993). Out of general agreement that parenting practices influence child development, the concept of parenting style was developed initially as a way to describe the parenting milieu. Throughout the years, researchers from different theoretical perspectives have proposed different processes through which parenting styles influence children consistent with their theoretical orientation and view of the origins of maladaptive behavior (Darling & Steinberg, 1993). While there are a wide variety of theories of parenting styles, Baumrind's (1966) parenting typologies, later revised by Maccoby and Martin (1983), in addition to broader concepts of parental control (e.g., psychological and behavioral control) are reviewed here because such theories are the most useful for capturing the specific parenting style of the helicopter parent.

Typological parenting styles. One of the most influential theories of parenting is Baumrind's (1966) parenting typologies. According to Darling and Steinberg (1993), Baumrind's operationalization of parenting style set her apart from earlier researchers in a few ways. First, rather than extracting multiple dimensions of parenting behavior and defining parenting style as a linear combination of these styles, Baumrind focused on one parenting function, control. Secondly, rather than organizing parental control from high to low, she presented three qualitatively different types of parental control: permissive, authoritarian and authoritative. Lastly, Baumrind argued that the influence of one aspect of parenting (e.g., ideology, maturity demands or the use of discipline) is dependent on the configuration of all other aspects.

According to Baumrind (1966), parenting practices favored by American parents have changed from over time. Pre-empirical views of children and child rearing were mostly based on humanistic or religious values. Then, stemming from the psychoanalytic view that gratification of needs is essential for secure and healthy adult personalities, child rearing in the late 1940s and 50s was centered around the complete acceptance of the child's needs for gratification rather than around preparing the child for adulthood; a generally permissive approach to parenting. With progressivism in American education during the late 1900s, instead of giving children complete freedom, teachers began insisting that children conform to rules of conduct by implementing a level of authority. Therefore, conversations about the best way to rear children involved discussions of the ideal level of adult control. Baumrind's (1966) work reflects this shift in thinking and presents three qualitatively different prototypes of adult control (permissive, authoritarian, and authoritative).

According to Baumrind (1966), a permissive parent is non-controlling, non-punitive, acceptant and affirmative towards the child's impulses, desires and actions. A permissive parent makes few demands of responsibility or orderly behavior. A permissive parent makes themselves a resource for the child to use as they wish but does not take responsibility for shaping or altering the child's behavior. Also, the permissive parent does not act as a role-model or demonstrate responsible behavior which the child is encouraged to emulate. Permissive parents resort to using manipulation, or attempts to reason, to get what they desire from the child, rather than overt parental power (Baumrind, 1966).

In stark contrast to the permissive parent, an authoritarian parent holds a set standards of conduct with a high level of control (Baumrind, 1966). Through such standards, they attempt to shape, control, and evaluate the behavior and attitudes of the child. Authoritarian parents value obedience and use forceful or punitive measures to correct actions or beliefs of the child that are viewed as straying from the strict set of standards. Authoritarian parents restrict a child's autonomy and assign the child with many responsibilities. Authoritarian parents view their word as the last, with no room for verbal negotiation from the child (Baumrind, 1966).

Lastly, authoritative parents attempt to shape or direct the child's behaviors in a rational, issue-oriented manner with a moderate level of control (Baumrind, 1966). Authoritative parents encourage and facilitate verbal negotiations regarding childrearing and will share the reasoning behind parental control or intervention with the child. Authoritative parents exercise their parental control, with respect for the child's individual interests (Baumrind, 1966).

Baumrind's (1966) three prototypes, all with varying levels of control, are theoretically associated with different child outcomes. According to Baumrind (1966) permissive parenting can result in impulsivity and a lack of understanding for consequences, which is in turn associated with carelessness, insecurity and even aggression. Likewise, punitive, hostile, or non-empathic parenting, or authoritarian parenting, is associated with behaviors in children including withdrawal, acting out, dependency, and nervousness due to emotional and cognitive disturbances created by the hostile environment.

Baumrind (1966, p. 904) explains that both permissive and authoritarian parents can create a climate in which the child is not “desensitized to anxiety with nonconformity.” What this means is that children of permissive or authoritarian parents do not have the experience of being met with differences between themselves and others; they do not learn how to appropriately handle when what they do does not conform with others. With both permissive and authoritarian parenting, children may be shielded from vigorous interaction with people. Too low of standards or too high of standards, or too much help or a refusal to help, can result in the child failing to gain the knowledge and experience that could reduce their dependence on the outside world.

Permissive and authoritarian parents, in different ways, minimize dissent through indulgence or suppression. In these scenarios, children do not learn appropriate prosocial ways to deal with nonconformity or disagreement, albeit in opposite ways, by not feeling the consequences of acting in socially unacceptable ways (as in the case of permissive parents) or by being too harshly punished (as in the case of authoritarian parents). On the other hand, parenting behaviors more indicative of authoritative parenting, such as demanding reasonable levels of responsibility in children and explanation of parental interventions, seem to provide surroundings conducive to the child’s well-being and do not tend to provoke rebellion or result in the negative child outcomes seen with authoritarian parenting and permissive parenting. For example, with authoritative parenting, the rules and rationale behind parenting decisions are clearly explained so children develop a prosocial rationale of right and wrong. If accompanied with the warmth and respect associated with authoritative parenting, children learn how to express aggression in a prosocial way and learn to accept the unpleasant consequences of socially

nonconforming actions. Also, a parent who asserts control but who is also warm, understanding, and autonomy-granting should generate less passivity as well as less rebelliousness (Baumrind, 1966).

One of the primary reasons why authoritative parenting results in the best child outcomes is that these parents grant children autonomous decision making in addition to some guidance (Baumrind, 1966). Specifically, Baumrind asserts that the ability to make an autonomous decision includes that external agents (parents) leave the child to formulate, initiate and carry out the decision. With the freedom to make a decision comes the feedback and lesson learned if there are negative outcomes to the decision. Being able to autonomously make a decision and learn from mistakes is viewed as an important step in becoming more autonomous and responsible. For example, an emerging adult who makes their own decisions, such as procrastinating registering for classes, will experience the consequences of that decision, such as not being able to enroll in classes or complete their degree in a timely manner. If a parent makes the decision instead by insisting repeatedly until the emerging adult registers for classes, the emerging adult is more removed from the follow through of the decision process and may not benefit from the learning experience of being responsible for their decisions. Being removed from decision making processes and not experiencing obstacles that arise from decisions made may result in the loss of valuable life lessons including the confidence that is created through trial and error in decision making processes. An emerging adult essentially forced to register on time through parental nagging will not necessarily understand the rationale or importance of taking their own initiative to register on time, or alternatively of learning the consequences of not registering on time.

Baumrind (1966) concedes that while leaving the child to formulate the decision may be ideal, there also are good reasons for parents to lend guidance in that decision, specifically through direct methods of cognitive appeal or power rather than through indirect methods such as nurturance withdrawal or guilt induction (forms of psychological control). Authoritative parents offer such direct guidance as opposed to the indirect methods used by permissive and authoritarian parents. According to Baumrind's parenting typologies, authoritative parenting results in the best child outcomes because of the balance between autonomy granting and direct guidance.

By the 1980s, Baumrind's (1966) authoritative-authoritarian-permissive parenting typology was firmly engrained in the field of child development and held a leading position in the discussion of how parents influence their children's development. Interested in a broader range of parenting variations beyond the single dimension of control and their influence on child development, Maccoby and Martin (1983) attempted to capture parenting style as a function of two dimensions: responsiveness and demandingness. Responsiveness refers to the level of warmth, acceptance, and involvement, whereas demandingness refers to the level of control, supervision, and maturity demands placed on the child.

Maccoby and Martin's (1983) two dimensions resulted in four parenting typologies: authoritarian, authoritative, indulgent, and neglecting parents. Utilizing these two dimensions, authoritarian parents are high in demandingness but low in responsiveness. Authoritative parents are conceptualized as both high in demandingness and responsiveness. Where Baumrind (1966) described the permissive typology, Maccoby and Martin distinguished two patterns of permissive parenting: indulgent and

neglectful parents. Indulgent parents are defined as high in responsiveness but low in demandingness, while neglecting parents are low in both responsiveness and demandingness.

Maccoby and Martin's (1983) found that parental typologies appear to have different effects on the child. Authoritarian parenting is associated with low independence, low self-esteem, and a feeling of a lack of control. Indulgent parenting results in a lack of respect for order or routine, lax discipline, and a lack of respect for authority. Neglectful parenting is associated with children who are emotionally and socially withdrawn, delinquent and show deficits across many areas. Similar to Baumrind's typologies, authoritative parenting is conceptually the ideal form of parenting and is associated with children who are self-reliant, self-controlled, able to achieve, and show little disruption (Maccoby & Martin, 1983).

In later work, Baumrind (1991) also incorporated the dimensions of demandingness and responsiveness in further explaining parenting styles. In addition to the authoritarian, authoritative and permissive parenting typologies, Baumrind derived a fourth parenting typology: rejecting-neglecting. The rejecting-neglecting typology is characterized as being low on both demandingness and responsiveness.

Baumrind's (1966) three parenting typologies, Maccoby and Martin's (1983) four parenting styles, and Baumrind's (1991) four parenting typologies, overlap in some ways with the concept of helicopter parenting. None, however, fully captures the style of helicopter parenting in its uniqueness. Helicopter parents might be classified as authoritarian from either Baumrind's or Maccoby and Martin's (1983) conceptualization because they have a high degree of control. However, being high in control is not

necessarily the only key defining feature of helicopter parents. Instead, they also do things like over-involve themselves in their child's life and take over for the child, that appear to have different intentions than the intention to enact control (e.g., with the perspective that they are being helpful or to eliminate obstacles). Helicopter parents could also be considered authoritative because they are high on demandingness and responsiveness, however helicopter parenting appears to reflect a level of responsiveness that goes beyond an appropriate level. Overall, responsiveness appears to reflect the notion of parents being attuned and supportive of the child's needs; however, helicopter parenting behaviors appear to be responsive, not just in a highly responsive, but in an overresponsive manner. That is, helicopter parents do not just listen to their child's concerns or support their needs, they instead take over to get the child's needs met, which does not allow the child to learn to deal with demanding situations by themselves. While authoritative parents act as a support system while also leaving room for their child to learn through trial and error, helicopter parents are supportive but appear to eliminate the opportunity to learn through trial and error.

Odenweller et al. (2004) aimed to empirically explore the relationships between helicopter parenting and parenting styles, specifically Baumrind's (1966) parenting typologies. Results revealed a weak, positive relationship between helicopter parenting and the authoritarian parenting style ($r = .26, p < .001$) and no relationship between helicopter parenting and the authoritative ($r = -.04, p = .53$) or permissive ($r = .03, p = .61$) parenting styles. According to Odenweller and colleagues the positive relationship between helicopter parenting and the authoritarian parenting style speaks to the similarities between the styles of overpowering parental control and also reinforces why

helicopter parenting would, like authoritarian parenting, be associated with negative outcomes. Odenweller and colleagues discuss that the lack of a relationship between the permissive and authoritative parenting styles provides more insight into the complexity of helicopter parenting. Helicopter parenting, apart from the some of the overlap with authoritarian parenting style, such as the control aspect, is not conceptualized as inherently negative, but also includes healthy parenting behaviors such as advice-giving, emotional support and positivity as reflected possibly in some of the behaviors of permissive and especially authoritative parents (Padilla-Walker & Nelson, 2012; Segrin et al., 2012). It is curious then why it was not associated with authoritative parenting in Odenweller's study. Had Odenweller and colleagues used definitions of authoritative parenting that differed on demandingness and responsiveness dimensions, such as Maccoby and Martin's (1983) they might have discovered a relationship between an authoritative style and helicopter parenting.

The differences previously discussed between helicopter parenting and Baumrind's (1966) and Maccoby and Martin's (1983) parenting styles speaks to the uniqueness of helicopter parenting regarding the constructs of control, demandingness and responsiveness. A more nuanced view of control is needed to better understand the construct of control associated with parenting and how control within helicopter parenting relates to other parenting styles or typologies.

Types of parental control. Parental control can be broken down into two constructs, psychological control and behavioral control. According to Schaefer (1965), psychologically controlling parents are experienced as intrusive, overprotective, possessive, directive and use guilt as a method for control. Schaefer believed that by way

of these characteristics, psychologically controlling parents would hinder their child's development as an individual, separate from their parent, negatively impacting healthy development. The construct of psychological control lost momentum in the 1970s and 1980s as typological approaches to parenting behavior, such as Baumrind's (1966) parenting styles gained attention and discussions of other dimensions like responsiveness and demandingness increased (Soenens & Vansteenkiste, 2010). In the early 1990's, Barber (1996) refocused on the construct of psychological control, defining it as "socialization pressure that is nonresponsive to the child's emotional and psychological needs (but instead) stifles independent expression and autonomy" (p. 3299). More specifically, the construct of psychological control refers to parenting behaviors that are manipulative and intrusive in regard to children's thoughts, feelings and attachment to their parents. According to Barber and Harmon (2002), psychological control can be expressed through guilt-induction, contingent love or love removal, instilling anxiety and invalidating the child's perspective. Guilt induction refers to the use of guilt to pressure children to succumb and obey their parents' requests or demands (Barber & Harmon, 2002). Parents may also pressure compliance by making their attention, interest, care and love contingent upon the compliance of the child (Barber & Harmon, 2002). Psychological control directly induces anxiety to make the child comply with the parent (Barber & Harmon, 2002). Lastly, invalidation of the child's perspective involves parental restriction of the child's spontaneous expression of their own thoughts and feelings (Barber & Harmon, 2002). Essentially, psychological control involves manipulation of feelings or emotions which then has the potential to impact thoughts and actions.

Psychological control can be clearly differentiated from behavioral control.

Behavioral control refers to parental attempts to control or structure a child's behavior, as opposed to emotions, aspirations or identity (Barber & Harmon, 2002). For example, parents may communicate rules outlining appropriate behavior and monitor it. In addition, behavioral control ideally provides guidelines for appropriate behavior, which theoretically protects adolescents from inappropriate, externalizing or antisocial behavior (Barber & Harmon, 2002). On the other hand, psychological control is thought to be connected to a risk for internalizing problems by interfering with the establishment of a secure and positive sense of self, thus placing adolescents at risk for low self-esteem and depressive symptoms (Barber & Harmon, 2002). Essentially, behavioral control carries a positive trajectory towards healthy development, whereas parental psychological control appears to place children and adolescents at risk for outcomes related to unhealthy development. Indeed, some research finds that behavioral control is negatively predictive of externalizing problems and psychological control is positively predictive of internalizing problems (Barber et al., 1994).

There are similarities between behavioral and psychological control and helicopter parenting. Helicopter parents engage in behavioral control by dictating activities emerging adults should or should not be involved in. Similarly, they engage in psychological control by inducing anxiety so that emerging adults think that they need their parents to make decisions for them or to intervene when conflict is experienced. However, research on helicopter parenting has not yet adequately defined or distinguished helicopter parenting from these other controlling parenting practices. Helicopter parenting is not a clear form of psychological control, as it does not explicitly

target the emotional or psychological autonomy of the child (Padilla-Walker & Nelson, 2012). While it reflects some level of behavioral control, it is done with high levels of warmth and support and an excessive limiting of autonomy that is developmentally inappropriate based on the age of the child. Therefore, just as helicopter parenting is not clearly captured by Baumrind's (1966) or other typologies of parenting styles, it also is not clearly captured by dimensions of psychological or behavioral control.

Overprotective/oversolicitous parenting. Perhaps the closest parallel to helicopter parenting in the parenting literature is the overprotective or oversolicitous parenting of younger children (Padilla-Walker & Nelson, 2012). Oversolicitous parenting involves intrusive and unnecessary micromanagement of a child's activities and strong affection in the absence of child distress or the need for comfort. In younger children, oversolicitous parenting has been repeatedly linked with maladaptive outcomes including anxiety, social withdrawal, and peer difficulties (Padilla-Walker & Nelson, 2012). The term oversolicitous parenting has been used mostly in terms of parenting younger children, while similar terms for the parenting of adolescents and older children are overparenting and overprotective parenting.

The term overparenting encompasses excessive or developmentally inappropriate parental involvement in a child's life (Segrin et al., 2013). Overparenting describes a parenting style influenced by cultural or pop-psychological (Omer et. al., 2016) recommendations for close and continuous parental involvement to ensure success and positive development. By contrast, the concept of overprotective parenting reflects a transformation of a once popular concept of overprotective mothering, which culturally changed to be more inclusive as fathers became more involved in child rearing.

Previously, developmentally appropriate or inappropriate parental involvement only looked at the mother-child relationship, but shifted to discussions of overparenting of both mother and father. Overprotective mothering and overprotective parenting have historically had a pathological connotation (Omer et. al., 2016).

Despite differences in their definitions, these parenting styles involve similar behaviors on the part of parents (Omer et. al., 2016). All of these parenting terms describe some level of hovering over the child, or being involved in most if not all aspects of the child's life in a developmentally inappropriate manner (Omer et al., 2016). This hovering behavior is conceptually similar to the construct of helicopter parenting. Indeed, helicopter parenting behaviors, such as being overinvolved in a child's life and stunting autonomous functioning, are quite similar to those seen in overprotective parents. Due to the similarities between how overprotective and helicopter parents behave toward their children, it appears that overprotective and helicopter parenting produce very similar outcomes in children (Omer et al., 2016). Problematic outcomes associated with overparenting include a lack of autonomy, reduced self-confidence and problem-solving skills, increased anxiety, decreased well-being and the excessive use of pain killers (Omer et al., 2016). While parental monitoring likely helps to prevent negative consequences like substance abuse, unsafe sex or problematic peer involvement, excessive monitoring is also believed to have a relationship with increased developmental risks (Omer et al., 2016). Over-controlling or helicopter parenting may reduce a child's sense of autonomy and competence (Omer et al., 2016).

There is one main reason that helicopter parenting is not the same as overparenting, and that is the motivation behind the parenting behaviors likely differ.

Researchers have characterized overprotective parents as possessing high levels of anxiety regarding their children, difficulty separating from their children, a lack of encouragement for autonomy, and an increased need to monitor and control their children (Thomasgard & Metz, 1993). As previously mentioned, most of the literature has a pathological tone in referring to both the cause and effect of overprotective parenting. By contrast, researchers tend to describe helicopter parenting as less, or not at all, pathologically motivated (Padilla-Walker & Nelson, 2012; Segrin et al., 2012). Helicopter parenting is more often described as stemming from parents' desires to see their children succeed rather than from their own pathology (Padilla-Walker & Nelson, 2012; Segrin et al., 2012). It is unclear if the way helicopter and overprotective parents engage in controlling behaviors differs qualitatively and or affects children differently (Padilla-Walker & Nelson, 2012; Segrin et al., 2012).

In sum, parenting theories provide the framework for how parenting behaviors differ from parent to parent and from family to family. Parenting theories provide a way to conceptualize how parents differ in the way they interact with and raise their children. This is important because each parenting style has been linked to different outcomes including effects on the parent-child relationship and attachment (Baumrind, 1966) as well as child psychological and overall well-being (Maccoby & Martin, 1983). Many of these theories have similar dimensions as helicopter parenting. None of them, however, entirely encompass all the relevant dimensions of helicopter parents (e.g., good intentions, controlling behaviors, etc.). The most similar construct found is overparenting but it differs from helicopter parenting in the motivations behind parental behaviors. Given that helicopter parenting does not completely overlap with prior conceptualizations

of parenting types, measures used to assess these parenting dimensions are inadequate to assess helicopter parenting and the potential negative outcomes associated with it.

Therefore, the conceptualization of parenting typologies, behaviors, and intentions behind those behaviors needs to be expanded if it is to fully capture the phenomenon of helicopter parenting. Additionally, distinct measures need to be developed to assess this construct.

Enmeshment in Emerging Adulthood

Along with aspects of parenting styles, aspects of family dynamics may have similarities with the construct of helicopter parenting. Enmeshment generally refers to a relationship between two people (in this case between parent and child) in which there are diffuse boundaries, particularly in association with emotions (Minuchin, 1974). This then often translates into a synchronicity of emotion, whereas one person's emotions escalate, so does the other's (Minuchin, 1974). This type of interconnectedness seems to be in contrast to the concept of personal autonomy and has been linked to unfavorable outcomes (Givertz & Segrin 2014; Heider et al., 2008; Meites, Ingram, & Seigle, 2012; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014; Spokas & Heimberg, 2009; van Ingen et al., 2015). In the context of emerging adulthood, enmeshment and helicopter parenting appear to share the aspect of diffuse boundaries, as well as this link to negative psychological outcomes.

In a study examining the associations between adolescent perceived family enmeshment and emotional dysregulation, Kivisto and colleagues (2015) hypothesized that adolescents who reported high enmeshment would demonstrate more negative global appraisals of the capacity to tolerate stress, increased negative affect in response to

discussing a distressing event, lower basal respiratory sinus arrhythmia (RSA), a type of heart rate variability, and vagal augmentation in response to escalating stress, both as measures of physiological reactivity to distress. They also hypothesized that gender would moderate these effects; more specifically, that girls would demonstrate poorer emotion regulation across measures but that boys who reported high enmeshment would show poorer emotion regulation across measures. Participants in the study consisted of 64 adolescents recruited from a small southeastern community in the U.S. between the ages of 14 and 17. Most participants identified as Caucasian and engaged in the study with their biological mother.

Kivisto and colleagues (2015) found that male adolescents, but not females, who perceived higher than average levels of family enmeshment also held stronger beliefs in their inability to adequately tolerate distressing emotions. As enmeshment increased, male adolescents reported significantly stronger negative affect following the interview. The researchers proposed that these results may reflect that enmeshment counters social and emotional norms for boys. Those boys who reported higher than average enmeshment had lower baseline RSA, which reflects essentially a lower baseline for distress tolerance. Kivisto and colleagues linked this to having fewer resources for coping with negative emotions. Overall, Kivisto and colleagues' study demonstrates that higher enmeshment is associated with greater emotional dysregulation for male adolescents.

In another study examining familial attachment and functioning in late adolescence, George and Bankar (2018) recruited a sample of 805 adolescents aged 14 to 19 enrolled in high school or college in Bangalore, India. Participants were given questionnaires assessing family functioning, attachment styles, and general health with

items to detect psychiatric disorders. Among the variables that increased the likelihood to be in the group with high general health questionnaire scores were external locus of control and enmeshment, thus supporting that high levels of familial enmeshment are associated with poorer psychological outcomes, particularly in the age group of emerging adulthood. These findings (George & Bankar, 2018; Kivisto et al., 2015) are important because they reflect the potential for family enmeshment to be a variable contributing to psychological outcomes even in late adolescence and emerging adulthood. The question then becomes whether or not helicopter parenting and enmeshment are similar constructs.

In summary, helicopter parenting has been compared to several parenting typologies (Baumrind; 1966; Baumrind 1991; and Maccoby & Martin 1983) as well as to concepts of psychological and behavioral control (Barber & Harmon, 2002) and overparenting (Segrin et al., 2013). As previously stated, many of these parenting constructs that include decreased autonomy and increased involvement of the parent have a pathological tone surrounding the intent of the parent. Helicopter parenting appears to differ from that. In the case of enmeshment, the negative impact on individuals appears to stem from a lack of appropriate emotional boundaries (Minuchin, 1974). This also does not capture specific aspects of helicopter parenting such as the behaviors intended to intervene and eliminate any potential barriers to success.

