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EXPERIENCE WITH AUTONOMOUS PARENTING STYLES AND COLLEGE STUDENTS' DECISION-MAKING

By
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A DISSERTATION IN PRACTICE

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Abstract

Different parenting styles allow children varying degrees of autonomy throughout all stages of childhood, influencing their self-esteem, self-actualization, and decision-making skills. Research indicates a positive correlation between autonomous parenting styles and children's well-being, encompassing their overall welfare, academic achievement, social values, and age-appropriate decision-making. However, there is limited research on how autonomous parenting relates to decision-making skills, which are vital for future leaders making sustainable choices in a complex and ever-changing world. The purpose of this study was to investigate the effect of levels of autonomous parenting styles received by undergraduate students on the extent of their decision-making proficiency. This study was guided by the hypothesis that parents who support autonomy enhance their college-aged children's decision-making skills. Specifically, higher perceived levels of autonomous parenting result in improved decision-making proficiency among college students. The study employed a quantitative method using a multivariate linear regression model, involving 380 college students aged 19-25 who were studying in the U.S. The findings indicated a statistically significant relationship between parental autonomy and decision-making abilities. These results remained consistent after controlling for variables such as age, gender, ethnicity, race, household income, GPA, and college year. This increases understanding of how autonomous parenting contributes to the successful completion of tasks and seeks to enhance understanding of how autonomous parenting benefits the development of decision-making skills in college students.

Keywords: autonomous parenting styles, decision-making skills, college students, sustainable development

Dedication

This dissertation is dedicated to my late father, whose wisdom, encouragement, and spirit laid the foundation of my academic journey. His light guided my steps, his strength strengthened my resolve, and his inspiration made what once seemed impossible possible.

I am deeply grateful to my mother and mother-in-law for their unwavering devotion, prayers, and faith that supported me throughout this journey. Their quiet strength and love offered comfort and courage.

I deeply thank my late teacher, Nam Nguyen, especially for instilling in me a strong belief in the saying, "Where there is a will, there is a way.” This has inspired me throughout my academic and professional life.

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I am deeply grateful for the encouragement from my former teachers, managers, colleagues, sisters, brothers, relatives, and friends.

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CHAPTER ONE: INTRODUCTION

Finding factors that enhance college students' effective decision-making skills is essential. College students must be well prepared for a leadership-changing role, while decision-making competence is critical for effective leaders (Dess & Picken, 2000). Instead of leaders viewing themselves as resource allocation specialists, leaders must envision themselves as flexible asset providers willing to be coaches, information providers, teachers, and ultimate decision-makers, depending on their subordinates' requirements (Dess & Picken, 2000). On the other hand, parents develop college students' leadership from the earliest days, shaping and influencing their leadership in some respects, such as leadership styles (Hartman & Harris, 1992; Murphy & Reichard, 2011). Specifically, as to whether parents influence college students' decision capabilities or not, a specific investigation of parents influencing college students' decision-making competence is necessary. Therefore, this quantitative study examined the hypothesis that higher perceptions of autonomy from parents can influence and enhance the decision-making capabilities of college students in the U.S. This perspective adds a new dimension to existing research and will likely pique the interest of scholars, educators, and students in psychology, education, and leadership development.

This chapter introduces and describes the research problem, the focus of the study, and the preliminary fundamental components of this project, including the purpose statement, a crucial research question, an aim statement, a methodology overview, delimitations, limitations, and a reflection of the scholar-practitioner.