Parenting and Family Styles Across Cultures

In examining the construct of helicopter parenting, it is important to review similar parenting practices across cultures. There is literature surrounding different constructs related to familial relationships and parenting behaviors. For instance,

familismo in Latinx cultures, the *tiger mom* in Asian cultures, and no-nonsense parenting in Black and other minority cultures appear similar to helicopter parenting.

Familismo is a term reflecting culture values surrounding collectivism, trust, and respect in Latinx cultures, and is not exclusive to the parent-child relationship; however, *familismo* has been described as an aspect of Latinx culture that informs parenting (Guilamo-Ramos et al., 2007). Familismo appears to reflect the respect for and consideration for values, and the family as a whole over the individual rather than a dynamic of parental behavior over adult children. Guilamo-Ramos and colleagues (2007) also asserted that while Latinx parenting can be looked at in relation to a demandingness and responsiveness framework, such as Baumrind's (1966) parenting styles, cultural differences and values must be considered.

In a study intended to describe Latinx parenting styles, Ayon and colleagues (2015) administered self-report scales assessing several aspects of parenting (e.g., involvement, monitoring, agency, self-efficacy in disciplining, and *familismo*) to 489 parents. Participants were mostly Mexican-born (93%), but only 17% had lived in the United States for 10 years or less. From their research, Ayon and colleagues described four parenting profiles. The first was described as a family parenting style that classified a majority of the parents (65%). It described as being high in *familismo* values as well as involvement, monitoring, agency and low in discipline. This parenting style was observed mostly in first-generation immigrant parents. The second was child-centered parenting (17%), with high levels of involvement, monitoring, agency, and lower discipline, also with lower levels of *familismo* and parents that tended to identify as bicultural (Mexican and Anglo). The third parenting style was considered a moderate parenting style (15%),

with high *familismo* and moderate levels of involvement, monitoring, and agency, with higher levels of efficacy in disciplining. Lastly, disciplinary parenting (3%) was characterized by the lowest scores of involvement, monitoring, and agency, with comparable scores in *familismo* to family parenting and moderate parenting, with highest scores in disciplining. This study demonstrates that *familismo* as a Latinx cultural value must be considered when looking at parenting styles within these communities. It also demonstrates that level of parents' acculturation, in this case to Anglo or the dominant culture in the United States appears to have an impact on parenting styles. While the aspects of parenting examined in this study (e.g., involvement and monitoring) may be related to aspects of helicopter parenting, these constructs were not clearly defined. They were also measured with assessed with items created by the researchers, not any existing scales, which resulted in no data related to reliability and validity outside of their study. This limitation, as well as a lack of research using helicopter parenting measures, such as the ones identified and used in the present study, leaves gaps in the literature and in the understanding of what, if any Latinx parenting styles parallel helicopter parenting and if present in Latinx communities, how specific helicopter parenting behaviors impact Latinx emerging adults.

In Asian culture, predominantly Chinese-American culture, is the Tiger Mom phenomenon which was coined by Yale Law School professor Amy Chau in her 2011 memoir "*Battle Hymn of the Tiger Mother*" (Chua, 2014). This term refers to strict or demanding parenting associated with pressuring children to attain high levels of academic achievement or success in different career arenas. With the focus on academic achievement and/or achievement with regard to a child's career, Tiger Mom appears to

draw some parallels to helicopter parenting as helicopter parenting involves parental behaviors intervening in both of these arenas. In addressing the prevalence of the Tiger Mom phenomenon in Asian culture, Poon and Byrd (2013) identified two types of anxiety associated with the Tiger Mom phenomenon related to selective college admission. First is the concept of the Asian American as a racialized other, activating a drive to neutralize White dominance in the nation's elite colleges. The second is the anxiety and pressures potentially associated by Asian American children of Tiger parents. Poon and Bryd (2013) conducted a study aimed at identifying key influences and information sources for Asian Americans in the college choice process by collecting data via Survey Monkey from a national sample of currently or recently enrolled college students, as well as through individual interviews. They found that while Asian American students value their parents' opinions, there were other individuals and factors that played an important role in their decision making. For first generation students, their parents limited knowledge about college opportunities did not allow them to be as involved as college educated parents, which resulted in influence from teachers and high school counselors. There were also differences across gender. While women acknowledged the role their parents played in their college pathways, male students were less likely to identify their parents as playing an important role. Overall, Poon and Byrd (2013) asserted that mainstream media portrays a stereotype of Asian parenting behaviors that does not accurately reflect the diversity among Asian and Asian American people. In sum, *Tiger Mom* appears to be similar to helicopter parenting in that they are both intended to ensure the success of the child, particularly in an academic arena. However, they appear to differ as *Tiger Mom* seemingly includes strictness and limiting children's

focus to academics while helicopter parenting includes overt behaviors of parents intervening on behalf of the child (e.g., emailing a professor).

No-nonsense parenting is a construct that appears in the literature surrounding Black and Latinx families. It reflects parenting behaviors which combine high levels of demandingness and acceptance with high levels of harshness in adaptation to parenting in the context of ethnic discrimination and ethnic segregation (White et al., 2016). No-nonsense parenting has been associated with adolescents' internalizing symptoms including depression and anxiety (Brody & Flor, 1998; White et al., 2016). In White and colleagues' study (2016), harshness or harsh parenting was measured with items from the Child Report of Parental Behavior Inventory (Schaefer, 1965) such as, "Your father spanked or slapped you when you did something wrong." While parallels may be drawn between no-nonsense parenting and helicopter parenting with regard to increased demandingness and parental behaviors driven by desire for a child's success in a particular environment, the component of harshness draws a distinction between the two. While no-nonsense parenting has been linked to internalizing symptoms (Brody & Flor, 1998; White et al., 2016), another study looking at parental control in Black families and its impact on grades, delinquency, and depression (Bean et al., 2006) found that behavioral control contributed to youth functioning and psychological control was unrelated to adolescent outcomes (including depression). This also reflects the impact of culture and how parenting behaviors that are perceived differently across cultures by adolescents may have mixed associations with negative psychological outcomes as frequently as is observed in White populations. Again, while there is a parallel between no nonsense parenting and helicopter parenting around ensuring a child's success, overt

behaviors characteristic of no nonsense parenting (e.g., harshness) appear to be distinct from helicopter parenting.

In sum, there are several parenting constructs across different cultures that appear to parallel helicopter parenting in some way. They also all appear to have unique aspects, further supporting the notion that helicopter parenting is a unique construct. In the interest of finding literature discussing the impact of helicopter parenting behaviors across culture, as well as another way to examine how helicopter parenting appears in the literature as a specific construct, a literature search was conducted to identify studies looking at the impact of helicopter parenting on psychological outcomes in different ethnic groups using the term helicopter parenting specifically.

Research specifically exploring helicopter parenting behaviors and their impact across different ethnic groups is very limited. Kwon, Yoo, and De Gagne (2017) conducted a qualitative study to examine college students' culturally mediated perceptions and experiences of helicopter parenting and its impact on their development. Using an online survey, Kwon and colleagues surveyed 40 Korean American students from two large public universities and one private university in the Southeastern region of the U.S. Students were not eligible to participate if they were in the U.S. with a foreign student visa, if they moved to the U.S. after the sixth grade, or if they did not feel comfortable answering questions in English. The age range of the students was 17 to 26 years ($M = 20.13$) and 53% of the sample were living with their parent(s). At the start of the survey, participants were provided with the following definition of helicopter parenting: "a style of child rearing in which an overprotective mother or father discourages a child's independence by being too involved in the child's life," obtained

from Dictionary.com. The students were then asked to respond to questions about their experiences with their parents' parenting style and their perception of the impact they thought this had on their physical, social-emotional, and intellectual well-being. Through qualitative analyses, Kwon and colleagues identified three themes in the participant's responses. They found that Korean American students defined three important features of helicopter parenting: overinvolvement/overprotection, strict overcontrol without granting autonomy, and benevolent intention. Kwon and colleagues also found a prevalence of helicopter parenting in 20-25% of Korean American college students in this study, which is higher than what has been found in studies with Korean college students using ratings on helicopter parenting scales (Kwon et al., 2017). The researchers in this study asserted that this may be because the qualitative nature of the study may better capture helicopter parenting as the students' experienced it.

Kwon and colleagues (2017) also found that 37 of the 40 participants addressed perceived group differences in the helicopter parenting phenomenon. More specifically, 37 participants agreed that Korean American parents are generally more likely to be overprotective and overcontrolling than other ethnic groups, as well as there being a variation between Korean and Korean Americans in helicopter parenting, suggesting that students' perceptions of parenting styles are culturally or contextually bound (Kwon et al., 2017). For instance, participants perceived that Korean immigrants of Korean American parents exhibit more helicopter parenting than those living in Korea, highlighting the role of social context. Lastly, the majority of participants in the study responded negatively with regard to the psychological, social, and emotional implications of helicopter parenting. While 36 participants perceived that they would benefit from

helicopter parenting to some degree in their lives, high levels of parental control were associated with increasing levels of anxiety, risky behaviors, family conflict, and undermining self-efficacy, confidence and self-esteem. Positive impacts of helicopter parenting on academics and successful careers were identified as new additions to the literature on helicopter parenting, which may speak to cultural differences surrounding expectations for academic success as well as perceptions surrounding parental intent with parenting behaviors. The participants in this study reported helicopter parenting might have most detrimental impacts on social emotional and physical health factors, and also recognized the parents' benevolent intent and some positive outcomes (Kwon et al., 2017). This study demonstrates that culture likely impacts the degree to which helicopter parenting is associated with negative psychological outcomes, while also maintaining that these behaviors might have some positive influence. It appears that the degree to which these parenting behaviors are largely accepted in the culture impacts emerging adults' perceptions of whether or not the parenting behaviors are overbearing.

In another study, Lee and Kang (2018) aimed to examine whether parent-child affection and pressure from parental career expectations mediated the relationship between helicopter parenting and psychological adjustment. Their study included a sample of unmarried Korean emerging adults aged 19 to 34 who were either full time students or unemployed. They hypothesized that helicopter parenting would be directly associated with depressive symptoms and life satisfaction, and indirectly related to depressive symptoms and life satisfaction through parent-child affection and pressure from parental career expectations. The sample for their study consisted of 562 emerging adults (269 women and 293 men), with 54.3% of their sample being undergraduate

college students. Among the participants, 74.9% lived with at least one parent. Helicopter parenting was assessed using the Korean version of the Helicopter Parenting Scale (HPS; LeMoyne & Buchanan, 2011), which was validated previously with a Korean population (Kang & Lee, 2017). The researchers found that the perceived level of helicopter parenting was directly associated with depressive symptoms, but was not directly related to life satisfaction. The finding that Korean emerging adults who perceived their parents as being overinvolved in their lives were more likely to experience depressive symptoms suggests that helicopter parenting behaviors negatively impact psychological functioning cross culturally.

Lee and Kang's (2018) finding that helicopter parenting was not directly linked to life satisfaction suggests that helicopter parenting can lead to psychological distress for Korean emerging adults, but is not linked to overall evaluation of their lives. According to Lee and Kang, this may suggest that even in a collectivistic culture, helicopter parenting can cause distress. It may also suggest that a sense of autonomy and independence are important, but that possibly the nature of the collectivistic culture does not make this as globally detrimental on perceptions of overall satisfaction. These behaviors may be more in line with aspects of collectivistic culture as compared to an individualistic culture, such as European Americans, where emerging adults' adjustment is impacted more globally (LeMoyne & Buchanan, 2011; Padilla-Walker and Nelson, 2012).

Interestingly, Lee and Kang (2018) found that Korean emerging adults who experienced helicopter parenting as they grew up maintained more affectionate relationships with their parents, leading to fewer depressive symptoms and greater life

satisfaction. Lee and Kang suggested that helicopter parenting may impact autonomy, but not intergenerational relatedness, referred to as parent-child affection in their study. This may be further support that Korean emerging adults have an acknowledgement of the benevolent intention behind helicopter parenting behavior. Similarly to parent-child affection, the mediational role of pressure from parental career expectations was associated with depressive symptoms, but not with life satisfaction. This study also reflects how collectivistic culture can impact the perception or interpretation of parenting behaviors that could classify as helicopter parenting and how that can result in mixed psychological outcomes. The perception that parents engage in these controlling behaviors from a source of benevolence may temper the impact on psychological or emotional functioning.

In a study examining overparenting and whether it is expressed differently within more individualistic contexts of Jewish-Israeli families than in the context of more collectivistic Arab-Israeli families, researchers Scharf, Rousseau, and Bsoul (2017) surveyed 165 young adults (80 males and 85 females) and their mothers and fathers residing in the northern area of Israel. Overparenting was measured by a questionnaire created by Segrin et al. (2012) to be completed by mothers and fathers. The questionnaire consisted of 39 items loading across four subscales: anticipatory problem-solving (e.g., “I tell my child how to plan out certain activities”), advice/affect management (e.g., “I say or do things to cheer up my child”), tangible assistance (e.g., “I see to it that my child’s financial needs are taken care of”), and child self-direction (e.g., “I let my child solve most problems on their own”). They also looked at the relationship between overparenting and interpersonal sensitivity. Cultural and parental-gender differences in

levels of overparenting were explored and results indicated that overparenting behaviors were more prominent in Arab-Israeli families than in Jewish-Israeli families (Scharf et al., 2017). Advice/affect management and less child-self direction was more prominent amongst mothers than fathers, and higher levels of anticipatory problem-solving were significantly associated with higher levels of interpersonal sensitivity, regardless of cultural background or parental gender. Additionally, interpersonal sensitivity was associated with only one type of overparenting behavior, anticipatory problem solving (Scharf et al., 2017). A limitation to this study is that they did not collect the young adults' reports on their parents' overparenting, which may have yielded different results. As discussed previously in the context of Kwon and colleagues (2017), the influence of culture and how it impacts young adults' perceptions of parenting behaviors may have an important role in the impact on outcomes, which would also vary across cultures given cultural norms.

Across many cultures, there are terms used to describe a common trend of mothers/parents parenting behaviors aimed at achievement for their children; “kyōiku mama” (Beauchamp, 1998) in Japanese culture, *Tiger Mom* in Chinese and other Asian cultures, and even the concept of a helicopter parent. While the literature on these constructs is limited, the literature that does exist highlights how much diversity and variation there is within a particular culture. There does not appear to be a solid foundation for being able to definitively discriminate between how or why these parental behaviors would be expected to impact different cultures differently. Given the variance within and across cultures, as well as the limited research available on helicopter parenting, the information obtained is a small look into the importance of considering

culture in the relationships between parenting and outcomes for emerging adults. As a result, the information gathered certainly does not provide definitive evidence, furthering the complication of validating the construct of helicopter parenting and how to measure it.

Self-determination Theory

In addition to reviewing parenting intentions and behaviors to define helicopter parenting, an exploration of the effects of such parenting on child outcomes is also warranted. Specifically, how helicopter parenting might impact emerging adults' motivation and outcomes is explored below.

Motivation encompasses what drives people to act, think, and develop (Deci & Ryan, 2008). According to Deci and Ryan, variance in human motivation is not simply a function of underlying physical processes or physiology, but a function of proximal sociocultural conditions. These social conditions influence not only what people do, but also how they feel during and after these behaviors. In other words, social conditions can motivate behaviors and provide feedback on that behavior that may influence future behavior. For example, someone who is encouraged by their social environment to engage in a behavior and is supported while doing so will feel positively about engaging in that behavior and therefore be motivated to do it again.

Deci and Ryan's (1985) self-determination theory (SDT) asserts that there are different types of motivation-autonomous and controlled. Autonomous motivation includes behaving with a sense of volition or choice, whereas controlled motivation involves feeling pressured or demanded by external forces to behave in a certain way. SDT assumes that people are active and self-motivated by nature, curious, and eager to

succeed because success is personally satisfying and rewarding. However, people can be mechanized, passive, or distanced away from a self-motivated nature by social forces, including their parents. The interactions between people's inherent nature and social environments that either support or thwart that nature result in different types of motivation that predict important life outcomes (Ryan & Deci, 2000). Specifically, SDT asserts that all humans need to feel competent, autonomous, and related to others. According to Deci and Ryan, social environments that facilitate the satisfaction of these three basic psychological needs will support people's inherent activity, promote more optimal motivation (e.g., autonomous motivation) and yield more positive psychological, developmental, and behavioral outcomes. On the other hand, social environments that stifle these three basic needs will have damaging effects on well-being through the promotion of controlled motivation.

Another important facet in SDT is the difference between autonomy and independence. Deci and Ryan (2008) assert that independence and autonomy do not mean the same thing. According to SDT, autonomy means to act volitionally or with a sense of choice, whereas independence means to function alone and to not rely on others. Based on these definitions, SDT asserts that people can rely on others because they find engagement and reliance as comforting or satisfying, as they enjoy relational mutuality. When this is the case, although people are acting with others, they are doing so autonomously. On the other hand, people can act independently because they think they should be viewed as competent or because they do not like being in relationships in which they depend on others. Neither of these situations would constitute acting autonomously or out of their own volition. In these examples, the independent behaviors

are controlled and not considered autonomous. Essentially, people can be either autonomous or controlled in their relative independence or dependence.

SDT conceptualizes the ability for extrinsic motivation to turn into autonomous, internal motivation using the concept of organismic integration (Deci & Ryan, 2008). The idea is that development is a natural process through which people internalize, elaborate, refine and integrate inner structures or representations of themselves and their world. SDT emphasizes that internalization will function more or less effectively contingent on the degree to which the person experiences support for the three basic psychological needs as noted earlier (the needs for autonomy, competence and relatedness to others). SDT outlines three types of internalization: introjection, identification, and integration. Introjection, the least effective type of internalization, involves people taking in an external demand but not accepting it as their own. With introjection, people tend to feel controlled, with the control being reinforced by contingent self-esteem and ego involvement. They feel pride after success and self-derogation after failure. The demand is taken in without a sense of ownership and as a result, it pressures and controls the individual. Identification involves people accepting the importance of a behavior for themselves and therefore accepting it as their own. With identification, the individual can identify the value of the activity and accepts the responsibility for regulating the behavior. When this occurs, a greater sense of autonomy is achieved and there exists no pressure or control to do the behavior. Finally, integration consists of successfully integrating an internalization with other aspects of the true self. Integration exemplifies the fullest type of internalization and is how extrinsically motivated behaviors become autonomous or self-determined (Deci & Ryan, 2008).

The conception of internalization has shifted the focus of SDT from intrinsic versus extrinsic motivation to a focus on autonomous versus controlled motivation. External and introjected regulations are then a form of controlled motivation and identified/integrated and intrinsic motivation are forms of autonomous motivation. Throughout research, autonomous regulation has been associated with greater persistence, positive affect, enhanced performance, and greater psychological well-being (Deci & Ryan, 2008). Due to these findings, SDT research (Deci & Ryan, 2008; Ryan & Deci, 2000) has focused on social climates that foster internalization and the autonomous enactment of behaviors. SDT asserts that environments supportive of the three basic psychological needs will facilitate internalization and integration; specifically, feeling related to a family or group will facilitate internalization of the values and behaviors endorsed in that group (Deci & Ryan, 2008). Feeling competent to enact behaviors, as well as being encouraged to think about the value of the behavior to the individual will also facilitate identifying with and integrating the behavior's value, increasing the chances of full integration (Deci & Ryan, 2008).

The factors that facilitate internalization of extrinsic motivation are viewed as similar to those that help to maintain intrinsic motivation and involve the role of significant others (including parents) to support and encourage the individual to explore, endorse and initiate behaviors that are interesting and/or important to them (Deci & Ryan, 2008). Facilitating internalization may require structure and guidance, but it is important that the structure and guidance be presented in an autonomy-supportive way (Deci & Ryan, 2008). For example, handling duties associated with registering for classes, such as communicating with university offices or professors, may be done by helicopter parents,

but would be more appropriately handled by the emerging adult student and would be more likely to occur if the student has internalized the importance of facilitating their education and if pursuing these responsibilities are intrinsically motivated.

Helicopter parenting violates the principles of healthy development set forth by SDT. Helicopter parents are viewed as externally controlling social agents, interfering with the ideal internalization process for nonintrinsically motivated activities of emerging adulthood (Deci & Ryan, 2008). Helicopter parents appear to undermine an individual's tendency for autonomous regulation of behavior and instead foster more controlled ways of regulating behavior (Soenes & Vansteenkiste, 2010). Young adults with helicopter parents, coming from a social environment that fosters controlled regulation of behavior, are hypothesized to be susceptible to continued controlled ways of regulating behavior rather than developing and acting from a sense of autonomy (Soenes & Vansteenkiste, 2010).

When activities or behaviors, such as those involved in the transition between adolescence and early adulthood are not internalized properly, it appears to create a parent-child dynamic in which helicopter parenting behaviors can occur (Soenes & Vansteenkiste, 2010). Essentially, when the child struggles with internalization and the ability to complete tasks, the parent steps in (Soenes & Vansteenkiste, 2010). When transitioning from adolescence to adulthood, emerging adults are faced with new sets of responsibilities (managing their academic or vocational careers, their social lives, managing finances or other responsibilities on their behalf) that require motivation and autonomous action. Helicopter parents take care of these responsibilities for their adult children, or take over at first sight of trouble, intervening with the development of

autonomous motivation and a general sense of self-efficacy or competence (Soenes & Vansteenkiste, 2010). According to SDT, autonomy and competence are two of the three basic psychological needs.

In addition to externally controlling contingencies, helicopter parents may also activate internal pressures that influence their children's functioning and have the potential to regulate behavior (Soenes & Vansteenkiste, 2010). Parents who are experienced as externally controlling agents who utilize psychological control may influence thoughts and feelings such as "I have to do this to avoid feeling guilty or less than" (Soenes & Vansteenkiste, 2010, pp. 78). Parents may activate these internal pressures, resulting in the engagement of a behavior, while simultaneously wanting to avoid the behavior all together (Soenes & Vansteenkiste, 2010). Their children then experience a conflict between feeling internally (or psychologically controlled) to engage in the behavior, but at the same time not being intrinsically or self-motivated to do so, creating a vulnerability for maladaptive development.

While helicopter parenting has been identified as a different construct than psychological control (Padilla-Walker & Nelson, 2012), helicopter parenting behaviors have been demonstrated to interfere with an individual's sense of autonomy or self-efficacy (Padilla-Walker & Nelson, 2012). For instance, a parent may exhibit a form of control resulting in their child engaging in a particular behavior, but if that behavior is not self-driven or engaged in autonomously, the child's self-efficacy or sense of autonomy is compromised (Padilla-Walker & Nelson, 2012). In this respect, helicopter parenting behaviors may result in externally controlled behaviors, where there the adult child allows their parent to intervene due to thoughts or feelings surrounding their ability to

handle the situation independently (Padilla-Walker & Nelson, 2012). Helicopter parenting behaviors resulting in this behavioral pattern in emerging adults speak to a diminished sense of competence or self-efficacy, which is asserted by SDT as one of three basic psychological needs.

In addition to diminishing a sense of autonomy, helicopter parents seemingly communicate a message of incompetence to their children. In regards to the impact of socialization agents' interpersonal style, the concept of structure has been discussed in the literature in relation to SDT (Grolnick & Ryan, 1989; Reeve, 2002). Structure refers to the communication of clear and consistent guidelines and expectations for children (Reeve, 2002). Parents who incorporate structure introduce and uphold clear rules, enforce consequences for not following the rules and follow through when rules are disobeyed (Reeve, 2002). Structure also involves help from parents when children engage in a task or make a decision. (Reeve, 2002). In this respect, communication includes competence-relevant feedback and an attitude expressing confidence in a child's ability to perform and behave well (Reeve, 2002). According to Reeve, this type of structure, provided by a socialization agent such as a parent, provides the child a sense of personal efficacy to meet challenges and to execute tasks effectively. Reeve also asserts that with helicopter parenting, parents take over tasks for emerging adults to eliminate potential failures or because the parent(s) deem the task to be important. Contrary to parents who incorporate structure with competence-relevant feedback and an attitude expressing confidence in the child's behavior to perform well on their own, helicopter parents tend to enforce what they deem to be important or take over the decision-making process for the child. Thus, children do not get competence-relevant feedback and parents do not

show confidence in their children. In addition, helicopter parenting behaviors may communicate clear guidelines and expectations, which is referred to as structure. The questions remains though whether it is developmentally appropriate for parents of emerging adults to still be holding their adult children to these forms of structure. Structure introduces clear guidelines or rules, consequences for disobeying the rules, and also involves help from parents when children make decisions. Helicopter parents, however, appear to overstep boundaries undermining the child's participation in decision making and also appear to carry this past a developmentally appropriate stage (Reeve, 2002).

Overall, helicopter parenting appears to violate the basic needs asserted by SDT by interfering with the internalization of nonintrinsically motivated activities, by exerting control which undermines autonomous regulation of behavior, and by diminishing a sense of autonomy and competence. Given that SDT links a violation with basic psychological needs and negative outcomes, (Deci & Ryan, 2008) it is no surprise that helicopter parenting is beginning to be linked to a host of negative outcomes for emerging adults.

Outcomes of Helicopter Parenting

As the construct of helicopter parenting gains more attention, documentation of the effects of helicopter parenting is emerging in the literature. Of particular interest for the present study are the relationships between helicopter parenting and negative internalizing psychological outcomes including depressive symptoms, anxiety, stress, and lowered self-efficacy. Indeed, several studies have empirically documented theoretical links between helicopter parenting and negative outcomes.

Schiffirin et al. (2014) examined the underlying mechanisms that explain the relationship between helicopter parenting and the psychological outcomes of college students, such as depression, anxiety, and satisfaction of basic needs, explained by SDT. The mean age of the sample was 19.34 years ($SD = 1.27$). The majority of the participants were White (84.8%) and female (88%). Schiffirin and colleagues designed the Helicopter Parenting Behaviors Questionnaire (HPB) for this study. Items for the measure were generated from books listing behaviors that were associated with helicopter parenting. The authors found that helicopter parenting behaviors were related to higher levels of depression and decreased satisfaction with life. In addition, they found evidence to support the mechanisms to explain why helicopter parenting might be related to negative outcomes. That is, helicopter parenting was related to lower levels of perceived autonomy and competence as hypothesized by SDT theory and in turn, such lower levels of perceived autonomy and competence were related to negative outcomes such as depression and lowered life satisfaction (but not anxiety). Thus, these findings demonstrate how the effects of helicopter parenting can violate the basic needs explained by SDT and can have a detrimental impact on several aspects of well-being. Students who perceived they were being helicopter parented felt that their basic psychological needs were not being met (Schiffirin, et al., 2014). When parents solve problems for their children, the children may not develop a sense of competence to solve their own problems and may have the sense that their personal autonomy is diminished (Schiffirin, et al., 2014). Feeling a lack of volition and control can lead to depression (Deci & Ryan, 2008; Ryan & Deci, 2000). Despite the findings for depression and life satisfaction, Schiffirin et al. did not find a relationship between helicopter parenting behaviors and

anxiety. It is unclear why this relationship was not significant and therefore further work needs to be done to see whether or not helicopter parenting relates to anxiety symptoms.

Similar to Schiffrin et al. (2014), LeMoyné and Buchanan (2011) developed a scale (Helicopter Parenting Scale; HPS) to measure helicopter parenting and found that it was significantly associated with lower ratings of well-being ($r = -0.22$), having a prescription for anxiety or depression medication ($r = 0.19$), and pain pill consumption ($r = 0.14$), although it is important to note that these correlations are small in effect size. While these findings add some support for links with well-being and depression and anxiety, the study did not directly measure the outcomes of depressive symptoms, anxiety, stress, or self-efficacy.

Other authors have also examined relationships between features of parenting similar to helicopter parenting and outcomes, but have not looked at helicopter parenting behaviors per se. Meites, Ingram, and Siegle (2012) explored the association between dimensions of parental bonding (e.g., care and overprotection) and different types of depressive and anxious symptoms in college students using the Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979). Overprotection as defined by the PBI is similar to helicopter parenting in that it reflects controlling and intrusive behaviors and therefore results linking this scale to negative outcomes may be very similar to results when helicopter parenting is measured specifically.

Specifically, Meites et al. (2012) used data from 680 undergraduate students who rated their mothers and fathers on overprotectiveness and their own anxious and depressive symptoms using the Beck Anxiety Inventory and the Beck Depression Inventory. The mean age of the sample was 18.44 years ($SD = .05$) and the majority of

the participants were female (73.9%). Results of the study showed that paternal, but not maternal, overprotection on the PBI was associated with higher levels of self-related negativity on the Beck Depression Inventory. In regards to anxious symptomology, only maternal overprotection was associated with increased fears of dying. To explain these findings, Meites and colleagues noted that when parents manage their children's problems for them, children may develop schemas of incompetence and low self-efficacy, both of which may increase and perpetuate anxiety. Parents who are controlling and intrusive may also convey the message that the world is a dangerous place and that the child is unable to manage their concerns independently (Meites et al., 2012). The types of negative schemas of the self and the world developed by children of overprotective parents may then be associated with the development or perpetuation of depressive or anxious symptoms (Meites et al., 2012). To the degree that helicopter parenting overlaps with overprotective parenting, this similar process may also take place in the children of helicopter parents.

While Meites et al. (2012) found few relationships between parental overprotection and specific dimensions of depression and anxiety, there were a number of other dimensions of anxiety and depression that overprotectiveness by mothers and fathers did not correlate with (e.g., negative beliefs about interactions with others, fear, physical symptoms of fear). Meites and colleagues assert that parenting behaviors do not account for all of the variance in these factors and that other aspects of parental patterns contribute to the findings (e.g., lower levels of care, lower levels of parental bonding, etc.). Lower levels of care and bonding were associated with symptomology including sleep difficulties/fatigue and generalized fear. Essentially, these findings highlight that

parental patterns other than overprotection, or helicopter parenting behaviors, can contribute to psychological outcomes. A limitation of this study is that it did not look at how overprotection correlated with overall levels of depression and anxiety and thus such associations still remain unclear.

Heider et al. (2008) demonstrated the link between overprotective parenting and different types of anxiety disorders. The researchers used data from 8,232 respondents across six European countries recruited from the European study of the epidemiology of mental disorders to examine adverse parenting as a risk factor in the occurrence of anxiety disorders. The mean age of the sample was 47.3 years ($SD = 16.8$) and the majority of the participants were females (57%). As evidence supports the role of psychosocial factors in the etiology of anxiety disorders, Heider et al. sought to examine the relationship between dimensions of parental rearing, using the PBI and specific anxiety disorders including generalized anxiety, social anxiety, specific phobia, and panic disorder with or without agoraphobia. With the exception on generalized anxiety disorder, the authors found significant positive associations between overprotection and anxiety. Heider et al. assert that the association between adverse parenting, specifically overprotective parenting, and the risk of psychiatric disorders is general rather than disorder specific given that it was related to a number of anxiety disorders. Because participants in this sample were older, there remains need to examine how overprotective parenting behaviors impacts anxiety in emerging adults.

Spokas and Heimberg (2009) have also looked at how parental overprotection is related to specific anxiety disorders in college students. Specifically, they examined the relationship between overprotective parenting and social anxiety and sought to

understand if the two are linked. Specifically, the authors examined how well students' recollections of overprotective parenting behaviors predicted an increase in social anxiety in a socially stressful situation (e.g., beginning college) and if an external locus of control mediated that relationship. Participants included 923 undergraduate psychology students from a large urban university, with a subsample of 166 participants who completed a measure of social anxiety the summer before their first semester of college and again during their first semester. The mean age of the sample was 19.7 years ($SD = .96$) and the majority of the participants were White (62.5%) and female (74.7%). The participants completed online questionnaires regarding social anxiety, locus of control, parental care and overprotection (assessed through the PBI), and memories of being parented during their upbringing. Specifically, participants were asked to rate memories of parental factors including rejection, emotional warmth, feeling favored by their parent(s) and overprotection.

Overall, college students' reports of social anxiety were associated with high parental overprotection and previous recollections seem to predict increases in anxiety when faced with a stressful situation (Spokas & Heimberg, 2009). In addition, external locus of control was found to be a potential mediator between parenting and social anxiety. According to Spokas and Heimberg, overprotective parenting contributes to the development of a cognitive style in which outcomes are believed to be determined by external factors. When a parent is overprotective, it interferes with a child's acquisition of necessary skills and leaves the child feeling out of control when presented with social demands thus leading to higher levels of social anxiety (Spokas & Heimberg, 2009). These findings fall in line with the general theme of helicopter parenting, in that

helicopter parents who are overprotective or over involved interfere with their children's ability to develop necessary skills to navigate their social life and interpersonal distress, resulting in psychological distress.

As Spokas and Heimberg (2009) and Schiffrin et al. (2014) demonstrate, helicopter parenting and overprotective parenting are related to negative psychological processes, specifically external locus of control and less perceived autonomy and competence. This might explain why these behaviors are linked to depression and anxiety among youth. In addition to reducing internal locus of control, perceived autonomy, or competence, young adults whose helicopter parents handle all sources of conflict receive a message of codependence that they are unequipped to handle problems on their own. As such, they do not develop the skills to solve their problems (van Ingen et al., 2015). van Ingen and colleagues (2015) studied the relationship of college students' self-efficacy and peer attachment with their self-reports of their parents' parenting behaviors to determine if such behaviors resulted in a lowered sense of self-efficacy among students to solve their problems.

In their study, 190 traditionally-aged undergraduate students living on campus participated. The mean age of the sample was 20.03 years ($SD = 1.81$) and the majority of the participants were European American (73.8%) and female (82.5%). Participants completed self-report inventories about parental rearing behaviors, peer attachment, self-efficacy, and demographic characteristics (van Ingen et al., 2015). Helicopter parenting was measured using the Overprotection subscale of the PBI (Parker, Tupling & Brown, 1979) that assesses the perception of childhood parental overprotectiveness. As hypothesized, perceptions of helicopter parenting (e.g., overprotective parenting as

assessed by the PBI) were significantly associated with low self-efficacy and poor peer attachment. In regard to general self-efficacy, low self-efficacy was linked with perceptions of an overprotective mother ($r = -.25, p < .01$) and perceptions of an overprotective father ($r = -.18, p < .05$). Also, the perception of an overprotective mother was associated with difficulty trusting one's peers ($r = -.19, p < .01$) and feeling alienated from peers ($r = .22, p < .01$). Perceptions of an overbearing father demonstrated similar relationships and was also associated with poor peer communication ($r = -.18, p < .05$). Although the associations were small, these results reflect a relationship between helicopter parenting, low general self-efficacy and poor peer attachment. These results reinforce a link between aversive parenting behaviors and negative psychological outcomes and also highlight the impact of parenting behaviors on peer attachment which also may be a contributing factor to depressive, anxious, and/or other negative outcomes for emerging adults.

In another study, Givertz and Segrin (2014) examined the association between helicopter parenting and young adult self-efficacy through parent and child reports of helicopter parenting. Givertz and Segrin solicited information from both parents and young adult children in an effort to provide a more holistic view of family functioning and the parent-child relationship. Based on theoretical conceptualizations of family environment and parenting, four research hypotheses were made. It was hypothesized that authoritative parenting would be positively associated with parent and emerging adult family satisfaction, whereas authoritarian and permissive parenting would be associated with lower family satisfaction. It was also hypothesized that elements of parental control (i.e., psychological control, authoritarian parenting, rigid family

flexibility) would be associated with lower levels of self-efficacy and an increased sense of entitlement in emerging adults. Lastly, Givertz and Segrin hypothesized that open family communication would moderate the association between parental psychological control and child identity outcomes.

Participants in Givertz and Segrin's (2014) study were 339 parent-young adult dyads who completed questionnaires regarding their family environment, parenting, family communication and family satisfaction. Parenting style was assessed with the Parental Authority Questionnaire; no specific measures of helicopter parenting were used in the study. The parent questionnaires assessed family adaptability, cohesion, communication, and satisfaction in addition to parent-adolescent communication and parenting style. The young adult children completed the same questionnaires as their parents as well as a measure of self-efficacy and the Psychological Entitlement Scale (Givertz & Segrin, 2014).

Givertz and Segrin's (2014) results showed that parental control was positively associated with psychological entitlement. Parental control was also significantly and negatively associated with young-adults' general sense of self-efficacy. The researchers attributed these results to a type of parental control in which the parent is excessively involved in the child's life, is overly responsive to the child's needs, demonstrates unbridled affection for their child, and is preoccupied with the child's success and happiness. They characterized this excessive parental control as parental overinvolvement and noted that these parenting behaviors predicted psychological entitlement and lower self-efficacy. Givertz and Segrin assert that this type of parental control is distinct from parental psychological control, which is nonresponsive to the child's needs. They

described overinvolvement as promoting extreme intimacy through frequency of contact and rewards and also through advice giving and other directive behaviors that intrude on the adult child's ability to become self-sufficient. In regard to the sense of entitlement, Givertz and Segrin (2014) stated that while benevolently intended, parents' desire to protect their children from negative outcomes, while simultaneously providing for all of their child's needs, may lead to an expectation of privilege in their children. Essentially, as overinvolved parents intervene to ensure success when their young adult children face an obstacle, it creates a sense of entitlement or belief that every situation will and should turn out in the child's favor.

All of what Givertz and Segrin (2014) described in terms of overinvolved parents aligns with the developing construct or idea of helicopter parenting. As previously stated, this type of overinvolvement appears to be different than other types of parental control, like psychological control, and to result in a pattern of negative outcomes for young adult children, especially including a diminished sense of self-efficacy. As mentioned previously, overinvolvement is different than psychological control because psychological control is not concerned with the child's needs.

Overall, there appears to be preliminary evidence for relationships between overprotective parenting and depression and self-efficacy in young adults (Givertz & Segrin, 2014; LeMoyne & Buchanan, 2011; Meites et al., 2012; Schiffrin et al., 2014; van Ingen et al., 2015). There is also some evidence for a relationship between overprotective parenting and anxiety, albeit associations seemed even more mixed (Heider et al., 2008; LeMoyne & Buchancn, 2011; Meites et al., 2012; Spokas & Heimberg, 2009). Therefore, further investigation, especially in regard to overall depressive and anxiety symptoms and

stress, needs to be conducted. In addition, few of these studies have measured helicopter parenting explicitly. More frequently, overprotective parenting has been measured in the literature but as noted previously may differ in important ways from helicopter parenting. Further exploration and understanding of the specific relationships between helicopter parenting and depression, anxiety, and self-efficacy using measures that explicitly measure helicopter parenting is warranted.

Gender Differences

There have been few studies that have examined gender differences in outcomes relating to helicopter parenting specifically. However, there is some reason to expect gender differences in relation to particular parenting styles. In a study examining the influence of parenting style on adolescent competence and substance use, Baumrind (1991) found that adolescents from unengaged homes (more permissive parenting) were similar to adolescents from authoritarian homes and girls in particular manifested internalizing problem behavior. These results suggest a parenting influence on internalizing and externalizing symptoms that may differ by gender. To the extent that authoritarian parenting might overlap with helicopter parenting, it may be expected that emerging adult women would be more affected by helicopter parenting than emerging adult men.

Other studies on authoritarian parenting, however, have not found gender differences. In a study of 17 to 69 year olds ($M = 35$, $SD = 13.9$) that examined the relationship between authoritative, authoritarian, and permissive parenting on respondents' mental health, Uji and colleagues (2014) found that both maternal and paternal authoritarian parenting styles worsened respondents' later mental health

including symptomatic problems, risk to self and others, life functioning, and psychological well-being. They also found that these influences did not vary in regard to respondent gender. Most importantly, in a review of studies examining the association between parenting and childhood anxiety, McLeod and colleagues (2007) also assessed whether the strength of the association between parenting and anxiety could depend on the gender of the child. Moderating effects of child gender produced no significant findings. In another review examining the association between parenting and childhood depression, McLeod and colleagues (2007) tested moderating effects of child gender, also producing no significant findings.

While sex differences have been previously explored in relation to parenting practices, such as Baumrind's (1966) three parenting styles, Kouros and colleagues (2017) appear to be the first to examine sex differences in regard to helicopter parenting behaviors specifically. The researchers examined sex differences in relation to helicopter parenting and autonomy support on college students' mental health and well-being. To measure helicopter parenting behaviors and autonomy support, Kouros and colleagues used the HPB (Schiffirin et al, 2014). They found that higher levels of helicopter parenting predicted lower levels of well-being for females only. In contrast, autonomy support was associated with less dysphoria and social anxiety for males only. These findings imply that sex differences exist in regard to helicopter parenting and psychological outcomes. Kouros and colleagues suggested that these sex differences may be related to forms of parental control being more detrimental to females than males and that females are likely to be more vulnerable to these negative outcomes during adolescence into emerging adulthood. It could also be that parents tend to use more

controlling and less autonomous granting behaviors with females earlier in life than with males and that helicopter parenting behaviors for females is a prolonging of this type of control (Kouros, 2017).

In the broader literature on parenting styles and outcomes, gender differences in the associations with negative psychological outcomes and parenting appears to be unfounded. However, Baumrind (1991) appears to provide empirical evidence that gender does moderate the association between parenting and negative outcomes for adolescents. Finally, Kouros et al. (2017) lends preliminary support as it is the only study thus far to look at gender differences with helicopter parenting specifically. Therefore, the present study aimed to explore potential gender difference in the relationship between helicopter parenting and depression, anxiety, stress, and lowered self-efficacy.

Helicopter Parenting Measures

Given the relative newness of the construct of helicopter parenting and the notion that helicopter parenting appears to be similar to, albeit different than traditional conceptualizations of parenting styles or behaviors, specific measures that assess helicopter parenting need to be created and evaluated if the construct and the outcomes associated with it are to be understood. As previously noted, prior studies related to outcomes of helicopter parenting often use proxy measures of helicopter parenting, namely the PBI. It is unclear whether helicopter parenting is distinct from overprotective parenting. Recent research has begun to use measures designed to specifically capture helicopter parenting behaviors, although no study has compared the validity and quality of each of these measures that has been developed and used in such studies. An aim of the present study was to assess the validity of measures used to assess helicopter

parenting to identify clinically useful measures of helicopter parenting that are related to negative psychological outcomes.

Parental Bonding Instrument (PBI). The majority of research done on helicopter parenting has utilized the overprotection subscale of the PBI (Parker, Tupling & Brown, 1979). Therefore, it is important to carefully examine the PBI, its development, and its original intended use.

The original development of the PBI began with Parker and colleagues (1979) who aimed to define and measure the constructs significant to the parent-child bond. Until that time, the bond between parent and child had not been well-defined (Parker et al.). Based on their review of the literature, Parker and colleagues believed that the parental contribution to bonding is influenced by two constructs. The first construct is a care dimension and the second less clearly defined construct seems to be a dimension of psychological control. Parker and colleagues' intention was to define this second dimension more precisely.

Based on these two principle constructs, items suggesting attitudes of care, affection, sensitivity, cooperation, accessibility, indifference, encouragement of autonomy and independence and items suggesting attitudes of control or strictness, punitiveness, rejection, interference, and overprotection were generated from clinical notes and a literature review (Parker et al., 1979). The researchers accumulated 114 items and administered them to a pilot sample of 50 fifth-year medical students asking them to rate each of their parents on a four-point scale regarding their first 16 years. No other demographic information was given in the manuscript. After revisions to the wording of these items, they were administered to a second sample of 34 psychiatric nurses and 19

medical students. The mean age of this second sample was 27 years old, with equal numbers of male and female respondents.

After administration of these items to the second sample, four items without well-distributed responses were eliminated. The remaining items were intercorrelated and further reduced by one item from pairs with a high correlation coefficient. The remaining 99 items were run through a confirmatory factor analysis with four factors resulted. The first factor accounted for 52% of the variance and reflected a dimension of care/involvement versus indifference/rejection. Some of the highest loading items for the care factor included, “Was affectionate to me,” “Frequently smiled at me,” and “Appeared to understand my problems and worries.” The second factor accounted for 29% of the variance and suggested a dimension of control/overprotection/intrusion versus encouragement of independence. Some of the highest loading items for the overprotection factor included, “Was overprotective of me,” “Tried to control everything I did,” and “Invaded my privacy.” The third factor, accounting for 11% of the variance, was comprised of overprotection and encouragement of autonomy items. The fourth factor consisted of diverse content. The items in the fourth factor were discarded, resulting in a 48-item pool for the principal study. Based on the factor analysis, it was determined that a two-dimensional model, with a care dimension and a control or overprotection dimension, was the best fit for the data. Parker and colleagues did not explain why a two-dimensional model instead of a three-dimensional model seemed like the best fit for the data. It seems likely their decision was because the third factor seemed to be a combination of the first two and accounted for little variance. Items weighting

negatively on the second factor tended to weight positively on the third factor and vice versa and so these two factors were condensed into one factor.

Parker et al. (1979) further established the factorial and convergent validity of the scale through a sample of 65 medical students, 43 psychiatric nurses, 13 technical college students and 29 parents of children. Respondents were fairly equally split in regard to gender and had a mean age of 25 years. An exploratory factor analysis with the responses to the 48-item pool was conducted and again resulted in a four-factor solution. After a confirmatory factor analysis with a limitation of two dimensions, two factors for the 48 items were extracted. The first factor accounted for 28% of the variance and was identified as care factor. The highest loading items were: "Spoke to me in a warm and friendly voice," "Appeared to understand my problems and worries," "Enjoyed talking things over with me." The second factor accounted for 17% of the total variance and was called an overprotection factor. The highest loading items were, "Did not want me to grow up," "Tried to control everything I did," and "Invaded my privacy." To obtain a measure of reliability, two identical items had been included in the 48-item questionnaire, producing a Pearson correlation coefficient of .70. To assess test-retest reliability, 17 respondents completed the questionnaire on two occasions, three weeks apart; a Pearson correlation coefficient of .76 was obtained for the care scale and .63 for the overprotection scale. Split-half reliability was measured at ($r = .88$) for the care scale and ($r = .74$) for the overprotection scale. Two independent raters also interviewed subjects about their parents and rated care and overprotection. These objective ratings were then correlated with subjects' self-reports on the PBI dimensions as a measure of convergent validity. The two raters scores and the scale scores were highly correlated ($r_s = .77$ - $.78$

for the care scale and $r_s = .48-.51$ for the overprotection scale). Analyses suggested that mothers were experienced as more caring and somewhat more overprotective than fathers, but that the gender of the respondent did not influence their perception of their parent's capacity to care or be overprotective. Overall, the data reflects that the PBI is a reliable scale that has convergent validity with observer ratings of parental care and overprotection.