Statement of the Problem

The problem examined in this study is that college students struggle in decision-making, which can negatively affect their college progress (Rimawi & AlMasri, 2021). This may be partly due to the parenting style with which the student was raised (Baumrind, 1967, 1991, 2005; Bednar & Fisher, 2003b; Brauer, 2017; Marbell-Pierre et al., 2019b). Research has demonstrated that children form their decision-making skills in proportion to the autonomy their parents give them throughout childhood and adolescence (Brighouse, 2003; Mullin, 2014). College students can be both influential and effective decision-makers, whether their decision-making competence is a product of their development of autonomy, as has been affirmed with adolescents (Baumrind, 1996, 2005). For instance, parental styles play a crucial role in the decision-making styles of children in their early adolescence and the decision-making competence of their college-age children, specifically in making career decisions (Alexander & Harris, 2022; Davids et al., 2016). On the other hand, parents are the initial educators in children's lives (Barratt-Pugh et al., 2022; Baumrind, 1967). This is particularly applicable to parents who apply autonomous parenting styles, providing their children with the appropriate autonomy and care to build their self-reliance, self-assertion, self-control, self-determination, and confidence in early childhood (Baumrind, 1967; Baumrind, 2005; Deci & Ryan, 2000; Tafarodi et al., 1999). These understandings are essential and evoke a potentiality that parenting styles influence children's decision-making capabilities at the college stage.

An autonomous parenting style is imperative for children's decision-making capabilities. Different parenting styles build disparate autonomy levels throughout a child's development (Baumrind, 1966). They help generate autonomous and thorough thinking, supporting children's awareness and self-esteem development. Instead of being locked onto parents' stated expectations in all circumstances, children can be trained, step by step, in small and large tasks to make goal-directed decisions, taking responsibility for their actions, their performance, and related consequences (Baumrind, 1966; Castelo et al., 2022; Mullin, 2014). In a world of continual change, developing autonomy in children benefits them with an augmented ability applied to decision-making skills. Yang et al. (2021) noted that differences in decision-making among college students at various leadership levels complement their development of self-actualization, emotional constraints, and self-control abilities, all considered traits of autonomous development. College students are trained to make decisions both under favorable conditions, such as in a supportive and nurturing environment, and within intricate or complex environments of competitive or high-pressure situations (Marshall & Hornak, 2008).

The topic of this quantitative study is vital to both supporting college students in developing critical leadership abilities and considering the significance of effective decision-making skills in today's complex and continually evolving world. Scholars have investigated the specific relationship between autonomy provision by parents and children's decision-making skills (Brighouse, 2003; Mullin, 2014). However, their research target was adolescents, not college students. Hence, young-adult-aged (19-25) college students were the focus population of this dissertation. The study findings revealed a positive correlation between enhanced parental autonomy and skillful decision-making. The findings highlight the importance of autonomy in decision-making skills and compel college students to continue to nurture and develop these skills during and beyond their initial leadership tenure. The potential impact of these findings on the future of leadership development is significant. It should interest all those involved in educating and developing young adults, inspiring them to continue fostering and sustaining future leaders with adequate decision-making competence.

Purpose of the Study

The purpose of this quantitative survey design study was to investigate the effect of levels of autonomous parenting styles received by undergraduate students on the extent of their decision-making proficiency by utilizing a multivariate linear regression model.

Research Question

This dissertation's research question was: To what extent does autonomous parenting influence decision-making proficiency among college students? This question may provide valuable insights into the role of parenting in shaping the decision-making skills of future leaders.

Research hypothesis: Higher levels of perceived autonomous parenting styles lead to higher levels of college students' decision-making proficiency.

Aim of the Study

This study aimed to underscore the importance of autonomous parenting in enhancing children's well-being, especially in developing adults who make critical decisions. It reflects the role of autonomous parenting in decision-making robustness. This long-lasting impact of autonomous parenting accumulatively enriches decision-making proficiency throughout college leadership tenure. It provides insights and strategies to enhance decision-making competence and directly impacts their work or studies.

This study also stresses the importance of autonomous parenting as the foundation for college students to become effective leaders, practicing emotional leadership, and making ethical and effective decisions. Autonomous quality and decision-making competence are crucial for leaders practicing authentic leadership (Leroy et al., 2015; Shaw, 2023; Yang et al., 2021). Reliable autonomous behavior and accurate decisions define a good leader. Authentic leadership optimizes the trust relationship between leaders and followers regarding long-term common goals and sustainable organizational development. Notably, this successful leadership style emphasizes that making decisions aligned with societal demands and the greater good, grounded in awareness and a spirit of generosity, is the most effective and efficient (Shaw, 2023).