Because the initial validation studies used an unrepresentative sample, Parker and colleagues (1979) used another sample to obtain normative data as well as to continue to examine the validity of the scale and differences in scores between different groups. For this study, 410 patients visiting general practitioners in Sydney, Australia participated. The sample had a mean age of 36 years. The intercorrelations of the care and overprotection scales were negative and at a medium effect size for mothers and fathers, thus indicating that the two dimensions are highly negatively related. In addition, findings for mothers being more caring and overprotective than fathers were replicated and converged with the findings of Parker and colleagues from other samples. In addition, they noted that the sex of the child rating the parent did not relate to differences in caring or overprotectiveness. The authors also examined if social class was related to ratings and found a small positive relationship between higher class and more maternal care. Age was not correlated with ratings suggesting that responses were not affected by the passage of time. The authors concluded that validity of the two PBI subscales appears to be supported and extraneous variables do not appear to significantly affect the scale's validity.

From the validation studies mentioned above, Parker and colleagues (1979) conclude that in addition to a care dimension, overprotection is an influential dimension in regard to parental bonding. The dimension of overprotection on the PBI is defined by control, overprotection, intrusion, excessive contact, and infantilizing and prevention of independent behavior versus the allowance of independence and autonomy (Parker et al., 1979). They noted it was very difficult to determine which of the core items made up this overprotection dimension and thus they simply conceptualized the items as measuring the presence or absence of overprotection. In addition, given the difficulty defining the second dimension, the reliability and validity of this scale was lower than that of the care scale. Despite these limitations, the authors do note that the scale has acceptable levels of reliability and validity, that the two dimensions are correlated, and that the dimensions are not correlated with age or sex of the respondent.

Since the original Parker et al. (1979) validation studies, the PBI has been used widely in the literature and there have been additional attempts to validate it. To examine the constancy of the PBI over time, Wilhelm and colleagues (2005) examined the long-term reliability of the PBI by using a cohort who had first taken the measure over 20 years prior. In doing so, they also consider factors which may have affected scores on the PBI over time including gender, number of life events, history of depression, current mood and neuroticism level.

Wilhelm and colleagues (2005) hypothesized that the passage of time would have no effect on the perception of parental care that was received. They also hypothesized that as the cohort members had children of their own and gained more life experience, that any changes in perception of their own parenting would be reflected in relation to

control and overprotection. In regard to life events, the researchers hypothesized that those who reported more experiences of significant life events would show a greater amount of change in parental perceptions than those who experienced less life events. Researchers also believed that depression and neuroticism would not affect parental perceptions over time and that women were more likely to be consistent reporters of their early experiences of being parented than men.

In 1978, students completing a postgraduate teaching training program were invited to participate in the longitudinal study (Wilhelm et al., 2005). The cohort consisted of 114 women and 56 men ($n = 170$) with a mean age of 23 years old. The cohort was followed-up with at 5-year intervals (1983, 1988, 1993, 1998). The participants completed a series of self-report measures and a semi-structured interview of physical and mental health including depression, lifestyle, work and social support. The PBI was administered on three of the four follow-up waves. More specifically, maternal PBI data at all four waves were completed by 144 participants and paternal PBI data was collected for 138 participants. The six remaining participants had incomplete paternal data because of death or lack of contact with the father. That data was not included in the analysis. Over the duration of the study, participants completed the two PBI subscales (care and overprotection) for both parents resulting in analyses for four subscales (maternal care, maternal overprotection, paternal care and paternal overprotection). At the end of the study, PBI data was collected from 144 participants (93 females and 51 males), demonstrating an 85% retention rate of the original cohort. Stability and change in mean levels of the PBI were tested using repeated-measures ANOVA, as well as interactions between gender and time with a between-subjects repeated-measures

ANOVA design. To assess the stability of the PBI subscales over the 20-year period, Pearson product-moment correlations were conducted, testing data from various time points.

No significant differences in linear trends were observed regarding the repeated-measures ANOVA results (Wilhelm et al., 2005). No significant interaction effects between gender and time were found, and there were no significant interaction effects between lifetime history of depression and time. Overall, the PBI scores were stable across time, with retest coefficients in the range of .64-.83 for maternal care and .74-.82 for paternal care. Retest coefficients for maternal overprotection were in the range of .67-.77 and in the range of .59-.78 for paternal overprotection over the 20-year span. As previously stated, there was also no evidence of confounding effects of gender or history of depression on the PBI subscales. The results of this study indicate that perceptions of parental care and over protection, as measured by the PBI, remained stable over the 20-year period. The stability of the PBI over this time period demonstrates its validity as a measure of perceived parental characteristics up until the age of 16, as it was originally intended to measure (Parker et. al., 1979). Further, the findings suggest that recollections of one's parental environment are not significantly influenced by gender, history of depression, number of life events and that perceptions do not shift with fluctuations in mood. The retention rate and non-clinical cohort serve as strengths to the study, as the generalizability of these findings can be more openly considered (Wilhelm et al., 2005).

Because the overprotection subscale of the PBI has acceptable reliability and validity for a difficult-to-define dimension of helicopter parenting and because it was the initial scale developed to measure overprotection, the PBI has been used as a starting

point for the development of measures of helicopter parenting that will later be reviewed. As noted, the PBI has strong psychometric properties such as good test-retest reliability, stability over time, and convergence with observer ratings of behaviors (Parker, 1979). Psychological characteristics of participants or the passage of time do not seem to impact participants' accurate recall of parenting behaviors on the PBI (Parker, 1979). It is important to keep in mind that the PBI was originally developed to capture parental care and overprotection and specifically psychological control prior to the development of the construct of helicopter parenting. It may be that overprotection is related to helicopter parenting but there may be important differences between these two as well. Without further examination, it might be premature to equate the overprotection dimension of the PBI as synonymous with helicopter parenting or to use it as the sole inspiration for developing helicopter parenting items. In addition, the scale was originally intended to capture the parenting experiences until age 16 and the validation studies used directions to rate parents up until age 16 (Parker et al., 1979). The validity for using the scale to measure helicopter parenting in emerging adulthood in college students ages 17-25 is unknown.

Helicopter Parenting Scale (HPS). In contrast to the PBI, the Helicopter Parenting Scale (HPS; LeMoyne & Buchanan, 2011) was developed to assess whether helicopter parenting is a general trend in the Millennial generation and hence was specifically designed to capture helicopter parenting. LeMoyne and Buchanan examined college students' attitudes about their parents as well as well-being and mental-health related issues to examine the phenomenon of helicopter parenting from an empirical perspective. They asserted that those born between 1982 and 1995, the Millennials, are

the most protected generation in Western history, with the over involvement of parents beginning at a young age. With the advances in technology, “electronic umbilical cords” allow parents with extreme separation anxiety to hover over their children after they leave for college (LeMoyne & Buchanan, 2011, p. 400)

In the context of Baumrind’s (1967) parenting styles, LeMoyne and Buchanan (2011) drew comparison between helicopter parents and authoritarian parents, with similar concerns for their children to succeed in life. LeMoyne and Buchanan conceptualized helicopter parenting as problematic because parents try to solve all of their children’s problems and hence thwart their child’s opportunity to function independently. Helicopter parents act on their concerns by doing things for their child, when the child should be navigating their own world as they mature. They argue that helicopter parents may appear authoritative in most areas of the child’s life, but that they are stunting independence and not nurturing the child’s ability to handle their own tasks. They also assert that helicopter parents are intrusive specifically in the areas of education and competitiveness, as they believe this will give their children a later advantage. In the development of the HPS, they intended to capture the kinds of normative concerns parents have for children to succeed and achieve in life when such normative concerns are taken to a dysfunctional level and expressed in the kinds of dysfunctional parenting behaviors demonstrated by helicopter parents.

The HPS attempts to provide a global assessment of respondents’ experiences with their parents in the years leading up to college (LeMoyne & Buchanan, 2011). The researchers generated a pool of items to capture helicopter parenting. Unfortunately, they did not explicitly discuss how they configured the items they used to develop the scale.

Respondents are asked to rate their level of agreement with statements related to their experiences growing up on a rating scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Some of the key items are, “I sometimes felt that my parents didn’t feel I could make my own decisions,” “My parents often stepped in to solve life problems for me,” and “My parents supervised my every move growing up.” The scale score is intended to reflect the respondent’s corresponding level of agreement with the helicopter parenting scale.

The data from LeMoyne and Buchanan’s (2011) study was obtained from a convenience sample of undergraduate general education classes of a university in the Southern United States. The authors’ decision to survey general education classes was driven by the desire to avoid a sample that was oversaturated with students from any particular discipline or major. The sampling frame consisted of the total enrollment of eight classes ($N = 414$) with a response rate of 80% and 330 students completing the surveys. To ensure the examination of differences among students of similar ages, 12 students over the age of 25 were removed from the study, resulting in a total of 317 college students in the final sample. The majority of respondents were college Freshman (49.1%), followed by Sophomores (34.2%), Juniors (13.3%) and Seniors (3.5%). No percentage breakdown of gender or ethnicity was provided for the sample.

Originally beginning with ten items, a principle components factor analysis with varimax orthogonal rotation was conducted to examine factor loadings (LeMoyne and Buchanan, 2011). Two factors emerged- one helicopter parenting factor and one other factor with three items that were more indicative of healthy perceptions of parents and included, “My parents have always been very involved in my activities,” “I trust my

parents' judgment over my own," and "I rarely talk to my parents before I make decisions." These items had factor loadings of greater than .60 on the second factor and loadings .25 or lower on the helicopter parenting factor. The seven items which loaded onto the helicopter parenting factor consisted of factor loadings ranging from .45 ("It was very important to my parents that I never fail in life") to .75 ("My parents let me figure things out independently"). Other items comprising the HPS included, "My parents often stepped in to solve life problems for me," "My parents supervised my every move growing up," and "I sometimes felt that my parents didn't feel I could make my own decisions." The Cronbach's reliability alpha for the seven items included in the HPS was .71 (LeMoyne & Buchanan, 2011). The scale was significantly associated with lower rating of well-being ($r = -0.22$), having a prescription for anxiety or depression medication ($r = 0.19$), and pain pill consumption ($r = 0.14$). The mean for the HPS was 2.80, which corresponded to a rating between *disagree* (2) and *undecided* (3), reflecting a low level of helicopter parenting behaviors in general.

Limitations to the development of the HPS discussed by LeMoyne and Buchanan (2011) included the use of a convenience sample rather than a random probability sample and the limited geographic location from which the surveys were obtained. Both the use of a convenience sample and the use of a sample from an isolated geographical location limit the generalizability of the results and applicability of the scale. The lack of a clear gender and ethnicity breakdown also leaves some unanswered questions in regard to the demographic variables of the respondents in the sample. It is unclear if the scale generalizes to certain ethnic groups or captures the construct equally across gender. Also, while a relationship can be illuminated between helicopter parenting and

psychological functioning, it is possible that respondents with low levels of well-being and high levels of anxiety and/or depression view their parents as more intrusive or overbearing than students without similar profiles, irrespective of the parenting style they received or experiences they had growing up. These students may tend to blame their parents for difficulties in their lives, may resent any help their parents attempt to give them, and may reflect a nature of their relationship that is not completely accurate. How the authors constructed the original ten HPS items also remains unclear (LeMoyne and Buchanan, 2011). An item pool of only ten items is questionable. It is unknown whether items were borrowed from other scales or if the authors followed standard guidelines for item generation, such as consultation with influence and guidance from relevant expertise (Furr & Bacharach, 2014).

Kwon et al. (2016) attempted to validate the HPS by examining factorial and predictive validity of the scale among 412 Korean students. Participants were almost equally divided between male (49.3%) and female (50.7%), and single, middle class, traditional aged ($M = 21.3$ years) students at private universities in Seoul, Korea. They were given questionnaires including the HPS, a measure of locus of control and of emotional well-being. Kwon and colleagues hypothesized that there would be a direct association of helicopter parenting with locus of control and emotional well-being and an indirect association of helicopter parenting with emotional well-being through its impact on students' locus of control. Structural equation modeling was used to check the validity of the measurement model of the helicopter parenting construct and test their hypotheses regarding the relationships between the study variables. A reliability analysis was conducted for the original 10 items of the HPS. Of the original 10 items, two items ("I

trust my parents' judgment over my own" and a reverse coded item, "I rarely talk to my parents before I make a decision," were identified as problematic and removed. The remaining eight items demonstrated adequate internal reliability ($r = .70$). The two items excluded were two of the three items also removed by LeMoyne and Buchanan (2011). A confirmatory factor analysis validated the one-factor solution of the eight items for the helicopter parenting construct with significant loadings ranging between .41 and .74.

Results demonstrated that the HPS is a reliable measure to use for Korean college students with eight items loading on one factor as opposed to the 7 items used by LeMoyne and Buchanan's (2011). In regard to the researchers' hypotheses, the findings revealed that perceived helicopter parenting is negatively associated with college students' internal locus of control. No direct association between perceived helicopter parenting and college students' emotional well-being was found (Kwon, et al., 2016). Kwon and colleagues' (2016) findings may reflect a global trend of helicopter parenting in college students' lives and demonstrate consistency in regard to this phenomenon between Western and non-Western parenting experiences. As one version of the scale has seven items and one version has eight items, it remains unclear which version to use

In sum, while the HPS seems to be an improvement over the PBI in that it was originally developed specifically as a measure of helicopter parenting, it does have its limitations. As noted, it is unclear how items for the scale were developed, contributing to questions surrounding the construct validity of the scale. Also, the scale does not appear to have been correlated with other parenting measures, thus bringing into question its construct validity. Finally, it is problematic that factor analyses in different samples are not entirely consistent and have resulted in 7 (LeMoyne & Buchanan, 2011) and 8

item (Kwon et al., 2016) scales. Finally, there have been conflicting results as to whether or not it correlates with depression, anxiety, and well-being in all samples as these correlations tend to be low (Kwon et al., 2016; LeMoyne & Buchanan, 2011). This calls into question the predictive validity of the scale.

Helicopter Parenting Instrument (HPI). Odenweller, Booth-Butterfield, and Weber (2014) created the Helicopter Parenting Instrument (HPI) to explore the relationships that exist between helicopter parenting and the authoritarian, authoritative, and permissive parenting styles previously discussed (Baumrind, 1966). Odenweller and colleagues discussed concern regarding LeMoyne and Buchanan's (2011) HPS and created the HPI to be administered in conjunction with the HPS. According to Odenweller et al., because helicopter parenting is conceptualized as developmentally inappropriate parenting behavior used with otherwise competent children, it is possible that LeMoyne and Buchanan (2011) did not capture helicopter parenting but instead actually measured parents' appropriate hovering over their younger children.

To compensate for a potential conceptual flaw with the HPS, items for the HPI were reported as being inspired by phrases used in empirical research and popular press to describe helicopter parenting in a way that would be understood and accurately rated by the Millennial generation (Odenweller et al., 2014). Items of the HPI were intended to capture the current parenting practices of college aged students (as opposed to earlier parenting behaviors) and included item such as: "My parent tries to make all of my major decisions," "My parent overreacts when I encounter a negative experience," "My parent insists that I keep him or her informed of my daily activities," and "When I am going through a difficult situation, my parent always tries to fix it."

The HPI was administered and completed by 268 women ($n = 147$; 54.9%) and men ($n = 121$; 45.1%) who ranged in age from 18 to 25 years old ($M = 20.8$, $SD = 1.3$) (Odenweller et al., 2014). Participants were recruited via convenience sampling in an introductory communication studies course at a large Mid-Atlantic university. Participants were predominantly European American ($n = 242$; 90.3%) and single ($n = 264$; 67.5%). Participants were instructed to report on the parent they talk to the most frequently. The majority of respondents reported on their biological mothers who were also predominantly European American and were married to their biological fathers. Most respondents reported having at least one sibling ($n = 238$; 88.8%) and perceived their parents' parenting styles as consistent among all of the children in the family ($n = 162$; 60.4%).

Odenweller et al. (2014) found a significant positive relationship ($r = .63$) between the HPI and LeMoyné and Buchanan's (2011) HPS demonstrating convergent validity between the scales. It was also reported that the HPI demonstrated strong construct validity given its positive relationships with theoretically related variables such as the authoritarian parenting and conformity orientation and showed no relationship with a divergent variable of conversation orientation. The overall HPI scale had a reliability of $\alpha = .78$.

In regard to study limitations, the researchers noted the use of a largely homogeneous sample, limiting the generalizability of results; the correlational nature of the study, and the influence of a single-source bias (Odenweller et al., 2014). The correlational nature of the results prohibits causal claims regarding helicopter parenting and negative outcomes. In addition, since all measures were self-reports, it is possible

that they reflect the same bias. Collecting observer ratings of parenting behaviors would be illuminating and would validate the self-reports. Finally, collecting and aggregating survey data from children as well as parents from a systems approach is recommended to further explore if helicopter parenting is a family-wide phenomenon or just a parent's unique style of parenting a specific child (Odenweller et al., 2014). No further studies utilizing the HPI were found for review.

In conclusion, the HPI appears to demonstrate clearer construct validity than the HPS, as it correlates with other related parenting styles theoretically linked to helicopter parenting (Odenweller et al., 2014). The HPI looks at behaviors rather than intent, which may make it easier for students to more reliably rate parental helicopter behaviors as they do not have to guess at their parents' internal psychological state. Also, items of the HPI are phrased to assess current parent behaviors, rather than past behaviors (Odenweller et al., 2014). However, there does not appear to be much empirical evidence regarding the scale's validity or reliability beyond the initial validation study that validated (Odenweller et al., 2014). It is also problematic that the only other helicopter parenting scale that was tested against this one was the HPI which itself has psychometric limitations.

Helicopter Parenting Behaviors Questionnaire (HPB). The HPB was developed to examine the effects of controlling parenting or helicopter parenting on college students' well-being (Schiffirin et al., 2014). The researchers reviewed books associated with helicopter parenting to generate the original pool of scale items. The original HPB questionnaire contained 20 items deemed to represent helicopter parenting behaviors. Seven items were included to represent autonomy supportive parenting

behaviors, as contrasting items to those portraying more controlling parenting behaviors. Respondents rated the extent to which they agreed with the items on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) regarding their mother's current parenting behaviors. Respondents were undergraduate college students at a public liberal arts college in the Mid-Atlantic region of the United States ($N = 297$). Most respondents were students in general Psychology courses and received credit for their participation. Respondents were between the ages of 18 and 23 years old ($M = 19.3$, $SD = 1.3$) with 88% of the sample being female and 12% being male. The majority of participants self-identified as White (84.8%) followed by 4.1% Black, 3.8% Asian or Pacific Islander, and 7.1% identified as "other". Most students were college freshman (51.2%).

An exploratory factor analysis was conducted using principal components analysis with a varimax rotation to test the factor structure of the 27-item HBP (Schiffirin et. al., 2014). A secondary exploratory factor analysis was conducted following a scree plot that indicated a two-factor structure. Items with factor loadings of .50 or greater and no cross-loadings greater than or equal to .32 were retained. The first factor, Helicopter Parenting Behaviors accounted for 20.77% of the variance and consisted of nine items. The Helicopter Parenting Behavior factor includes items such as, "My mother calls me to track my schoolwork," "If I were to receive a low grade that I felt was unfair, my mother would call the professor," and "If I am having an issue with my roommate, my mother would try to intervene." The second factor, Autonomy Supportive Parenting Behaviors consisted of six items and accounted for 9.73% of the variance. The Cronbach's reliability alpha for the nine-item Helicopter Parenting Behavior factor was acceptable at

.77. The second factor, Autonomy Supportive Parenting Behavior had a Cronbach's reliability alpha of .71. The distribution of the responses for the entire scale were reported as normal based on skewness and kurtosis values. Helicopter parenting behaviors were negatively correlated with autonomy support ($r = -.37$) and positively correlated with depression ($r = .27$). Helicopter parenting behaviors were also negatively correlated with the Basic Needs and Satisfaction in General Scale, demonstrating that helicopter parenting behaviors were related to lower levels of autonomy, competence, and relatedness.

Overall, the HPB appears, on the surface, to contain items that target the construct of helicopter parenting. The scale also appears to be correlated appropriately with convergent and discriminant constructs. However, there does not appear to be much support for the validity of the scale, as the use of the scale in other empirical research is lacking. As discussed by the researchers, generalizability of results found with the use of the HPB scale are limited by the homogeneity of the sample used (Schiffrin et al., 2014). Schiffrin and colleagues acknowledge that while the concept of helicopter parenting has been explored most often among the middle- to upper-middle class populations, the ways in which helicopter parenting is manifested and perceived in economically and ethnically diverse populations is not fully understood and requires further research. Also, the HPB scale was designed to reflect the parenting behaviors of the mother and not of the father, which raises questions regarding differences in the manifestation of helicopter parenting behaviors among fathers and the differences between how helicopter parenting is perceived from a mother versus a father and also between male and female students in relation to each parent (Schiffrin et al., 2014). Although the researchers indicate that

items could be reworded to easily reflect helicopter parenting behaviors from fathers, more research surrounding the previous questions should be explored to ensure that the construct of helicopter parenting is stable across parent gender.

Reed and colleagues (2016) conducted a study that aimed to confirm the factor structure of the HPB and sought to determine whether self-efficacy was a mechanism by which helicopter parenting related to negative outcomes. Specifically, confirmatory factor analysis was used to test the hypothesis that the data would support the two-factor model of autonomy supportive and helicopter parenting behaviors as separate but related dimensions concluded from the original HPB development study (Schiffrin et al., 2014). Structural equation modeling was also used to examine self-efficacy as a mechanism linking helicopter parenting to outcome variables of anxiety, depression, life satisfaction and general physical health. Participants in this study were 461 emerging adults aged 18 to 25 years old ($M = 19.66$) from a large public university in the southeast United States. The sample consisted of mostly European Americans (71.8%) but included Hispanic/Latino (11.9%), African American/Black (10.7%), Asian American (3.2%) and biracial/multiracial/other (2.4%) participants. The majority of the sample was female ($n = 372, 80.8%$). Approximately one in seven of the participants ($n = 52; 15.2%$) reported living at home with one or more of their parents.

To measure autonomy support and helicopter parenting, Reed et al. (2016) administered the six-item Autonomy Support subscale and the nine-item Autonomy Support and Helicopter Parenting subscales from the HPB. Both subscales had good internal consistency ($\alpha = .78$ and $\alpha = .82$ for Autonomy Support and Helicopter Parenting, respectively). This was similar to the reliabilities reported in Schiffrin et al.

(2014; $\alpha = .71$ and $\alpha = .77$, respectively). Examination of skewness and kurtosis indicated that the data were normally distributed. Overall, the sample had low levels of helicopter parenting and moderate levels of autonomy support, anxiety and depression. Reed and colleagues replicated the two-factor model seen in the original HPB development (Schiffirin et al., 2014), identifying helicopter parenting and autonomy support as separate factors ($r = .05$). One Helicopter Parenting subscale item (“My mother regularly wants me to call or text her to let her know where I am”) demonstrated a .37 loading on autonomy support and .39 on helicopter parenting and was removed from analysis. The helicopter parenting subscale reliability remained the same after the removal of this item.

Reed and colleagues (2016) demonstrated that the HPB is a reliable scale measuring the two distinct factors of helicopter parenting and autonomy support. Support of this two-factor structure of the HPB indicates that helicopter parenting is a construct of its own and that it is not simply the opposite of autonomy support. Contrary to the original scale development study (Schiffirin et al., 2014) however; the results of Reed and colleagues indicated that helicopter parenting was not significantly correlated with self-efficacy, anxiety, depression, or life satisfaction. Helicopter parenting was related to physical health, but the relationship was small ($r = .11$). Therefore, the results raise the question whether helicopter parenting directly relates to the measured outcomes of depression, anxiety and self-efficacy. While these relationships were seen in the original scale development (Schiffirin et al., 2014), they were not observed by Reed and colleagues.

Possible explanations as to why this occurred include that there were low levels of helicopter parenting reported among the sample and that some items are more or less appropriate for emerging adults living at home. For example, lower levels of helicopter parenting reported may be due to the fact that some items are not relevant to emerging adults living at home (“If I am having an issue with my roommate, my mother would try to intervene”). As previously mentioned, approximately 15% of the respondents reported living at home with one or more of their parents; therefore, certain parenting behaviors may not have been perceived or rated as helicopter parenting as they may have been if these emerging adults lived outside the home. Parental monitoring of diet, exercise, social activities and schoolwork may be reported as more intrusive or more like helicopter parenting if the adult child is not living in the home, where parents are closer in proximity and more likely to ask questions or observe these behaviors. Similarly, if low levels of helicopter parenting behaviors were reported, this could account for the lack of a relationship detected between helicopter parenting and the targeted outcomes. If living at home influences the perceptions of parenting behaviors as helicopter parenting or not, this could be one moderator variable, among others, that impacts the experience of helicopter parenting and its relationship to outcomes. In addition, it seems that the specific items included in the helicopter parenting scale (e.g., items about intervention at school versus items about intervention in life such as with diet or exercise) could have important implications for assessing the correlates of helicopter parenting in different samples.

In all, it seems that the HPB is a reliable scale with factorial validity. However, questions remain as to whether or not it is appropriate for use in diverse samples,

specifically whether it can capture helicopter parenting behaviors similarly in emerging adults living at or away from home. Also, conflicting results regarding the relationship between the HPB and negative outcomes raises questions surrounding the validity of the scale. Finally, the HPB has not been investigated for convergent validity with any other parenting constructs or scales.

General Limitations and Comparison of Scales. In summary, there are many limitations to the current scales used to assess helicopter parenting. To better understand what helicopter parenting is and how it is affecting emerging adults, there needs to be a unifying definition and a consensus on what scale(s) to use to assess the construct. As previously discussed, there does not appear to be a clear definition of helicopter parenting, impacting the actual items and construct validity of existing measures. For example, the PBI (Parker et al., 1979) measures overprotective parenting whereas the other scales were specifically designed to capture various aspects of helicopter parenting. In addition, the PBI and HPS (Parker et al., 1979; LeMoyne & Buchanan, 2011) combine both perceptions of parental intentions and actual parenting behaviors whereas the remaining scales examined (HPI and HPB helicopter parenting subscale) focus just on actual parenting behaviors (Odenweller et al., 2014; Schiffrin et al., 2014). This is important, and ultimately a limitation to the research on the topic, as even slightly differing definitions influence item construction for these scales. As seen in the review of the helicopter parenting measures that are available, item development has been frequently based on key phrases in the literature, essentially being made up and including a variety of different factors. Several questions emerge. Where are these items coming from? Have experts reviewed them? Are the constructs and components that make up the

phenomenon of helicopter parenting consistently being tapped into? The available measures of helicopter parenting appear to tap into similar, but different factors relating to the idea of helicopter parenting, perpetuating the lack of understanding for what behaviors and or attitudes or intent are specifically and consistently exemplifying helicopter parenting.

How participants are instructed to respond to measures of helicopter parenting also appear to differ. As pointed out by Odenweller et al. (2014) in the construction of the HPS, LeMoyne and Buchanan (2011) instructed participants to respond based on experiences with the parenting styles they received growing up, while their measure instructs participants to respond based on current interactions regarding the parent with whom they have the most correspondence. Important to the stable and consistent conceptualization of the phenomenon of helicopter parenting is an accurate and agreed upon depiction of when helicopter parenting matters and is occurring. Consistent with most definitions of helicopter parenting is the idea that overparenting or hovering is occurring at a developmentally inappropriate time, or when the child is now an emerging adult and is theoretically competent to address their own needs and thus it is important that scales specifically measure parenting in this time period. In addition to the lack of a consistent operational definition of helicopter parenting, is the limitation of the differentiation of when the targeted helicopter parenting behaviors have occurred.

As is commonly a limitation to empirical research, the research concerning the validation of helicopter parenting scales used largely homogeneous samples (LeMoyne & Buchanan, 2011; Odenweller et al., 2014; Reed et al., 2016; Schiffrin et al., 2014). The majority of participants are European American female college students. While using

traditionally aged college students coincides with the idea that helicopter parenting is relevant for and negatively impacts emerging adulthood, there is little discussion surrounding how helicopter parenting impacts different cultures and even different genders, including gender differentiation between parents and their children. The literature on helicopter parenting is predominantly influenced by European American female participants responding based on their experiences with their mothers. It is unclear if helicopter parenting is found among other cultural or ethnic backgrounds. In addition to culture, ethnicity, socioeconomic status, religion, and gender, there may be other differences observed with helicopter parenting, such as the appropriateness of the different measures for students residing at home versus away from the parents (Reed et al., 2016). Failing to explore and control for potential extraneous variables such as those and also designing items that can accurately be used for a wide variety of samples poses questions and concern for the validity of helicopter parenting measures.

Finally, it is worth noting that even when using the same scale, there are differing outcomes regarding whether or not helicopter parenting is related to psychological symptoms. It is unclear at this time whether the discrepancies are due to the differential construct validity of the different scales, to differences in the samples used in each study; or if helicopter parenting is truly unrelated to negative psychological outcomes. According to SDT theory (Ryan & Deci, 2000), one would expect that helicopter parenting should be related to self-efficacy and psychological symptoms. Without further validation and examination of the scales however, it is impossible to resolve these important issues. It is important for researchers to consider cultural and other factors that

may influence how helicopter parenting behaviors are perceived and impact outcomes among the diverse population of emerging adults.

The Present Study

This present study sought to add clarity to measures of helicopter parenting as well as to the outcomes of helicopter parenting. To add clarity to measures of helicopter parenting, each scale was assessed for a variety of types of validity as well as internal consistency reliability. In addition, to assess construct validity, the convergence between existing helicopter parenting measures and the correlations between the measures and negative psychological outcomes for emerging adults were examined. Finally, gender and ethnic differences in the association between helicopter parenting and negative psychological outcomes were also be examined. The specific research questions and corresponding hypotheses are the following:

Research Questions and Hypotheses

The following research questions and hypotheses guided the present study.

Research Question 1- The first research question was an exploratory question regarding the appropriateness of the measures to capture the construct of helicopter parenting. How appropriate are the measures to capture helicopter parenting?

There were no specific hypotheses for this question as it is exploratory in nature. To explore this question, for each of the measures administered in the study (the overprotection subscale of the PBI, HPS, HPI, and the helicopter parenting subscale of the HPB) the range of scores, distribution, number of missing values, reliability, and face validity of the questions and instructions were examined. By examining these features of each measure, the appropriateness of using each of the measures in practice to best

capture helicopter parenting can be determined (i.e., if the scales are normally distributed, have low rates of missing values, demonstrate reliability, etc.).

Research Question 2- Do measures of helicopter parenting all converge on similar constructs?

Hypothesis 2: All measures of helicopter parenting will be significantly positively correlated to one another. It is hypothesized that all measures of helicopter parenting will be strongly positively correlated with one another, as most (HPS, HPI & HPB) were designed to capture helicopter parenting specially and the remaining (PBI) was designed to capture similar concepts of overinvolvement and control (e.g., LeMoyne & Buchanan, 2011; Odenweller et al., 2014). Also, it was hypothesized that the scales would be significantly positively correlated with one another due to previous research findings, for example that there is a significant positive relationship between the HPI and the HPS (Odenweller, et al., 2014).

Research Question 3- Using appropriate measures of helicopter parenting, is helicopter parenting related to negative outcomes, including depression, anxiety, stress, and lowered self-efficacy, in a diverse sample?

Hypothesis 3a: Helicopter parenting will be significantly positively related to depressive symptoms. It was hypothesized that overall, the measures of helicopter parenting would positively correlate with depressive symptoms based on previous findings that helicopter parenting, or parenting behaviors similar to the constructs of helicopter parenting, are positively associated with increased depressive symptoms (Meites et al., 2012; Schriffin et al., 2014;).

Hypothesis 3b: Helicopter parenting will be significantly positively related to anxiety. It was hypothesized that overall, the measures of helicopter parenting would be positively correlated with anxiety based on previous research findings that overprotective parenting is associated with anxiety manifesting into multiple anxiety disorders (Heider et al., 2008) and that overprotective parenting is associated with increase social anxiety in young adults (Spokas & Heimberg, 2009). While not all studies reviewed found helicopter parenting to be associated with anxiety (Reed et al., 2016), based on other findings of this relationship and the general association between helicopter parenting and negative outcomes (Givertz & Segrin 2014; Heider et al., 2008; LeMoyné & Buchanan, 2011; Meites, Ingram, & Seigle, 2012;; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014; Spokas & Heimberg, 2009; van Ingen et al., 2015), it was hypothesized that a relationship between helicopter parenting and anxiety would be observed.

Hypothesis 3c: Helicopter parenting will be significantly positively related to stress. It was hypothesized that the measures of helicopter parenting would be positively correlated with stress given previous research on the relationships between constructs similar to helicopter parenting and depression (Meites et al., 2012; Schiffrin et al., 2014) and anxiety (Heider et al., 2008; Spokas & Heimberg, 2009).

Hypothesis 3d: Helicopter parenting will be significantly negatively related to self-efficacy. It was hypothesized that the measures of helicopter parenting would be negatively correlated with self-efficacy due to previous research findings that helicopter parenting behaviors are associated with lower self-efficacy (Givertz & Segrin, 2014; van Ingen et al., 2015). Also, Givertz and Segrin found similar results demonstrating the relationship between parental control and young adults' lowered sense of general self-

efficacy. This relationship between helicopter parenting and self-efficacy was also expected based on the assertions of SDT that the violation of basic psychological needs (competence, relatedness, and autonomy) can result in negative psychological outcomes (Deci & Ryan, 2000).

Research question 4- Are there gender differences in the relationship between helicopter parenting and emerging adult outcomes (e.g., more symptoms of depression, anxiety, stress, and lowered self-efficacy)?

Hypothesis 4: Gender will moderate the association between helicopter parenting and outcomes such that helicopter parenting will be more strongly linked to negative outcomes (more symptoms of depression, anxiety, stress, and lower self-efficacy) for females than males. It was hypothesized that females will show more negative outcomes than males based on previous research findings. For example, in a study examining parenting style and adolescent outcomes, Baumrind (1991) found that with adolescents coming from authoritarian style homes, girls demonstrated higher levels of internalizing problems. Also, perhaps the strongest evidence in support of this hypothesis is that when examining the impact of helicopter parenting on college student mental health, helicopter parenting predicted lower emotional well-being for females only (Kouros et al., 2017).

CHAPTER II

METHOD

Participants

A G*Power analysis was conducted (Faul et al., 2007) to calculate the number of participants required for this study. Using an alpha level of .05 to have a power of .80 to detect a medium effect size for a regression analysis with three predictors (research question 4), the G*Power analysis proposed a minimum sample size of 77 participants. Using an alpha level of .05 to have a power of .80 to detect a medium sized effect for zero-order correlations (research questions 2 and 3), it was determined that a minimum of 84 participants would be needed in the final sample. However, more participants ($n = 200$) were recruited in order to account for missing data and extreme values. There were 158 participants in the final sample for analysis.

Participants were recruited through the online SONA recruitment system at an undergraduate psychology program in a small comprehensive university. Students were also recruited by making an announcement and providing links to the survey in an undergraduate psychology class, and via Facebook. Inclusion criteria to participate were that individuals identified themselves as between the ages of 18 to 25 years, residing in the U.S., and were enrolled as a college student at the time of their participation.

There were a total of 200 participants who responded to the survey. Of the 200 participants, 20 responses were excluded from the study because they did not fall between the ages of 18 and 25 years. An additional four participants were excluded from the study for reporting that they do not live in the United States. Six participants were excluded for not reporting their age and seven participants were excluded for not

responding to any of the scales included in the survey. Four participants were excluded as univariate outliers on the NGSE. One participant was excluded as a multivariate outlier. The final sample was 158 participants.

Demographic characteristics are presented in Table 1. The mean age for the participants was 20.28 years old ($SD = 1.92$), with the majority of participants between the ages of 18 and 21 years old. As shown in Table 1, the majority of the sample was female. Seniors and Sophomores were the most represented classes. There were no international students in the sample. Of the sample, over half were living off campus, with a little over half of that subsample living with their parents/guardian. The majority of the sample listed their mother as their current primary caregiver, with the majority also identifying their mother as their primary caregiver growing up. With regard to mothers' education level, the majority of the sample listed their mothers' as having some college or less. With regard to parents' annual income, the median household income was between \$50,000 and \$59,999. The majority of the sample identified as Latino/a and a little under half of the sample identified themselves as first generation college students. Regarding religion, the majority of the sample identified as Christian.

Measures

The following measures were used in the present study to assess the variable of interest.

Demographic Questionnaire. Participants were given a demographic questionnaire that gathered information on a variety of variables. Items for the demographic questionnaire were derived from basic demographic surveys and were also

Table 1

Means, Standard Deviations, and Frequencies of Demographic Variables (N = 158)

Variable	<i>n</i>	%
Type of College		
4-year Public	2	1.3
4-year Private	156	98.7
Year in School		
Freshman	32	20.3
Sophomore	47	29.7
Junior	27	17.1
Senior	51	32.3
Other	1	0.6
First Generation College		
Yes	70	44.3
No	88	55.7
International Student		
No	158	100
Gender		
Male	38	24.1
Female	118	74.7
Gender variant	2	1.3
Ethnicity		
Latino/a	80	50.6
White	24	15.2
Black	7	4.4
Asian/Asian American	5	3.2
Bi/Multi Racial	41	25.9
Other	1	0.6
Religion		
Not religious	46	29.1
Christian	100	63.7
Buddhist	1	0.6
Hindu	1	0.6
Other	5	3.2

Atheist	4	2.5
No Response	1	0.6
Living		
On campus	54	34.2
Off campus	104	65.8
Living With		
Self	11	7.0
Friends/Roommates	42	26.6
Romantic Partner	9	5.7
Parents/Guardian	91	57.6
Other	4	2.5
No Response	1	0.6
Mother Current Primary Caregiver		
No	46	29.1
Yes	112	70.9
Mother Primary Growing Up		
No	22	13.9
Yes	136	86.1
Mother's Level of Education		
No schooling completed	4	2.4
Elementary to 8 th grade	9	5.7
Some High School	7	4.4
High School Diploma	37	23.4
Some College	45	28.5
Associates Degree (AA, AS)	16	10.1
Bachelors Degree (BA, BS)	27	17.1
Masters Degree (MA, MS)	8	5.1
Professional Degree (MD)	2	1.3
Doctoral Degree (PhD, EdD)	1	0.6
Other	2	1.3
Parent(s) Annual Income		
Less than \$10,000	8	5.1
\$10,000 - \$19,000	8	5.1

\$20,000 - \$29,000	9	5.7
\$30,000 - \$39,000	17	10.8
\$40,000 - \$49,000	20	12.7
\$50,000 - \$59,000	17	10.8
\$60,000 - \$69,000	13	8.2
\$70,000 - \$79,000	16	10.1
\$80,000 - \$89,000	10	6.3
\$90,000 - \$99,000	11	7.0
\$100,000 - \$149,000	20	12.7
More than \$150,000	9	5.7

developed to appropriately describe a college-student sample of emerging adults. The demographic questionnaire can be found in Appendix A.

Helicopter Parenting Measures. Four measures of helicopter parenting were included. These measures were chosen because of their previous use in studies on helicopter parenting.

Parental Bonding Instrument (PBI). The Overprotection scale of the PBI (Parker et al., 1979) was used as a measure of helicopter parenting. The PBI appears in Appendix B and permission to use the measure is found in Appendix C. As previously noted, the PBI was developed to assess the parent-child bond with these two dimensions- ‘care’ and ‘overprotection’ or ‘over control’ (Parker et al., 1979). Therefore, it was not designed to specifically assess helicopter parenting. However, due to similarities with helicopter parenting and because of a lack of scales of helicopter parenting, the Overprotection factor of the PBI was often used to measure helicopter parenting prior to the development of specific helicopter parenting measures.

The Overprotection scale of the PBI consists of 13 items that ask participants to rate their parents’ behaviors during their first 16 years on a 4-point Likert scale ranging from 0 (*very unlike*) to 3 (*very like*). Sample items from the PBI Overprotection subscale include: “Was overprotective of me,” “Tried to control everything I did,” and “Invaded my privacy.” The total score of this factor is used and thus higher scores represent more an overprotective parenting style. The reliability and validity of this scale have been well-established as noted previously. (Heider et al., 2008; Meites et al., 2012; Spokas & Heimberg, 2009; Wilhelm et al., 2004). The total score of the Overprotection subscale of the PBI was used in the present study and the subscale demonstrated good reliability. The

reliability, mean, standard deviation, and range of the Overprotection subscale are located in Table 2.

Helicopter Parenting Scale (HPS). The HPS (LeMoyne & Buchanan, 2011) was also used to measure helicopter parenting. The HPS appears in Appendix D and permission to use the measure can be found in Appendix E. As previously noted, the HPS was created to examine the relationships between helicopter parenting and other forms of parental control (e.g. behavioral and psychological control) and to determine if helicopter parenting is a distinct form of control (LeMoyne & Buchanan, 2011). Items are aimed to capture the degree to which parents make important decisions for their adult children.

The HPS is a 7-item measure in which participants are asked rate how alike their parents' behavior while growing up is to sample statements on a 5-point Likert scale ranging from 1 (*not at all like him/her*) to 5 (*a lot like him/her*). Sample items include, "My mother often stepped in to solve life problems for me" and "My mother has always been very involved in my activities." Scores are summed and then averaged across the seven items to create a total mean score; higher scores are indicative of more helicopter parenting behaviors. While one study has examined the reliability of the scale (Kwon et al., 2016), the validity of the scale is not well established, and does not appear to have been used in further empirical research beyond the initial validation study (Kwon et al., 2016; LeMoyne & Buchanan, 2011).

The mean of the HPS was used in this dissertation. Questions were changed to reflect the experience with the mother as opposed to "parents" in order to have each of the scales to assessing the parental behaviors of same parent, the mother. The means,

Table 2

*Reliabilities, Means, Standard Deviations, and Ranges of Main Study Variables**(N = 158)*

Construct	α	M	SD	Range
PBI Overprotection	.89	17.16	8.59	0.00 - 36.00
HPS	.82	3.81	1.20	1.14 - 7.00
HPI	.86	3.64	1.03	1.47 - 6.73
HPB Helicopter	.81	2.71	0.99	1.00 - 5.78
DASS-21 Depression	.91	10.75	9.97	0.00 - 42.00
DASS-21 Anxiety	.84	10.85	9.31	0.00 - 38.00
DASS-21 Stress	.89	15.08	10.25	0.00 - 42.00
NGSE	.94	5.78	0.95	2.75 - 7.00

standard deviation, range, and internal consistency reliability of the HPS are located in Table 2. The scale demonstrated high reliability.

Helicopter Parenting Instrument (HPI). The HPI (Odenweller et al., 2014) was used as a measure of helicopter parenting. The HPI appears in Appendix F and permission to use the measure can be found in Appendix G. As previously noted, the HPI was developed to examine the relationships between helicopter parenting and the authoritarian, authoritative, and permissive parenting styles as well as to address conceptual and statistical concerns surrounding the HPS (LeMoyne & Buchanan, 2011). Items for the HPI were inspired by words and phrases used in empirical research and the popular press to describe helicopter parenting.

The HPI consists of 15 items. Respondents rate current parenting behaviors. Sample items of the HPI include: “My parent tries to make all of my major decisions,” “My parent overreacts when I encounter a negative experience,” “My parent insists that I keep him or her informed of my daily activities,” and “When I am going through a difficult situation, my parent always tries to fix it.” The items are rated by participants on a 7-point Likert scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). A mean score of all the items is used, with higher scores representing higher levels of helicopter parenting.

The HPI has evidence of validity and reliability (Odenweller et al., 2014). A significant positive relationship between the HPI and LeMoyne and Buchanan’s (2011) HPS was found ($r = .63$), demonstrating convergent validity between the HPI and HPS (Odenweller et al., 2014). It was also reported that the HPI demonstrated strong construct validity given its positive relationships with theoretically related variables such as the

authoritarian parenting and conformity orientation and no relationship with a divergent variable of conversation orientation (Odenweller et al., 2014). The overall HPI scale had a reliability estimate of $\alpha = .78$ (Odenweller et al., 2014).

The mean score of the HPI was used in this dissertation. The items of the HPI were also modified to assess the parental behaviors of the mother, in order to create consistency among the scales. The means, standard deviation, range, and internal consistency reliability of the HPI are located in Table 2. The scale demonstrated good reliability.

Helicopter Parenting Behaviors Questionnaire (HPB). The Helicopter Parenting Behaviors subscale of the HPB was used as another measure of helicopter parenting. The HPB appears in Appendix H and permission to use the measure can be found in Appendix I.

As previously noted, the HPB was designed to assess mothers' controlling and autonomy supportive behaviors reported by their adult children (Schiffrin et al., 2014). The controlling behaviors represent the helicopter behaviors captured by the measure.

The HPB is a 15-item measure assessing two dimensions of parenting behavior: Helicopter Parenting Behaviors (9 items) and Autonomy Supportive Behaviors (6 items). Participants are asked rate their mother's current parenting behaviors using a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Helicopter parenting items include: "If I were to receive a low grade that I felt was unfair, my mother would call the professor," "My mother calls me to track my schoolwork (i.e., how I'm doing in school, what my grades are like, etc.)," and "If I am having an issue with my

roommate, my mother would try to intervene.” The score for each subscale is the mean of the items of the subscale (Schiffirin et al., 2014).

The items loading onto the Helicopter Parenting Behaviors factor have shown acceptable internal consistency, with a Cronbach’s alpha ranging from .77 to .82 (Reed et al., 2016; Schiffirin et al., 2014). While the scale has evidence for its reliability, the validity of the scale does not appear to be well established because of the conflicting results concerning the relationship between the HPB and negative outcomes (Reed et al., 2016) as well as the HPB having never been investigated for convergent validity.

The Helicopter Parenting Behaviors subscale mean score of the HPB was used in this dissertation. The means, standard deviation, range, and internal consistency reliability of the Helicopter Parenting Behaviors subscale are located in Table 2. The subscale demonstrated good reliability.

Outcome measures. The following scales were used to assess the negative psychological characteristics of emerging adults exposed to helicopter parenting.

Depression Anxiety Stress Scale (DASS-21). The DASS-21 (Lovibond & Lovibond, 1995) was used as a measure of the negative psychological outcomes of depressive and anxiety symptoms and stress. The DASS-21 appears in Appendix J and permission to use the measure can be found in Appendix K.

The DASS-21 is a shortened version of the DASS-41 which was developed to measure the three related negative emotional states of depression, anxiety, and stress (Antony et al., 1998) The DASS-21 includes 7 items from each of the three subscales (depression, anxiety, and stress) of the DASS-41. The DASS-21 uses a 4-point Likert scale of frequency or severity of the participants’ experiences over the past week, with a

rating scale ranging from 0 (*Did not apply to me at all*) to 3 (*Applied to me very much, or most of the time*). Sample items of the DASS-21 include: “I couldn’t seem to experience any positive feelings at all,” “I felt I was close to panic,” and “I found it difficult to relax.” Scores of each subscale can be used for interpretation. High scores on the depression subscale reflect symptoms associated with dysphoric mood (e.g., sadness and worthlessness) whereas elevated scores on the anxiety subscale reflect symptoms of physical arousal, panic attacks, and fear (e.g., trembling or faintness). The stress subscale reflects features of both anxiety and depression (e.g., tension or irritability).