Moreover, leaders with autonomous traits are typically perceived as confident and motivated, internally enhancing their performance. Specifically, in disorderly work environments, autonomy supports authentic leadership by fostering a synergistic feedback effect between leaders and followers, boosting motivation and overall organizational performance, navigating unpredictable challenges, and managing chaos (Leroy et al., 2015; Yang et al., 2021). Likewise, effective leadership is compulsory for achieving shared and sustainable goals in today's complex and constantly evolving world. Shaw (2023) noted, “effectiveness requires a degree of self-actualization based on self-determination and strong character development” (p. 17). As such, college students need to learn that autonomy is a significant achievement for them, helping them to be confident and make good decisions not only for their good deeds but also for the general good of the community and organization, working toward the common goals of practicing authentic leadership.

Definition of Relevant Terms

The following terms are used operationally within this study.

Autonomy: Merriam-Webster (n. d.) defines autonomy as the act or power of making one's own choices or decisions, or the state of being free from the control or power of another.

Autonomous parenting styles: Different parenting styles build different autonomy levels in children's development. Concretely, parenting styles that generate autonomous thinking can include those that support children in developing awareness and self-esteem in their decision-making in small and big tasks (Baumrind, 1966; Castelo et al., 2022; Mullin, 2014).

Decision-making: Merriam-Webster (n.d.) defines decision-making as the act or process of deciding something, especially with a group of people. In a broader sense, decision-making involves making a choice at a given moment. Decision-making involves identifying problems, setting goals, analyzing options, selecting solutions, and managing contingencies amid uncertainties while considering potential risks (Mathematics, 2020).

Decision-making proficiency: The capability to make a good or reliable decision by focusing on the quality of the decision-making process instead of the outcomes (Bruine et al., 2007).

Parenting styles: Parenting styles convey varying attitudes through body language, temper, tone of voice, emotional displays, and quality of attention (Bornstein & Zlotnik, 2008). As such, children can perceive different levels of warmth, support, attention, indifference, anger, and so on from interacting with their parents, positively or negatively influencing their development (Baumrind, 1966).

Methodology Overview

This survey design study employed a multivariate linear regression model to examine the level of autonomous parenting styles extending college students' levels of decision-making proficiency, in which autonomous parenting styles were independent variables and college students' decision-making proficiency was a dependent variable. The population was students recruited from four-year universities and classified by age, gender, country of birth, and study performance. The study utilized an online survey methodology to receive college students' responses to survey questions on both scales: 1) the level of autonomy perceived from parents and 2) the level of decision-making proficiency.

The hypothesis that higher levels of perceived autonomous parenting styles lead to college students' decision-making proficiency aligns with the goal of the quantitative method, examining the correlational relationship of variables (Kellstedt et al., 2022). The quantitative method offers the methodology to detail the "explanation of the logic for evaluating causal claims about relationships" between an independent and dependent variable (Kellstedt et al., 2022, p. 24).

A Qualtrics platform and STATA software were utilized to deploy the whole research process: designing the whole survey procedure, entering survey questions, creating an anonymous link and QR code, sending to potential participants, receiving anonymized data, evaluating, sorting the data, and storing the data for working up the analysis. Initially, the Qualtrics platform met all the critical requirements of data treatment in a quantitative research project. Specifically, it facilitates the holistic data process, from data initiation to data collection, storage, sorting, and arrangement, as well as data confidentiality protection, data anonymizing, and data processing for analysis. Next, STATA software was utilized for data analysis. Hence, Qualtrics systems and STATA software help save the researcher time, extend convenience, and provide safe and reliable data generation and protection throughout the research process.

The Perception of Parents Scale (POPS) is a validated survey instrument that measures individuals’ perceptions of autonomy from their parents. This instrument is intended for ages that match typical college students' ages, making it a good fit for this research. Importantly, utilizing the existing validated survey instrument was an effective and efficient approach regarding the time and financial constraints of the dissertation.

The survey incorporates a set of component tasks from another validated tool, the Decision-Making Competence Inventory (DMCI) index, which consists of four distinct factors: Factor 1, known as Informed Awareness; Factor 2, known as Self-Appraisal; Factor 3, known as Autonomy; and Factor 4, known as Confidence (Miller & Byrnes, 2001). This tool suggests that some components may predict adolescents’ choices better than others. This validated assessment is instrumental in gauging the decision-making proficiency of college students. This instrument was utilized to explore the correlation between college students’ autonomy and their decision-making proficiency.