Antony et al. (1998) examined the psychometric properties of the DASS-21 using a sample of adult non-clinical volunteers ($n = 49$) and patients with diagnoses of panic disorder ($n = 67$), obsessive compulsive disorder ($n = 54$), social phobia ($n = 74$), and major depressive disorder ($n = 46$). Cronbach’s alphas for the DASS-21 subscales were .94 for Depression, .87 for Anxiety and .91 for stress (Antony et al., 1998). To examine concurrent validity, the DASS-21 correlations were computed between the DASS-21 and other measures of depression and anxiety, including the Beck Depression Inventory (BDI) and the Beck Anxiety Inventory (BAI). The Depression subscale of the DASS-21 was strongly correlated with the BDI ($r = .79$) and the Anxiety subscale was correlated strongly with the BAI ($r = .85$) (Antony et al., 1998). Total scores of the DASS-21 of each subscale are used to assess clinical cut offs (Lovibond & Lovibond, 1995). Severity ratings range from normal to extremely severe, with different cut off scores for each subscale. Normal ranges are 0-9, 0- 7, and 0-14 for depression, anxiety, and stress respectively. Mild ranges are 10-13, 8-9, and 15-18. Moderate ranges are 14-20, 10-14,

and 19-25. Severe ranges are 21-27, 15-19, and 26-33. Severe ranges are 28+, 20+, and 34+ (Lovibond & Lovibond, 1995).

In this dissertation, the total subscale scores of depression, anxiety, and stress of the DASS-21 were used. The means, standard deviation, range, and internal consistency reliability of the depression, anxiety, and stress subscales of the DASS-21 are located in Table 2. In its entirety, the DASS-21 demonstrated good reliability, along with the depression subscale. The anxiety and stress subscales demonstrated good reliability.

New General Self-Efficacy Scale (NGSE). The NGSE (Chen, Gully, & Eden, 2001) was used as a measure of general self-efficacy. The NGSE appears in Appendix L and permission to use the measure can be found in Appendix M.

The NGSE was developed to measure individuals' perceptions of their ability to perform across a variety of different situations (Chen et al., 2001). The NGSE (Chen, et al., 2001) was designed to address limitations of previous measures of general self-efficacy, specifically validity issues with previous measures. Chen and colleagues revised the NGSE by building on the developmental work initiated by Chen and Gully (1997) and compared its content validity, reliability and overall validity to previous measures of general self-efficacy, developing the most recent version of the NGSE.

The NGSE has a total of 8 items scored on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items of the NGSE include: "I will be able to successfully overcome many challenges," "Even when things are tough, I can perform quite well," and "I will be able to achieve most of the goals that I have set for myself." The total of the scale is used and higher scores represent higher levels of self-efficacy.

Across three studies, Chen et al. (2001) compared the NGSE content validity to a previous measure (General Self-Efficacy Scale, SGSE; Sherer et al., 1982) and further compared the reliability and the validity of the NGSE and the SGSE in various samples. Internal consistency of the NGSE ranged from ($\alpha = .86$ and $.90$) when tested on two different occasions (Chen et al., 2001). Test-retest coefficients show that the NGSE scale is stable ($r = .67$). Content validity was assessed by two independent panels of 8 psychology graduate students and 14 psychology undergraduate students. The students were given a definition of general self-efficacy and were asked to indicate whether the 8 NGSE items capture general self-efficacy, self-esteem or another related construct. The graduate students rated 98% of the NGSE items as being related to general self-efficacy and the undergraduate students rated 87% of the NGSE items as being reflective of general self-efficacy. The NGSE is a unidimensional scale whereas the previous standard measure of general self-efficacy, the SGSE (Sherer et al., 1982) is multidimensional. Chen et al. (2001) found that while both measures are internally consistent and stable, the NGSE and the SGSE scale capture somewhat different constructs. Also, the NGSE consistently yielded appreciably higher content and predictive validity compared with the SGSE scale. Thus, the NGSE is considered a more valid measure of general self-efficacy than the widely used SGSE (Chen et al., 2001), which is why it was used in this study.

Total scores from the NGSE were used to capture the construct of self-efficacy (Chen et al., 2001). The means, standard deviation, range, and internal consistency reliability of the NGSE is located in Table 2. In the study survey, the NGSE was placed on a seven-point Likert scale as opposed to a five-point Likert scale as a result of human error. Despite this, the scale demonstrated good reliability.

Procedure

After receiving IRB approval (see Appendix P), participants were recruited from a small, 4-year private university and online. To recruit participants, links to online surveys were made available via the SONA system for undergraduate psychology students, a QR code provided in an undergraduate psychology class, and through a link made available through Facebook.

Consent was required before participants could complete the survey (see Appendix N). The consent form included information about the procedures, benefits and risks associated with participation in the study, resources available to participants in case of emotional distress, information on confidentiality, identification of the investigator, and informed participants that their participation was voluntary. The consent form also provided information on the incentives provided to study participants. Once participants completed the consent form, they completed initial demographic questions to screen for inclusion criteria, including their age, enrollment in college, and whether or not they resided in the U.S. If participants met the inclusion criteria, they were directed to complete the study's questionnaires in a random order. If they did not meet inclusion criteria, they were automatically directed to the end of the study and provided the option to list an email to enter them into the drawing for participation incentives. All participants, whether they met inclusion criteria or not, were given the opportunity to enter the drawing.

Once completing the survey, participants were directed to a debriefing statement (Appendix O) which included information for resources if participants felt they needed counseling or mental health support due to emotional distress related to their participation

in the study. For university students, information on how to access the university's counseling center was provided. For all participants, the SAMHSA National Hotline and National Suicide Prevention Lifeline numbers were provided. As previously mentioned, at the end of the study, all participants were also directed to a separate survey with the option to enter an email address as an entry to the drawing. After all data collection was completed, seven participants were randomly selected to receive a ten-dollar Amazon gift card. The Amazon gift cards were sent to participants through their provided emails. Participants recruited from SONA also received one credit for their Psychology course. The entire participation procedure took approximately 18 minutes to complete on average ($M = 18.05$, $SD = 16.27$).

CHAPTER III

RESULTS

Data Screening

Before conducting the main analyses, IBM SPSS software was utilized to examine the data for missing values, statistical assumption violations, as well as univariate and multivariate outliers according to Meyers and colleagues (2016). Of the 200 responses, 20 were deleted due to not meeting the age requirement and four were deleted for not residing in the United States. A total of 13 participants were removed from the analysis for either not responding to the question of age ($n = 6$) or for not responding to any of the scale items ($n = 7$). There was one participant who had two missing items across scales, and those missing items were replaced with the mean of the male subgroup. There were no other missing data across the remaining participants for any of the scales.

Using descriptive statistics examination of frequencies, initial inspection of skewness and kurtosis of the scales appeared to be within normal limits (Meyers et al., 2016). A screen for univariate outliers identified four univariate outliers on the NGSE and these were deleted as they accounted for more than 2% of the sample. Following their deletion, univariate outliers were again assessed and all variables had less than three outliers (less than 2% of the sample) and no other univariate outliers were excluded. The data was then screened for multivariate outliers with the Mahalanobis distance for each of the variables. From the data screening, a single multivariate outlier was detected and was removed from the sample. The normality tests remained unchanged after this single multivariate outlier was deleted (Meyers et al., 2016).

Descriptive Statistics and Preliminary Analyses

All means, standard deviations, and ranges of the main study variables are presented in Table 2. With regard to the PBI, the average overprotection subscale score reflected what is considered “high protection” for mothers (Parker, 1979). With regard to report on the other helicopter parenting measures, participants largely responded in a “somewhat disagree” to a neutral range, which reflects essentially no endorsement of helicopter parenting behaviors. Responses to the HPS in this sample ($M = 3.19$, $SD = 1.20$) were slightly higher than the average in the scale development study ($M = 2.76$, $SD = 0.66$; LeMoyné & Buchanan, 2011) but similar to when the HPS was used in the scale development of the HPI ($M = 3.25$, $SD = 0.97$; Odenweller et al., 2014). The mean of the HPI in this sample ($M = 3.64$, $SD = 1.03$) was consistent with the mean from scale development ($M = 3.42$, $SD = 0.81$). The mean of the HPB helicopter parenting subscale was slightly higher in this sample ($M = 2.71$, $SD = 0.99$) than in scale development ($M = 2.00$, $SD = 0.79$). With regard to psychological outcome measures, on average, participants endorsed mild levels of depressive symptoms, moderate levels of anxiety, and mild levels of stress. However, 6.3% of the participants endorsed “Severe” depression, 8.9% endorsed “Extremely Severe” depression, 2.6% endorsed “Severe” anxiety, 20.9% endorsed “Extremely Severe” anxiety, 9.5% endorsed “Severe” stress, and 6.3% endorsed “Extremely Severe” stress based on clinical cutoffs (Lovibond & Lovibond, 1995). On average, participants endorsed affirmative belief in their self-efficacy.

Additional correlations and one-way ANOVAs were conducted to examine any relationships between the helicopter parenting scales with demographic variables. There

were small to medium significant negative correlations between age and HPI ($r = -.31$, $p < .001$), HPS ($r = -.21$, $p = .009$), and the HPB helicopter parenting subscale ($r = -.25$, $p = .002$), such that as age increased, helicopter parenting decreased. Age was not significantly correlated with any other parenting or outcome measures. Given that all but two of the participants attended a 4-year public university, there were not enough participants in each group to reliably examine differences in university types. There was a statistically significant relationship between year in college and the HPI [$F(3, 153) = 2.72$, $p = 0.05$]. Post hoc analyses show that freshmen ($M = 4.03$, $SD = 1.05$) differed significantly from Juniors ($M = 3.46$, $SD = 0.87$) and Seniors ($M = 3.42$, $SD = 1.11$) in that freshmen were reporting higher levels of helicopter parenting on the HPI. There was no significant relationship between other years within the HPI or with any other parenting or outcome measures.

There was a statistically significant relationship between gender and the depression, anxiety and stress subscales of the DASS-21, respectively [$F(2, 155) = 3.51$, $p = 0.03$; $F(2, 155) = 3.80$, $p = 0.025$; $F(2, 155) = 7.02$, $p = .001$]. That is, men had significantly lower scores on all three subscales ($M_s = 7.58, 7.68, 10.00$; $SD_s = 9.26, 8.36, 8.23$ for depression, anxiety, and stress, respectively) than women ($M_s = 11.59, 11.71, 16.58$; $SD_s = 10.02, 9.42, 10.19$ for depression, anxiety, and stress, respectively). There were no significant relationships between gender and any other parenting or outcome measures for gender. There was a statistically significant relationship between ethnicity and the PBI overprotection subscale $F(2, 156) = 3.56$, $p = .031$, HPS, $F(2, 156) = 3.66$, $p = .028$ and the HPB helicopter parenting subscale $F(2, 156) = 3.71$, $p = .027$. Post hoc analyses show that those who identified as White had significantly lower scores on the

measures ($M_s = 13.00, 3.24, 2.24, SD_s = 8.56, 1.07, 1.01$ for the PBI, HPS, and HBP, respectively) than people of color ($M_s = 17.86, 3.86, 4.05, SD_s = 8.40, 1.14, 0.93$ for the PBI, HPS, and HBP, respectively) and Bi/multiracial people ($M_s = 18.24, 4.05, 2.77, SD_s = 8.37, 1.35, 0.94$ for the PBI, HPS, and HBP, respectively). There were no significant differences in the means between people of color and biracial individuals for these three measures. There were also no significant relationships with ethnicity and the HPI or psychological outcome measures. There was a statistically significant relationship between mother as a current primary caregiver and the HPI $F(1,156) = 6.05, p = .015$ and HPB helicopter parenting subscale $F(1,156) = 7.61, p = .006$. Specifically, those whose mother was their primary caregiver had significantly higher scores on the measures ($M = 3.77$ and $2.84, SD = 1.02$ and 0.94 for the HPI and HPB respectively) than those whose mother was not their primary caregiver ($M = 3.33$ and $2.39, SD = 0.99$ and 0.94 for the HPI and HPB respectively). There were no significant relationships with mother caregiver and any other parenting/outcome measures. There were no significant relationships between religion, living on or off campus, mothers' education level, or household income with any of the parenting or outcome measures.

Main Analyses

Research Question 1. The first research question was exploratory in nature and therefore had no specific hypothesis. The question was aimed at assessing the appropriateness of the measures used to capture helicopter parenting. All scales were normally distributed and had responses ranging the breadth of each scale. No helicopter parenting scale had a large number of missing values either, therefore all were deemed appropriate and applicable to participants, easy to understand, and not deterring

participants due to any uncomfortable feelings in answering the questions. The internal consistency of the all scales were in the “acceptable” to “good” range of .70 to .90 (Meyer et al., 2016).

The face validity of each measure was assessed by having the author of the dissertation in collaboration with the dissertation chair rate whether each item appeared applicable to helicopter parenting or not. Both the PBI and HPS consists of items that are broad (i.e., they are not particular about parenting behaviors in particular contexts such as in relationships or with academics, etc.). The HPI consists of items that are more specific (i.e., relationships, making appointments, mother intervening to “fix” difficult situations) that may be more reflective of the types of parental behaviors that would be deemed developmentally inappropriate, or helicopter parenting behaviors. Lastly, the HPB consisted of items specific to parenting behaviors in particular contexts, but in a way, that may actually be limiting. For instance, the HPB includes items very specific to academics and parental behaviors in relation to professors or roommates. These items would not be applicable to young adults not enrolled in college as well as young adults who are still living at home which likely decreases its utility with a broader sample of emerging adults.

The directions for administration were assessed to see if each scale measured helicopter parenting at the current time (e.g., emerging adulthood) as opposed to earlier ages when such parenting behaviors might be more appropriate. All of the scales, except the PBI and HPS framed questions in a tense that was applicable to current parenting behaviors. Given the fact that the PBI verbiage refers to parenting behaviors that occurred in the first 16 years of life, and are all phrased in past tense, this scale may be viewed as

the least appropriate for measuring helicopter parenting in emerging adulthood. While the HPS does not distinguish a certain time frame to reference the rating of parental behaviors, it may also promote responses that are more remote from emerging adulthood and therefore less applicable to the concept of helicopter parenting occurring in this time frame.

Taken together, with regard to identifying the best measure, it is the author's opinion that among normally distributed scales all with good reliability, the HPI stands apart as a current measure of helicopter parenting that is in the present tense (as opposed to the PBI and HPS), includes items that reflect parental involvement in adult activities and in a way specific to the construct of helicopter parenting (e.g., with relationships, making appointments, mother intervening to "fix" difficult situations, etc.) and does not limit its utility among emerging adults who may not be enrolled in college classes or may still be living at home as the HPB does. In addition, the HPI was the only measure of helicopter parenting that demonstrated no ethnic differences, which would be considered a positive attribute if indeed there are truly no differences in levels of helicopter parenting across ethnicities.

Hypothesis 2. Zero-order correlations among the helicopter parenting scales (the Overprotection subscale of the PBI, HPS, HPI, and the helicopter parenting subscale of the HPB) were used to test hypothesis 2. Results of the zero-order correlations are presented in Table 3. There was evidence to support this hypothesis. Using Cohen's (1988) effect size conventions, there were large correlations between all of the helicopter parenting measures. Convergent validity (i.e., that the scales are measuring the same construct) is claimed if the correlation coefficient is above .50; however, .70 is

recommended (Furr & Bacharach, 2014). Correlations between the helicopter parenting scales ranged from $r = .53$ to $r = .78$, indicating that while they appear to be measuring similar constructs, there are likely slight differences resulting in correlation coefficients in the lower end of the range. Among the scales, the HPB demonstrated the lowest correlation coefficients, meaning it was less strongly correlated to the scales than others and contains items that do not align with the other scales (i.e., items that are likely tapping into a separate construct). The two strongest correlations were between the PBI and the HPS and between the HPS and the HPI.

Hypothesis 3. To test Hypothesis 3, zero-order correlations between each helicopter parenting scale and each negative psychological outcome were performed. Preliminary analyses were also reviewed and although age and ethnicity were related to other independent variables (helicopter parenting scales) and a variable assessing who the participant was living with was significantly related to one outcome variable (self-efficacy), they were not included as control variables in the analyses testing hypotheses 3 and 4, as they were not generally predicting the dependent variable (Maxwell & Delaney, 2004, p. B-35). In addition, although gender was related to the outcome measures, it was not correlated with the other independent variables and not included as a control variable so that these results could be better compared to prior studies which have also not controlled for gender (Givertz & Segrin, 2014; Heider et al., 2008; LeMoyne & Buchanan, 2012; Meites et al., 2012; Schiffrin et al., 2014; Spokas & Heimberg, 2009). Additionally, an unbiased estimate is still achieved even if the variable is not included (Maxwell & Delaney, 2004). See Table 3 for the results of the zero-order correlations that are reviewed below.

Table 3

Correlations between Helicopter Parenting Scales and Outcome Measures

Variable	1. PBI	2. HPS	3. HPI	4. HPB	5. DEP	6. ANX	7. STR	8. NGSE
1. PBI	---							
2. HPS	.750**	---						
3. HPI	.655**	.783**	---					
4. HPB	.578**	.531**	.622**	---				
5. DEP	.480**	.422**	.473**	.398**	---			
6. ANX	.420**	.415**	.435**	.336**	.742**	---		
7. STR	.430**	.430**	.438**	.292**	.805**	-.320**	---	
8. NGSE	-.177*	-.102	-.228**	-.278**	-.320**	-.268**	-.189*	---

Note. DASS-21 subscales are labeled as DEP, ANX, and STR.

* $p < .05$. ** $p < .01$.

Hypothesis 3a. Hypothesis 3a proposed that helicopter parenting would be significantly positively related to depressive symptoms. There was evidence to support this hypothesis, with moderate correlations between all four helicopter parenting measures and depression, such that higher scores of helicopter parenting correlated with higher ratings of depressive symptoms (Cohen, 1988). The effect size for the relationship between the HBP and anxiety was slightly smaller than the effect size for the relationships of the other helicopter parenting variables and depression (Cohen, 1988).

Hypothesis 3b. Hypothesis 3b proposed that helicopter parenting would be significantly positively related to anxiety symptoms. There was evidence to support this hypothesis, with moderate correlations between the PBI, HPS, and HPI and anxiety, such that higher scores on these measures correlated with higher ratings of anxiety (Cohen, 1988). The effect size for the relationship between the HBP and anxiety was slightly smaller than the effect size for the relationships of the other helicopter parenting variables and anxiety (Cohen, 1988).

Hypothesis 3c. Hypothesis 3c proposed that helicopter parenting would be significantly positively related to stress. There was evidence to support this hypothesis, again with moderate effect sizes in the relationships between the PBI, HPS, and HPI and stress, such that higher ratings of helicopter parenting correlated with higher ratings of stress (Cohen, 1988). The effect size for the relationship between the HBP was again smaller and at a small effect size (Cohen, 1988).

Hypothesis 3d. Hypothesis 3d proposed that helicopter parenting would be negatively related to self-efficacy. There was some evidence to support this hypothesis, as all correlations between the PBI, HPI, and HBP and self-efficacy were negative, but

with a small effect size (Cohen, 1988). Only the HPS was not significantly correlated with self-efficacy.

Hypothesis 4. Research question 4 was aimed at examining gender differences in the relationship between helicopter parenting and emerging adult outcomes (e.g., depressive symptoms, anxiety symptoms, stress, and lowered self-efficacy) and it was hypothesized that helicopter parenting would be more strongly linked to negative outcomes for females than males. Hierarchical multiple regression analyses were used to test the relationship between gender and each psychological outcome (depression, anxiety, stress, and poor self-efficacy). Given the previously discussed appropriateness of each helicopter parenting measure, as well as the correlations in research questions 3 and 4, a decision was made to first conduct the regressions with the HPI as the “best” measure of helicopter parenting in the study. Four separate hierarchical regressions were tested, one for each of the four psychological outcomes. Before entering variables into the regression equation or creating the moderator variables, the predictor of helicopter parenting was centered. The variable of gender was coded as 0 (female) and 1 (male). As two participants in the study listed their gender as “other” or “nonconforming” they were excluded from analyses conducted for hypothesis 4, resulting in a sample of 156. In the next step, an interaction variable of helicopter parenting and gender was created and a hierarchical regression performed. In step 1, the main effects (gender and helicopter parenting) were predictors. In step 2, the moderator variable was added as a third predictor such that the final regression equation in step 2 was as follows, $y = b_0 + b_1(\text{helicopter parenting}) + b_2(\text{gender}) + b_3(\text{helicopter parenting} \times \text{gender}) + r$.

For the model with depression as the DV, the first step of the model was significant $R^2 = .254$, $F(2, 153) = 26.11$, $p < .001$. When the interaction term was added in step 2, there was not a significant change in R^2 (R^2 change = 0.002, F change (1, 152) = 0.384, $p > .05$). In addition, looking at the individual coefficients in the final model, the interaction term was not significant. However, gender was significantly related, such that gender was a significant predictor of depression ($b = 3.67$, $SE b = 1.62$, $t = 2.26$, $p = 0.03$). As well, the HPI was related such that it was a significant predictor of depression ($b = 3.61$, $SE b = 1.68$, $t = 2.15$, $p = 0.03$); however, gender did not moderate the HPI with regard to depression.

For the model with anxiety as the DV the first step of the model was significant $R^2 = .221$, $F(2, 153) = 21.71$, $p < .001$. When the interaction term was added in step 2, there was not a significant change in R^2 (R^2 change = 0.015, F change (1,152) = 0.083, $p > .05$). In addition, looking at the individual coefficients in the final model, the interaction term was not significant. However, gender was significantly related, such that gender was a significant predictor of anxiety ($b = 3.84$, $SE b = 1.54$, $t = 2.50$, $p = 0.01$). The HPI was not significantly related ($b = 1.35$, $SE b = 1.59$, $t = 0.85$, $p = 0.40$). Therefore, gender did not moderate the HPI with regard to anxiety.

For the model with stress as the DV the first step of the model was significant $R^2 = .258$, $F(2, 153) = 26.63$, $p < .001$. When the interaction term was added in step 2, there was not a significant change in R^2 (R^2 change = 0.014, F change (1,152) = 0.093, $p > .05$). In addition, looking at the individual coefficients in the final model, the interaction term was not significant. However, gender was significantly related, such that gender was a significant predictor of stress ($b = 6.37$, $SE b = 1.65$, $t = 3.86$, $p = 0.00$). The

HPI was not significantly related ($b = 1.58$, $SE b = 1.71$, $t = 0.92$, $p = 0.38$). Therefore, gender did not moderate the HPI with regard to stress.

For the model with self-efficacy as the DV adding the interaction term in model 2 predicted significantly more variance (9.0%) in the NGSE mean than the first model (5.4%) [R^2 change = .04, F change (1, 152) = 6.08, $p = .02$] meaning the second model was a significantly better predictor of self-efficacy and that hence there was significant moderation by gender. Looking at the simple slopes, the b coefficient for the interaction was significant for females ($b = -.61$, $SE b = .18$, $t = -3.47$, $p = .001$). Simple effects were not significant for males ($b = -.10$, $SE b = .10$, $t = -1.00$, $p = .317$) demonstrating that helicopter parenting significantly predicted self-efficacy for females but not males or in other words, the relationship between helicopter parenting and self-efficacy was stronger for females than males.

Post Hoc Analyses

Given the results for research question four, additional analyses were run to examine gender differences in the relationships between the rest of the helicopter parenting and the emerging adult outcomes, or if these results were unique to the HPI. In addition to the significant interaction term observed for the HPI and the NGSE as noted above, there were additional significant gender interactions for the PBI and the NGSE ($R^2 = 0.4$., F (1, 152) = 6.35, $p < .05$), the HPS and the DASS-21 Anxiety subscale ($R^2 = 0.03$, F (1, 152) = 5.56, $p < .05$), and the HPB and the DASS-21 Stress subscale ($R^2 = 0.04$, F (1, 152) = 6.08, $p < .05$) in that the interaction term between gender and the specific scale was a better predictor of variance within the outcome measure. Overall no analyses showed gender moderation for depression and as noted above, only one was

significant for anxiety, one for stress, and two for self-efficacy. Thus, there were not consistent gender interactions between the helicopter parenting measures and the psychological outcomes.

Additional analyses were conducted to examine ethnicity in the relationship between helicopter parenting and the outcomes. Given that the majority of the sample identified as Latinx and there were not a substantial number of participants identified in each of the other ethnic groups, the data was coded as (0) Latinx and 1 (other) and regressions were run using the HPI as the measure of helicopter parenting. For each of these regressions, the addition of the interaction term between ethnicity and helicopter parenting resulted in no significant models, indicating that ethnicity did not moderate the relationship between helicopter parenting and any of the outcome measures.

CHAPTER IV

DISCUSSION

While the term helicopter parent was first coined in 1990 (Cline & Fay), there has been increased attention to the concept in recent years, especially in regard to the millennial generation and their progression through college and into the job market. Helicopter parenting has shown up in reports of parents sending emails to university officials and professors, and even attending job fairs and job interviews with their adult children (Vinson, 2013). The question has largely become about what helicopter parenting really is, whether or not it is a distinct construct from other parenting constructs, and how it is impacting emerging adults. Researchers have asserted that helicopter parenting does not fit well within other established types of parenting styles (LeMoyne & Buchanan, 2011), and that its developmentally inappropriateness is resulting in negative psychological outcomes for young adults (Givertz & Segrin 2014; Heider et al., 2008; Meites, Ingram, & Seigle, 2012; Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014; Spokas & Heimberg, 2009; van Ingen et al., 2015).

Upon review, the literature surrounding the nature and implications of helicopter parenting has been obscured by the lack of a clear and consistent operational definition of the construct, as well as a unified measure to capture the phenomenon. To address these areas, this study was interested in synthesizing the literature in an effort to help distinguish helicopter parenting as a distinct construct while acknowledging differences among cultures. However, the primary aim of this study was to examine the validity and reliability of existing measures of helicopter parenting as well as to examine their

relations to psychological outcomes to identify which of the scales appears to best capture the construct and would have the best clinical utility.

To accomplish this task, this study reviewed existing typologies (Baumrind, 1966) and parenting styles including types of parental control (Barber & Harmon, 2002), overprotective or oversolicitous parenting (Padilla-Walker & Nelson, 2012), enmeshment (Minuchin, 1974), as well as different parenting styles across cultures (Brody & Flor, 1998; Chua, 2014) in an effort to establish similarities as well as the ways in which helicopter parenting behaviors are distinct from other parenting constructs. This study also approached helicopter parenting from Deci and Ryan's (2008) theory of self-determination in examining the psychological outcomes associated with helicopter parenting behaviors in emerging adulthood. Specifically, this study looked at the relationship between helicopter parenting behaviors and psychological outcomes including depression, anxiety, stress, and self-efficacy. This study also sought to examine what subgroups of millennials may be impacted differently by helicopter parenting behaviors (e.g., if gender or ethnicity moderate the impact of helicopter parenting behaviors on psychological outcomes).

Summary and Discussion of Findings

Overall, this study confirmed that there are differences between existing helicopter parenting scales that may impact their construct validity in attempts to measure helicopter parenting as identified as a unique construct. This study also confirmed that helicopter parenting is related to negative psychological outcomes, and that there are some differences in these relationships with respect to gender. Additionally, given that the sample was predominantly Latinx, this study adds to the literature by demonstrating

the relationship between helicopter parenting and the negative psychological outcomes for Latinx emerging adults.

The first research question was exploratory in nature and was aimed at assessing the appropriateness of each identified measure to capture the construct of helicopter parenting. Overall, of the participants who met the inclusion criteria and initiated responding to the helicopter parenting scales (i.e., did not stop during or after completing demographic information), there was a high rate of survey completion with few missing items. This reflects that the scales were easy to understand and did not include items that deterred participants from completing the scales. With a range of acceptable to good internal consistency, there is also no concern for the internal consistency reliability of any of the scales examined however, test-retest reliability that was not explored in this study. There is, some concern with the validity across the helicopter parenting scales used. Review of the scales revealed differences with regard to timeframe of assessing parental behaviors (i.e., some assessing past helicopter parenting and some assessing current helicopter parenting). There were also differences across the scales for what specific types of parenting behaviors were being rated. For instance, the overprotection subscale of the PBI and the HPS both phrased items in the past tense. It is unclear how phrasing items in the past tense may impact the ability to capture helicopter parenting behaviors that are occurring currently for the responder and how that may impact the relationship between their experience of helicopter parenting behaviors and any negative psychological outcomes or distress they may be experiencing in the present. With regard to item content, both the PBI and HPS include items that appear very broad, while the HPI and HPB include items that are more specific about particular situations (e.g.,

parental behaviors in regard to making appointments and interactions between the parent a roommate and a professor). Of important note, the specificity of these items, particularly on the HPB limits the ability to use this measure for any emerging adult that is not currently living with a roommate or enrolled in college, as these items would not apply. Within the current sample, all participants were enrolled in college as an inclusion criterion. Therefore, it seems logically that the questions regarding being a college student were completed. However, the majority of the sample did not identify as living with a roommate; therefore, it can only be speculated that participants still responded to these items based on how they may view how their mother may respond in such a situation. The concern with the differences across scales centers around the question of whether each scale is indeed measuring the same construct. As was apparent through initial literature review on helicopter parenting, there has been no consistent operational definition for the construct. It appears that as a result of this, researchers who have attempted to develop measures of helicopter parenting (LeMoyne & Buchanan, 2011; Odenweller et al., 2014; Schiffrin et al., 2014) have developed scales that have distinct differences. With that being said, Odenweller et al. (2014) acknowledged these conceptual flaws and attempted to move the literature forward by building on the development of the HPS (LeMoyne & Buchanan, 2011) and the HPI was identified as the best of the helicopter parenting measures.

It is the author's opinion that the HPI stands apart as the best current measure of helicopter parenting because it is phrased in present tense (as opposed to the PBI and HPS), includes items that reflect parental involvement in adult activities and in a way specific to the construct of helicopter parenting (e.g., with relationships, making

appointments, mother intervening to “fix” difficult situations, etc.) and does not limit its utility among emerging adults who may not be enrolled in college classes or may still be living at home as the HPB does. Of note, the HPI was most strongly negatively correlated with age, and it is unclear whether this captures true developmentally appropriate tapering off of behaviors as adults age or if the scale is inappropriately capturing these. In addition, the HPI was the only measure of helicopter parenting that demonstrated no ethnic differences, indicating its utility across different cultures. However, it is still unclear if this represents a true non-difference between cultures or the inability of the measure to detect one.

The second research question was aimed at examining how the four identified measures of helicopter parenting related to one another. It was hypothesized that each helicopter parenting measure would be significantly positively correlated with one another. The second hypothesis was supported in that all of the identified measures of helicopter parenting were positively correlated to one another. However, while convergent validity across the scales was in a range considered acceptable, those correlation coefficients would be presumed to be higher if they were indeed measuring the exact same construct (Furr & Bacharach, 2014). Given the differences across measures with regard to time period as well as the specificity of helicopter parenting behaviors, it appears logical that convergent validity would not be as high as it could be with more uniformity in these factors. More specifically, the PBI and HPS were highly correlated to one other, most logically because they are both more general in their content and they both ask respondents to rate helicopter parenting behaviors that occurred in the past. Of important note, the HBP appeared to correlate less with the other scales and it is

unclear as to why this is given that the sample consistent of only college students.

However, the majority of the current sample were living off campus with parents/guardians and the HPB includes items relevant to living with roommates. Also, because the items of the HPB are more specific than the other scales, this likely impacted how much it correlated to previous research, in that having such specific items likely reduced convergent validity. Compared to the convergent validity between the HPS and the HPI during HPI scale development, the convergent validity in this study is higher. Given the limited research available and the development of the HPB without comparison to the other scales (Schiffrin et al., 2014), for instance, there are no other comparisons to be made.

The third hypothesis was supported in that helicopter parenting was significantly positively related to depressive symptoms, anxiety symptoms, stress symptoms, and negatively correlated with self-efficacy. In review of the literature, not all studies examining helicopter parenting or similar constructs (e.g., overprotection) found relationships between these parenting styles and negative psychological outcomes. For instance, Schiffrin et al. (2014) found no significant relationship between helicopter parenting and anxiety and while they did not look at overprotection in relation to depression and anxiety overall, Meites et al. (2012) found no significant relationship between maternal overprotection on the PBI and self-related negativity on the BDI. These two studies serve as examples of the mixed findings in previous studies. This study demonstrated significant relationships between helicopter parenting and all of the psychological outcomes.

More specifically, compared to previous research, this study demonstrated much higher correlations between helicopter parenting and the outcomes. For instance, correlations between the helicopter parenting measures and depression were medium in size and ranged from $r = .39$ to $.48$. Previous studies looking at the relationship between helicopter parenting and depression and anxiety, such as LeMoyne and Buchanan's (2012) study developing the HPS found small correlations ($r = .19$). LeMoyne and Buchanan (2012) looked at the relationship between helicopter parenting as measured by the HPS and prescriptions for depression or anxiety. The present study likely found higher correlations between the helicopter parenting measures and the outcomes of depression and anxiety because the DASS-21 is more nuanced. Essentially, the DASS-21 would capture more symptoms of depression and anxiety compared to whether or not someone has a prescription for psychotropic medication; individuals may be experiencing symptoms of depression or anxiety but not be prescribed medication for several reasons. It is also possible that these higher correlations are associated with the characteristics of the sample in this study, as the sample in this study is unique as being mostly Latinx college students at a small private university in Southern California. With regard to the relationship between helicopter parenting and self-efficacy, this study found significant negative correlations ranging from $r = -.10$ to $-.28$, which is consistent with previous research ($r = -.25$; van Ingen et al., 2015). Overall, the use of the DASS-21 may have demonstrated a better ability to capture symptoms of depression and anxiety than previous measures or items (LeMoyne & Buchanan, 2012) resulting in a stronger relationship between helicopter parenting and negative psychological outcomes. These findings are also consistent with previous research surrounding helicopter parenting being

related to negative psychological outcomes as a violation of two basic psychological needs; competence and autonomy (Deci and Ryan, 2000; Soenes & Vansteenkiste, 2010). Given that SDT links a violation with basic psychological needs and negative outcomes, (Deci & Ryan, 2008) it is no surprise that helicopter parenting demonstrates significant relationships with negative psychological outcomes in this study.

For the purpose of research question one, the HPI was identified as the best measure of helicopter parenting. In examining the results from research question 2 and research question 3, it appears as if the HPI being deemed the best measure of helicopter parenting is further supported. When compared to the other measures of helicopter parenting used in the study, the HPI shows similar correlations with the outcomes as the PBI and HPS. In contrast, as well as being the helicopter parenting measure with the smallest correlations to the others, the HBP was also comparatively less correlated to the outcome measures of depression, anxiety, stress, and self-efficacy, indicating that it is arguably the weakest of the helicopter parenting measures. As was also discussed in research question 1, the specificity of the items on the HBP may limit its clinical utility for individuals who are not enrolled in college or living with a roommate, for example. For these reasons, the HPI continues to be identified as the best measure of helicopter parenting and the HBP is identified as the weakest of the measures.

For the hypothesis that helicopter parenting would be more strongly linked to negative outcomes for females than males, there were mixed results. The research design was built around first identifying the best measure of helicopter parenting of those used, and then using it to test this hypothesis. Multiple hierarchical regressions conducted with the HPI only revealed significant gender moderation with the NGSE in predicting

psychological outcomes. In prior literature, there has been some evidence that parenting style impacts gender differently. More specifically, that permissive and authoritarian parenting styles have been associated with more internalizing problem behavior in females (Baumrind, 1991). However, in contrast to Baumrind (1991), other studies on authoritarian parenting have not found gender differences in relation to poor mental health outcomes (McLeod et al., 2007; Uji et al., 2014).

In research that showed preliminary evidence that helicopter parenting would affect males and females differently, Kouros and colleagues (2017) used the HPB and found that higher levels of helicopter parenting predicted lower levels of well-being for females only. It is unclear as to why only gender significantly moderated the relationship between the HPI and self-efficacy in this dissertation. It may be that the items included in the HPI are more able to tap into mechanism of internalization that result in the higher levels of depression that is typically seen in females (Baumrind, 1966) and potentially lower levels of self-efficacy when impacted by helicopter parenting behaviors.

Interestingly, additional analyses conducted to look at the relationship between gender and each measure of helicopter parenting in its ability to predict each psychological outcome (depression, anxiety, stress, and self-efficacy) revealed significant interactions between gender and the PBI in predicting self-efficacy, the HPS in predicting anxiety, and the HPB in predicting stress. These results speak to earlier discussions of a lack of uniformity or construct validity across the parenting scales. Where there was a significant moderation of gender in the relationship between a helicopter parenting scale and its ability to predict a particular outcome, that moderation would be expected across each of the helicopter parenting scales in relation to that outcome, if each scale was

indeed measuring the same construct. Due to these results, it indicates that there may be gender moderation in the relationship between helicopter parenting scales and each of these outcomes, but that there is inconsistency in the existing scales in capturing these relationships. What is it about the PBI and the HPI that this relationship was seen for the outcome of self-efficacy as measured by the NGSE? What about the items of the HPS and the HPB that resulted in a significant gender moderation for anxiety and stress? Future studies should continue to look at gender differences, particularly in relation to helicopter parenting and self-efficacy as alternatively, results could have been due to a type II error.

Limitations

There are several limitations to be noted about this study. As with any study, the results cannot be generalized past the characteristics of this sample. This study's sample was largely female (74.7%), Latino/a (50.6%), and enrolled at a 4-year private university (98.7%). While the degree of homogeneity of the sample is a general limitation with regard to making inferences about other demographics and ethnic/cultural backgrounds, it is also a strength of this study. This study adds to the literature demonstrating the relationship between helicopter parenting and negative psychological outcomes in a Latinx sample which is important given the lack of information on helicopter parenting in Latinx samples. With regard to other ethnic groups, there was a much lower number of White participants (15.2%) than the national averages reported by the U.S. Census (76.5%), a much lower number of African American/Black participants (4.4%) than the national averages (13.4%). The demographic characteristic of the study's sample is best explained by the recruitment and data collection procedures, which were centered at and

most representative of the population at a 4-year private, Hispanic Serving Institution in Southern California. Also, as only two participants did not identify as cis male or female, there were not enough participants to explain gender differences across the various gender identifies represented in the general population. Therefore, caution should be used when generalizing this study's results to any population who does not match the sample's demographics.

A limitation is also identified in the manner in which ethnicity was listed for participants and subsequently coded in the data set, in that there is no way to delineate what ethnicities those who identified as "multiracial" identify with. This poses a limitation because, for example, there is no way to tell what percentage of those who identified as multiracial identify with Latinx and another ethnicity. This brings ambiguity to the sample characteristics, therefore limiting whether or not these participants should have been included as Latinx in the additional analyses and adds to the limitations surrounding generalizing the findings. In addition to limitations surrounding ethnicity, because the sample was predominantly female, there may have not been enough male participants included in gender moderation analyses to find this moderation.

An additional limitation of the study is that there was no formal measurement assessment, such as factor analysis of each of the helicopter parenting scales.

Alternatively, the face validity of each scale was assessed by this writer and the dissertation chair, both identifying as White females. Factor analysis of the scales would have the potential to provide a more nuanced breakdown of each scales items and more definitively create clearer distinctions among types of helicopter parenting behaviors as well as add more evidence of construct validity across the scales.

With regard to study design, this was a cross-sectional correlational study so it cannot determine either the direction of the effects or if causal relationships exist between helicopter parenting and outcomes. Also, the self-report nature of the study makes the data set more susceptible to exaggerated responses, under-reporting, or influences of social desirability. Also, given that it was an inclusion criteria to be enrolled as a college student to participate in the study, there is a limitation around this study's ability to examine and make inferences about helicopter parenting that may exist in the lives of emerging adults who are not currently enrolled in college.

Another limitation of the study design is the presentation of the NGSE to study participants on a 5-point Likert scale instead of a 7-point Likert scale as was designed. Placing the NGSE on a 5-point Likert scale in the survey distributed to participants was a result of human error, and should be considered when examining the results discussed in relation to the NGSE. The participants were provided less rating options as was designed and they may have changed their responses had they been provided with all 7-point Likert scale options. For instance, a 7-point Likert scale allows for a more neutral response, whereas a 5-point Likert scale provides less options and makes the responded respond to one side of the scale or the other.

Another limitation of the study was the degree to which helicopter parenting behaviors appeared to be prevalent in the sample. While the range of helicopter parenting behaviors capture in this study was largely consistent with those captured in scale development research and other studies using these instruments, participants largely responded in a "somewhat disagree" to a neutral range, reflecting very low endorsement of helicopter parenting behaviors. This impacts the power of the analyses and the ability

to make substantial inferences about the relationship between helicopter parenting and psychological outcomes.

Lastly, a limitation is presented within the author's decision to modify each helicopter parenting measure to assess helicopter parenting coming from mothers. This was done in an effort to create consistency among the participant's responses across scales as they did not all originally have items specific to mothers' parenting. In retrospect, this has not been something that has been examined in previous literature with regard to upholding scale validity and may have altered the results. Moreover, by changing them all to have participant's respond based on mothers' parenting, it would likely impact the responses from those who were predominantly parented by their father or another guardian. In sum, by modifying the measures to assess mothers' parenting, there may be some unintended consequences to the overall analysis of the data as some raised by others who may be engaging in similar helicopter parenting behaviors, this may not have been fully captured.

Clinical Implications

Findings from the current study suggest that there is a relationship between helicopter parenting and psychological outcomes including depression, anxiety, stress, and self-efficacy. More specifically, this study found that higher ratings of helicopter parenting were associated with higher levels of depression, anxiety, and stress. This implies that clinicians should be aware of the potential impact of these parenting behaviors, particularly as the majority of the sample was Latinx. The findings imply that clinicians should consider assessing parenting style, particularly helicopter parenting,

with emerging adults to better conceptualize distress and to better tailor treatment planning.

Findings also suggest that there are issues with differences across existing measures of helicopter parenting impacting their validity. Due to the lack of uniformity in scale items, clinicians may consider using the HPI to assess these types of helicopter parenting behaviors, as this has been identified as the current best measure of helicopter parenting. In addition, the HPI was the only measure of helicopter parenting that demonstrated no ethnic differences. None of the helicopter parenting measures were designed to differentiate ethnicities; therefore, apart from the HPI, there is concern for the utility of the other measures across different ethnic backgrounds. There should also be acknowledgement that further assessment and discussion with the client with regard to their interpretation of the behaviors and their impact is important. To this end, a measure of helicopter parenting may be useful to use as a screener for potential relationships between helicopter parenting behaviors and psychological distress in emerging adulthood, for instance in a college counseling center. This may be useful given the nature of helicopter parenting behaviors to seemingly center around academic achievement as well as job attainment and achievement. Given the variation in item content across scales, it would be important for clinicians to be aware of these differences and if they were to use a measure of helicopter parenting in clinical practice, to consider how applicable the measure is to each particular client (e.g., whether or not the client's mother is/was the primary care taker, whether or not they are enrolled in college, whether or not they are living at home or off campus with roommates). For the purpose of this study, all measures were modified to ask participants to rate parenting behaviors of the

mother; the original HPS and HPI items include “parent” in their items. This is important to note, as the utility of the other measures may or may not be appropriate, or would require modification, in a clinical setting if the mother was not the primary care giver.

With regard to parents, while the basis of helicopter parenting behaviors stem from the desire to see their children succeed and face no barriers, this study further solidifies that helicopter parenting behaviors are associated with negative psychological outcomes. It is important for parents to realize and understand that developing competency and autonomy in facing and overcoming barriers is important in development for emerging adults (Deci & Ryan, 2000) and that disrupting this development is associated with negative outcomes (Deci & Ryan, 2008; Soenes & Vansteenkiste, 2010). While helicopter parenting behaviors appear to have become more and more socially acceptable and prevalent, focus on developing competency and autonomy in emerging adulthood should be considered by clinicians, physicians, and potentially even by those who interact with helicopter parenting behaviors in other arenas (e.g., professors, bosses, etc.) especially if resulting in psychological distress and negative outcomes for emerging adults.

With regard to clinical intervention, if helicopter parenting behaviors are identified, it may require working with the emerging adult to establish appropriate boundaries while working to develop their sense of competency and autonomy, but may also require or benefit from a family approach to intervention. This would have to be assessed on a case by case basis and would require the clinician to use clinical judgment as to what may be most helpful and beneficial to the individual. As helicopter parenting behaviors may be entrenched and may have established a norm within the parent-child

relationship, it is important for clinicians to acknowledge that attempts to correct these developmentally inappropriate behaviors may result in an adjustment period for the emerging adult and potentially an increase in psychological distress. In light of this, it may be best to take a progressive approach to increasing the emerging adult's autonomy and reducing parental involvement.

Future Directions

Given the lack of uniformity across existing measures of helicopter parenting, future studies should first aim toward working from an agreed upon operational definition of helicopter parenting and examining past development on the construct when moving forward as Odenweller and colleagues (2014) did with their development of the HPI. Given the reasons discussed as to why it is asserted in this study that the HPI is the best existing measure of helicopter parenting, future research should consider continuing research with the HPI, including a more formalized examination of the scale's factor structure. Now that existing scales have been examined in relation to one another, their differences have been examined, the best existing measure of the construct has been identified, and its relationship to negative psychological outcomes has been demonstrated, continued scale development would also greatly add to the literature by aggregating these findings and developing an even stronger scale.

Future research examining helicopter parenting and its impact should also strive to recruit a more diverse sample. In this study, the sample was mostly Latinx, female, college students enrolled in a 4-year-private university in Southern California, which can be seen as a strength, as well as a limitation. The strength of the sample being largely Latinx is that this study adds to the literature by demonstrating the relationship between

helicopter parenting and negative psychological outcomes in non-White individuals, particularly as the research on helicopter parenting and the Latinx culture is essentially non-existent. However, the homogeneity of the sample, including other demographics (e.g., female college students enrolled in a 4-year-private university in Southern California) limits the generalizability of the findings. Attempts to recruit a more diverse sample would increase the generalizability to the findings and would also increase the amount of inference that could be drawn from the research, which will ultimately best inform clinical practice.