The use of survey methods offers a comprehensive research process. It encompasses all necessary steps, from theory and hypothesis formulation to empirical testing, evaluation of hypotheses, evaluation of causal theory, and finally, deduction of scientific knowledge (Kellstedt et al., 2022). This ensures a thorough and rigorous approach.

Delimitations, Limitations, and Personal Biases

The quantitative methodology facilitates resolving the research problem's focus and finding the potential correlational relationship; however, there were certain delimitations, limitations, and personal biases extant. First, this study intentionally recruited the targeted college students aged 19 to 25 who are studying at universities or colleges in the U.S. since it has a broadly diverse range of students from different backgrounds and cultures, thus helping enhance the multifaceted perspective of parenting styles perceived by college students. However, the randomly selected but limited participants may lead to widely different parenting styles. In addition, the participants in the research were college students who answered the survey questions based on their perceptions of their parents in raising them and providing them autonomy. This was not a two-way survey, and potential personal bias may have occurred without getting validation from their parents.

Second, employing a quantitative methodology prevents a specific claim on a research result. For example, the result is always probabilistic, not deterministic. The limited observations may not represent the general population of U.S. universities or undergraduate students. In addition, transcribing data into calculations to examine the causal relationship sets the statistical correlation and likely induces the causal relationship rather than articulating a genuine causal relationship between variables. Although the employment of survey research might provide the best reliability for data obtainment, it might encounter self-report-generated data based on the subjective answers of respondents (Kellstedt et al., 2022). This can impact the validity of the data, which is one of the inherent and unavoidable shortcomings of the statistical research method.

Finally, the researcher can be biased in interpreting and analyzing the data obtained. As such, using a quantitative method helps the researcher prevent her insights from being included in the interview fieldwork if she approaches this topic with qualitative research. Using numbers to translate the data was the best way to keep the data accurate and reliable.

Reflections of the Scholar-Practitioner

My leadership philosophy is: As a leader, I am the final stop for the organization to place its confidence in. The leader must possess positive qualities and constantly enrich leadership knowledge to navigate this.

Integrity, personal development, challenge, love, and pioneer or autonomy are my top qualities, which I could envision throughout my leadership practice. As an individual, I have grown up with autonomy provided by my parents in their care and teaching. I have been a student of self-actualization in all my activities and decision-making. As a mother, I raised my sons, encouraged them to make all decisions from minor to significant, and trained them to be responsible for their own decisions in all circumstances.

As an autonomous leader or pioneer in the organizations where I work, I always proactively propose improvements, as strong opinions are lightly held. This reminds me of a business development project that I led. As a challenge leader, I confronted numerous ambitious assignments concurrently. I embraced my colleagues' strengths and weaknesses with love and supported them toward the organization's target. For personal development, I was keen on learning to grow and encouraged my counterparts to develop their inner pioneer or autonomy in the decision-making within their projects. I trained my subordinates to make decisions in their professional and even personal lives if asked. In addition to the autonomy development, my personal integrity allowed me to troubleshoot an array of hardships. These fundamental principles guide me in all leadership and decision-making.

Decision-making is the primary task for a leader, offering both positive and negative experiences. For instance, generating a proposal costs my company enormous resources and requires us to consider a cost-benefit analysis on whether to join in depth. My constant way was to listen to team members' opinions and encourage them to make their defensible decisions before the team's discussion for a final decision. Our team members would let the final call be mine. Once, we were invited to develop a communication proposal by a top industry company; we all agreed to join, as it was the first potential client of that industry to offer us the chance. However, it was too challenging for our team to continue after three rounds. Seeing the client's potential, I discussed it with the team and decided to change some team members. We won the pitch at the end with intensive time and effort. This client became our top income producer. For an opposing example, we were invited to generate a proposal by another leading industry client and agreed to join. Their marketing team was known to be very professional. We failed the pitch after the fourth round. Professionally, we might win, but politically, we failed. Nevertheless, our team gained enormous experience when working with professional clients. Both positive and negative occurrences taught me about what leadership was. Being persistent with the decision and persevering with the challenge to the end, every result generated value. With this leadership mindset, we won leading clients in other industries, and at the same time, we lifted our confidence, professionalism, wisdom, and mastery. Hence, as a leader, I needed to possess fundamental qualities to guide our team members toward our organization's mission and vision.