Future studies could then continue to further the understanding of helicopter parenting behaviors by focusing on different ethnicities and across different situations, and ultimately to see if these measures are valid in different cultural groups. As previous research has demonstrated, some aspects of helicopter parenting can be interpreted differently across emerging adults of different cultural backgrounds, resulting in differing impacts on psychological outcomes (Kwon et al., 2017; Lee & Kang 2018). If future studies are better able to capture samples of specific ethnic and cultural groups, it would be beneficial to look deeper into how helicopter parenting behaviors impact emerging adults in different cultures. While this study adds to the literature by demonstrating the relationship between helicopter parenting and negative outcomes in a predominantly Latinx sample, capturing this relationship across other ethnic and cultural backgrounds would help to further define the construct, how it parallels across cultures, and how to effectively measure the construct across cultures. Future research could also further this study by looking at specific cultural values of Latinx families, etc. to provide more depth into the Latinx population in particular. To better understand helicopter parenting as a

unique construct, examining helicopter parenting behaviors in the lives of emerging adults within the job market, and with regard to making adult decisions and communication with others outside of the college setting would add significantly to the literature. Additionally, it would add to the literature to examine helicopter parenting across situations that may result in positive outcomes. For instance, does helicopter parenting serve as a protective factor against suicide? Does helicopter parenting result in positive outcomes for individuals with other aspects of cultural diversity (e.g., developmental or acquired disability)? By capturing a more diverse sample, future research may also be able to better identify for which populations in which setting helicopter parenting is most prevalent, which would in turn result in the ability to capture more helicopter parenting and improve power in future studies.

In addressing limitations with the cross-sectional nature of this study and previous research, future research following helicopter parenting behaviors within the same participants across time and examining the impact as they grow older would also add to the literature. This could help provide a better understanding of whether or not there is a peak age of helicopter parenting behaviors, if it fades over time, or if it's impact on psychological outcomes changes as people age beyond the inclusion criteria for this study.

Of note, there was error in the presentation of the NGSE to the participants in that it was not placed on the original Likert scale. It is unclear if presenting this measure on the appropriate 5-point Likert scale (versus the 7-point Likert scale it was placed on) would have influenced how the participants responded. With that being said, future research should be sure to minimize or eliminate any human errors to strengthen the

integrity of the findings. Also, the decision to have participants respond to each measure of helicopter parenting with regard to their mother, which involved changing some of the scales' instructions appears to be unprecedented and it is unclear how this may have impacted the results. This was done in an effort to have consistency across the measures. If future research were to demonstrate the ability to do so, exploring helicopter parenting behaviors among fathers as well with the HPI could also be considered.

As was observed in the analyses in this study, the inconsistencies across the scales likely resulted in inconsistencies across other analyses, obscuring the real relationship between particular variables, particularly when examining gender moderation in the relationship between the helicopter parenting scales and psychological outcome measures. Examination of the prevalence and impact of helicopter parenting across different ethnicities and also situations seem impossible until there is a solid operational definition and way to measure the construct. These studies would also help to identify prevalence rates of helicopter parenting that are sensitive to ethnicity and context.

Overall Conclusions

This study confirmed that existing measures of helicopter parenting lack uniformity which reflects the underlying lack of an agreed operational definition of helicopter parenting in the existing literature. Without an agreed upon operational definition of what helicopter parenting is and what parenting behaviors constitute the construct, studies replicating the relationship between helicopter parenting and its impact on emerging adults will remain clouded. Given the current state of the literature and the measures of helicopter parenting that are available, clinicians interested in utilizing a measure would need firstly need to be aware of these issues and proceed with using any

of these measures accordingly. Until there is consistency in the operational definition of the construct, uniformity and improved construct validity among measures of helicopter parenting as a unique construct, and studies replicating the impact of helicopter parenting on psychological outcomes for diverse populations, the clinical utility of these measures pales in comparison to the recognized increase in these behaviors among parents of millennials, thus missing the opportunity to appropriately assess for and provide interventions targeting these outcomes. This study advances the literature however by providing comparisons to the existing literature and creating an accumulation of knowledge of helicopter parenting as a unique construct to help refine and continue scale development to best capture the construct. This study advances the literature in this way specifically, by providing a strong recommendation that future research utilize the HPI for all studies on helicopter parenting from this point forward to have consistency in the literature and also to refine future scale development.

Clinically, this study's results further point to the importance of considering parenting behaviors, particularly helicopter parenting behaviors in particular contexts for emerging adults who are experiencing psychological distress. These findings suggest that intervention aimed at these parenting behaviors and/or the emerging adults' response to these behaviors may be helpful in alleviating symptoms of depression, anxiety, and stress for some.

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APPENDIX A
DEMOGRAPHIC QUESTIONNAIRE

What is your age?

- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- None of the above

Are you currently enrolled as a college student?

- Yes
- No

Do you reside in the United States?

- Yes
- No

What type of college do you attend?

- 2-year public
- 2-year private
- 4-year public
- 4-year private
- Other _____

What year are you in school?

- Freshman
- Sophomore
- Junior
- Senior
- Other _____

Are you a first generation college student?

- Yes
- No

Are you an international student?

- Yes
- No

What is your gender?

- Male
- Female
- Transgender Male
- Transgender Female
- Gender variant/Non-conforming
- Not listed: please specify _____

What is your ethnicity? Check all that apply

- Latino/Hispanic American
- White/European American
- Black/African American
- American Indian or Alaska Native
- Asian/Asian American
- Native Hawaiian or other Pacific Islander
- Biracial/Multiracial
- Other _____

What is your religion?

- Not religious
- Atheist
- Christian (including Catholic, Protestant, and all other Christian denominations)
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- Other _____

Do you live on or off campus?

- On campus
- Off campus

Who do you live with?

- Self
- Friends/Roommates
- Romantic Partner
- Parents/Guardian
- Other _____

Is your mother currently your primary caregiver?

- Yes
- No

Growing up, was your mother your primary caregiver?

- Yes
- No

What is your mother's level of education?

- No schooling completed
- Elementary School to 8th Grade
- Some High School
- High School Diploma
- Some College
- Associates Degree (for example: AA, AS)
- Bachelors Degree (for example: BA, BS)
- Masters Degree (for example: MA, MS)
- Professional Degree (for example: MD, DDS, DVM, JD)
- Doctoral Degree (for example: PhD, EdD)
- Other _____

What is your parent(s) annual income?

- Less than \$10,000
- \$10,000 - \$19,999
- \$20,000 - \$29,999
- \$30,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$59,999
- \$60,000 - \$69,999
- \$70,000 - \$79,999
- \$80,000 - \$89,999
- \$90,000 - \$99,999
- \$100,000 - \$149,999
- More than \$150,000

APPENDIX B

PARENTAL BONDING INSTRUMENT

This questionnaire lists various attitudes and behaviors of parents. As you remember your MOTHER in your first 16 years would you place a tick in the most appropriate box next to each question.

	Very Like	Moderately Like	Moderately Unlike	Very Unlike
Spoke to me in a warm and friendly voice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did not help me as much as I needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Let me do those things I liked doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seemed emotionally cold to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Appeared to understand my problems and worries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was affectionate to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Like me to make my own decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did not want me to grow up	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to control everything I did	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Invaded my privacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enjoyed talking things over with me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frequently smiled at me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tended to baby me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did not seem to understand what I needed or wanted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Let me decide things for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made me feel I wasn't wanted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Could make me feel better when I was upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Did not talk with me very much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tried to make me feel dependent on her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt I could not look after myself unless she was around	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gave me as much freedom as I wanted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Let me go out as often as I wanted	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was overprotective of me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did not praise me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Let me dress in any way I pleased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX C

PERMISSION TO USE PARENTAL BONDING INSTRUMENT

Permission information obtained from

https://www.researchgate.net/publication/228049385_A_Parental_Bonding_Instrument

Availability

A copy of the full 25-item forms for scoring mothers and fathers is attached below. Please follow the scoring instructions. The standard application asks subjects to score their biological parents (one for each form) as the subject remembers them in their first sixteen years. In some studies, other "parent figures" have and can clearly be rated.

A modified version of the PBI (the MOPS or Measure of Parenting Style) was developed in 1997 for two purposes. It overcame one of the PBI limitations in having some 'double negative' items, and which can cause some confusion. Thus, all items are constructed in a direct way. Secondly, while preserving the 'care' and 'control' scales, they are considerably reduced in terms of the numbers of items. Thirdly, there is an 'abuse' scale. Thus, the MOPS is described after the PBI measure.

The PBI is not held under copyright. Therefore, clinicians and researchers are free to use the measure without obtaining permission.

References

[1] Parker, G., Tupling, H., and Brown, L.B. (1979) A Parental Bonding Instrument. *British Journal of Medical Psychology*, 1979, 52, 1-10.

[2] Parker, G. (1983) *Parental Overprotection: A Risk Factor in Psychosocial Development*, Grune & Stratton, New York. [A monograph describing the development of the PBI and its application across a wide range of psychiatric conditions and other disorders, as well as validity studies]

APPENDIX D

HELICOPTER PARENTING SCALE

Please rate your level of agreement with the following statements related to your experience with your mother growing up

I rarely talk to my mother before I make decisions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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APPENDIX E

PERMISSION TO USE HELICOPTER PARENTING SCALE

 **Michelle Ratcliff** <michelle.ratcliff@laverne.edu> May 16 (2 days ago) ☆  

to terri-lemoyne ▾

Hello,

My name is Michelle Ratcliff and I am a doctoral student in the Psy.D. program at the University of La Verne in La Verne, CA. I am currently working on my dissertation and am studying the impact of helicopter parenting behaviors on psychological outcomes for emerging adult college students. I am emailing seeking permission to use the Helicopter Parenting Scale (LeMoyne & Buchanan, 2011) for the purpose of my research. I look forward to hearing from you.

Best,
Michelle Ratcliff, M.S.

 **LeMoyne, Terri** May 17 (1 day ago) ☆  

to me ▾

Hi Michelle,

Sure, feel free to use it.

Terri

Terri LeMoyne, Ph.D.
UC Foundation Associate Professor of Sociology
Department of Social, Cultural and Justice Studies
University of Tennessee, Chattanooga
Chattanooga, TN 37403
[423-425-4433](tel:423-425-4433)

APPENDIX F

HELICOPTER PARENTING INSTRUMENT

Please rate your level of agreement with the following statements related to your experience with your mother growing up

My mother encourages me to take risks and step outside of my comfort zone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My parent thinks it is her job to shield me from adversity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX G

PERMISSION TO USE HELICOPTER PARENTING INSTUMENT

☆ **Kelly Odenweller**

June 20, 2017 at 9:08 AM

KO

To: Michelle Ratcliff

Re: Helicopter Parenting Instrument Permission

Hi Michelle,

I apologize for my delayed response. You may absolutely use my Helicopter Parenting Instrument for your dissertation. Please let me know if you need help accessing it.

Thanks,
Kelly

Kelly G. Odenweller, Ph.D.
Lecturer, Communication Studies
Faculty Affiliate, Women & Gender Studies
Iowa State University
346 Carver Hall
Ames, IA 50011-1010
Phone #: 515-294-9744
kellyo@iastate.edu

Spring 2017 Office Hours
MWF 11:00 a.m. – 12:00 p.m.
or by appointment

[See More](#) from Michelle Ratcliff

APPENDIX H

HELICOPTER PARENTING BEHAVIORS QUESTIONNAIRE

HPB Please answer the following questions thinking about your mother on a scale from 1 (Strongly Disagree) to 6 (Strongly Agree).

If I am having an issue with my roommate, my mother would try to intervene	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My mother encourages me to choose my own classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX I

PERMISSION TO USE HELICOPTER BEHAVIORS QUESTIONNAIRE

Holly Schiffrin (hschiffr)

To: Michelle Ratcliff

RE: Helicopter Parenting Behaviors Questionnaire Permission

May 16, 2017 at 11:40 AM

Inbox - michel...verne.edu

HS



New contact info found in this email: Holly Schiffrin hschiffr@umw.edu

[add...](#)

You're more than welcome to use it. Everything you need should be in the published article. Best of luck with your research!

Holly H. Schiffrin, Ph.D.
Associate Professor
Department of Psychological Science
University of Mary Washington
1301 College Avenue
Fredericksburg, Virginia 22554
Phone: (540)654-2281
Fax: (540)654-1836

[See More](#) from Michelle Ratcliff**Michelle Ratcliff**

To: hschiffr@umw.edu

Helicopter Parenting Behaviors Questionnaire Permission

May 16, 2017 at 10:38 AM

All Mail - mich...verne.edu

MR

Hello,

My name is Michelle Ratcliff and I am a doctoral student in the Psy.D. program at the University of La Verne in La Verne, CA. I am currently working on my dissertation and am studying the impact of helicopter parenting behaviors on psychological outcomes for emerging adult college students. I am emailing seeking permission to use the Helicopter Parenting Behavior Questionnaire for the purpose of my research.

I look forward to hearing from you.

Best,
Michelle Ratcliff, M.S.

APPENDIX J

DEPRESSION ANXIETY STRESS SCALE

Please read each statement and rate how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

	Never	Sometimes	Often	Almost Always
I found it hard to wind down	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was aware of dryness of my mouth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I couldn't seem to experience any positive feelings at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I experienced difficulty breathing (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it difficult to work up the initiative to do things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I tended to over-react to situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I experienced trembling (eg, in the hands)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that I was using a lot of nervous energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was worried about situations in which I might panic and make a fool of myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I had nothing to look forward to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found myself getting agitated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I found it difficult to relax	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt down-hearted and blue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was intolerant of anything that kept me from getting on with what I was doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I was close to panic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was unable to become enthusiastic about anything	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt I wasn't worth much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that I was rather touchy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt scared without any good reason	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I felt that life was meaningless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX K

PERMISSION TO USE DEPRESSION ANXIETY STRESS SCALE

PsycTESTS Citation:

Lovibond, S. H., & Lovibond, P. F. (1996). Depression Anxiety Stress Scales [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t01004-000>

Instrument Type:

Rating Scale

Test Format:

The DASS uses a 4-point Likert scale of frequency or severity of the participants' experiences over the last week. The rating scale is as follows: 0 = Did not apply to me at all; 1= Applied to me to some degree, or some of the time; 2= Applied to me to a considerable degree, or a good part of time; 3 = Applied to me very much, or most of the time.

Source:

Antony, Martin M., Bieling, Peter J., Cox, Brian J., Enns, Murray W., & Swinson, Richard P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment*, Vol 10(2), 176-181. doi: 10.1037/1040-3590.10.2.176

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APPENDIX L

NEW GENERAL SELF-EFFICACY SCALE

Please rate the following statements based on your level of agreement

APPENDIX M

PERMISSION TO USE NEW GENERAL SELF-EFFICACY SCALE



New General Self-Efficacy Scale
Version Attached: Full Test

PsycTESTS Citation:

Chen, G., Gully, S. M., & Eden, D. (2001). New General Self-Efficacy Scale [Database record]. Retrieved from PsycTESTS. doi: <http://dx.doi.org/10.1037/t08800-000>

Instrument Type:
Rating Scale

Test Format:

The measure's 8 items are rated on a 5-point Likert-type scale from strongly disagree (1) to strongly agree (5).

Source:

Chen, Gilad, Gully, Stanley M., & Eden, Dov. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, Vol 4(1), 62-83. doi: 10.1177/109442810141004, © 2001 by SAGE Publications. Reproduced by Permission of SAGE Publications.

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APPENDIX N
INFORMED CONSENT

CONSENT TO PARTICIPATE IN RESEARCH

VALIDATION OF HELICOPTER PARENTING: AN EXAMINATION OF MEASURES AND PSYCHOLOGICAL OUTCOMES

You are being asked to participate in University of La Verne Institutional Review Board approved research study conducted by Michelle Ratcliff, M.S., a doctoral student in the Clinical Psy.D. Program, from the Psychology Department at the University of La Verne. Results will be used for the completion of a doctoral dissertation. You may participate in the study if you are between the ages of 18-25 years old and are currently enrolled as a college student.

PURPOSE OF THE STUDY

This study will examine the impact of your mother's behaviors on your levels of depression, anxiety, and your attitudes about your abilities.

PROCEDURES

If you decide to participate in this study, we will ask you to do click "I AGREE" at the bottom of this page to give your consent to participate and you will then proceed to complete questionnaires that include demographic information as well as several surveys on how your mother parents you, your depression and anxiety levels, and your attitudes about your abilities. The questionnaires should take you approximately 15-20 minutes to complete. Once they are complete, you will be debriefed and will have the option to enter your name into a raffle to win a \$10 Amazon gift card.

POTENTIAL RISKS AND DISCOMFORTS

Answering questions may bring up negative emotions as they ask you to think of your parents and yourself.

For University of La Verne students: If you experience any distress or discomfort as a result of answering questions in this survey or if you need to talk to a mental health professional, please contact the University of La Verne Counseling and Psychological Services (CAPS) located at 2215 E St, La Verne, CA 91750 or by calling (909) 448-4105 – from 9 am to 5 pm on weekdays. If the counseling center is not open, you can utilize their after-hours crisis line: (909) 448-4650. The counseling center is open from the end of August until the end of May.

For all participants. If you experience feelings of discomfort during or after your participation in the study, you may contact SAMHSA Treatment Referral Helpline - 1-877-726-SAMHSA7 (1-877-726-4727). SAMHSA's National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.

If you have thoughts of suicide, please contact the National Suicide Prevention Lifeline - 1-800-273-TALK (8255). The National Suicide Prevention Lifeline is a free, 24 hour, confidential support for people in distress and provides crisis resources.

If you feel that your life or the life of another is in immediate danger, you can call 9-1-1.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

You will not experience any personal benefit from participating in the study and you will not receive any feedback or counseling. However, your participation in this study will add to the psychological research about the impacts of parenting behaviors on mood and self-efficacy.

INCENTIVES FOR PARTICIPATION

You will not be paid for participating. However, at the end of the survey, you will have the option to enter your name in a raffle to win one of seven \$10 Amazon gift cards. To enter the raffle, you will be directed to send your email address to the primary researcher. In addition, if you are participating on SONA, you will be awarded 1 credit for participating in the study. Once all participants have completed the study, the primary researcher will email the winners of the raffle with the gift cards.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. While the survey does not explicitly ask, if the researchers become aware of exceptions to confidentiality, they will be reported. These exceptions include information about the physical, sexual or emotional abuse of a minor, dependent adult, or a senior as well as any intent to kill or harm oneself or someone else, or in certain legal situations. To ensure your confidentiality, it is best to complete the survey in an isolated environment. You will not be required to provide your name or any other contact information, except for an email address that you will supply if you wish to enter the raffle. The email address will not be associated with any study data. All data will be kept in the password protected Qualtrics system and downloaded to a password protected personal computer and onto a secure server. The primary investigator, Michelle Ratcliff, M.S., will have access to the data as well as her faculty sponsor, Kristina Post, Ph.D. Data presented in the dissertation or in public will only aggregated data with no identification numbers or individually personally identifying information. Consistent with Ethical Guidelines of the American Psychological Association, the data will be deleted in three years. Consent will also be stored with the data for three years.

PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so, such as if you call the researcher with concerns about your participation. Your participation and/or your withdrawal from the study will not affect your relationship with the University of La Verne or the study investigators.

IDENTIFICATION OF INVESTIGATOR

If you have any questions or concerns about the research, please feel free to contact me, Michelle Ratcliff, M.S. at michelle.ratcliff@laverne.edu, or my supervisor, Kristina Post, Ph.D., kpost@laverne.edu, (909) 448-4131, University of La Verne, 1950 Third Street, La Verne, CA 91750.

RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact the IRB Office at (909) 448-4564 (irb@laverne.edu), University of La Verne, Institutional Review Board, 1950 Third Street, CAFÉ 112, La Verne, CA 91750.

CONSENT

By checking "I AGREE", you give your consent to participate in this study and are confirming that you are between 18-25 years old and are a currently enrolled college student. If you choose not to participate or if you are not between 18-25 or a current college student, please click on "I DO NOT AGREE." You may print a copy of this form for your records.

I AGREE

I DO NOT AGREE (if you click on this, please close your browser at this time)

APPENDIX O
DEBRIEFING STATEMENT

DEBRIEFING STATEMENT

You have participated in a study that asked you questions about your experiences with parenting behaviors, your mood and attitudes about your abilities. The purpose of this study was to examine the impact of experienced parenting behaviors, such as helicopter parenting behaviors, on mood and self-efficacy.

If, for any reason, you feel distressed after completing the study, and you do not have a mental health provider, if you are a University of La Verne student please contact the University of La Verne Counseling and Psychological Services (CAPS) at (909) 448-4105. The University of La Verne CAPS is open end of August to the end of May, weekdays from 9 am to 5 pm. The University of La Verne CAPS after hours line is (909) 448-4650. If you are not a University of La Verne Student, please contact SAMHSA National Hotline at 1(800) 662-4357 which provides confidential mental health information and referrals in the United States.

You are also encouraged to dial “911” to access emergency personnel if you feel like your life or the life of someone else may be in danger. If you have thoughts of suicide but do not feel your life is in immediate danger, you may also contact the National Suicide Prevention Lifeline at 1(800) 273-8255. You are solely responsible for any counseling or emergency service charges incurred.

If you have any questions or concerns about this study, or would like a copy of the informed consent form, please contact the principal investigator, Michelle Ratcliff, at michelle.ratcliff@laverne.edu or the faculty sponsor, Dr. Kristina Post at kpost@laverne.edu, (909) 448-4131. If you have any questions regarding your rights as a research participants, contact Kanya Godde Chrisco, Ph.D., Director of IRB at (909) 448-4564 or at irb@laverne.edu. The mailing address is: University of La Verne, Institutional Review Board, 1950 Third Street, CAFE 112, La Verne, CA 91750

Your participation in this study is greatly appreciated.

Sincerely,

Michelle Ratcliff, M.S.
Doctoral Student
Clinical Psychology Program
University of La Verne
michelle.ratcliff@laverne.edu

APPENDIX P

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



Institutional Review Board

TO: Michelle Ratcliff

FROM: University of La Verne, Institutional Review Board

RE: **2018-58-CAS, Validation of Helicopter Parenting: An Examination of Measures and Psychological Outcomes**

The research project application for exemption, cited above, was reviewed by the University of La Verne (La Verne) Institutional Review Board (IRB). Congratulations, your La Verne IRB application has been **determined to be exempt** and you can proceed with the proposed study.

A copy of this letter is required to be included as an appendix to your completed thesis/dissertation. An exempt determination means there is no expiration date, but you need to keep the IRB apprised of your progress through annual activity reports.

Consent and recruitment documents are not required to be uploaded and reviewed for exempt studies. However, researchers are reminded that University of La Verne follows the principles of the Belmont Report, which requires all potential participants to be informed of the research study, their rights as a participant, confidentiality of their data, etc. It is recommended you utilize the Information Sheet for exempt research (<https://laverne.edu/irb/irb-forms-and-examples/informed-consent-forms-templates/>) and revise the template to be specific to your study. This document will not be reviewed by the IRB. It is the responsibility of the researcher to make sure the document is consistent with the study procedures listed in the application.

Please note the following conditions apply to all exempt IRB submissions:

The IRB expects to receive prompt notice of any proposed changes as per the guidelines in the modification policy document: <https://sites.laverne.edu/institutional-review-board/files/2015/02/La-Verne-IRB-Modifications.pdf>

Changes to your protocol will require a new determination, which may not be exempt.

Notification that you have completed the data collection for the study and/or annual reports indicating your study is still active.

The IRB wishes to extend to you its best wishes for a successful research endeavor.

A handwritten signature in black ink, appearing to read "Kanya Godde Chrisco".

Kanya Godde Chrisco, Ph.D.

08/06/2018

For the Protection of Human Participants in Research
 Contact: email irb@laverne.edu or phone (909) 448-4564
 ULV IRB Website: laverne.edu/irb