Overall, my leadership was progressively formed by accumulating case studies in my professional and personal life. It is a learning and practicing journey based on my personal qualities, including integrity, development, challenge, love, and strengths: maximizer, learner, developer, futurist, and connectedness. These principles and strengths are fundamental attributes that helped me navigate leadership to succeed. Immersing myself in the leadership notions and approaches of Lowney (2003) and Haslam et al. (2020), I learned how to develop a social identity based on my principles and traits and applied them to the 5R program for developing identity leadership. This will upgrade my leadership to a new level hereafter. Furthermore, I appreciate value, which is the measurement of success. Value can be seen as the mixture of material, lessons learned, and other things that positively benefit my community.

Furthermore, systems thinking in the leadership subject has enhanced my knowledge of organizations' operations and decision-making capabilities, which has led me to strive for program completion and become a teaching expert (Stroh, 2015). This growth confirms my perspective of decision-making as a crucial competence needed for authentic leaders in century 21 and urges me to strive for the completion of my dissertation persistently and to become a valuable teacher who can transcend this knowledge to the community I teach. The course has taught me how to make ethical decisions in the community regarding diversity and inclusion toward the common goals for everyone, as well as for the community (Stroh, 2015).

Stroh (2015) mentioned that every component works with all its interconnections; some systems result in unfavorable results, while others produce favorable consequences – evolution. Meadows (2008) and Stroh (2015) argued that awareness of these complexities necessitates an analysis of interventions and the identification of the weakest link to break and eliminate chronic issues, thereby achieving sustainability and promoting better justice and equality in a world of constant change. Organizations require an actual interrelationship awareness. This enhances my understanding of the systems of both collective and individual growth. Therefore, the system's responsibility is to develop the organization's professionalism concurrently with personal growth. Historically, I have often put personal growth behind everyone in the communities or organizations. However, this is not sustainable; my growth must also be synchronous with the organization’s growth. This helps guide everyone in the organization in learning to be a leader and make effective decisions to bring diversity and inclusion toward common goals. I appreciate Wheatley’s (2006) perspective that people need to know how to be together, which has not yet been done, even though it has become increasingly vital. This is required to sustain development today.

The current program has equipped me with significant systems thinking knowledge, practical tools, and skills to maneuver complexity and resolve issues for today's sustainable world. As an individual, this knowledge helps me see the world working in systems and encourages me to extend my support where I can. As a business consultant, this course supplied me with identifiable and various archetypes of chronic issues, as well as methodologies to break those issues by finding the weakest links, and tools to tackle those problems for improvement. All this knowledge is crucial to equipping me to become a technical expert, providing effective advice for people in making effective decisions. My professional journey offered me numerous opportunities to work with young adults, listening to their stories of advantages and disadvantages in developing and growing. Realizing that their lack of autonomy as provided by their parents has been critical to their decision-making for growth, I started thinking, learning, and studying. This is the history behind my dissertation.

As a future teacher of fundamental leadership subjects at the university level in Vietnam, I will integrate this knowledge into teaching college students problem-solving and decision-making skills. Moreover, I agree with Uit de Weerd and Fridjhon (2021) that students should be taught how to be leaders who can bring care and balance to overcome the general systems' lack of justice and equity.

Summary

The introduction and description of the research problem, the focus of the study, and the preliminary fundamental components of this project, including the purpose statement, research question, aim statement, and methodology, presented essential components demonstrating the importance of considering the relationship between parenting styles and college student leadership outcomes, specifically decision-making proficiency. Employing quantitative survey methodology and using POPS and DMCI surveys helped establish a correlational relationship between autonomous upbringing and decision-making proficiency among college students. I expected to observe that college students who report higher perceptions of autonomous parenting are more likely to report better decision-making proficiency. The anticipated outcome was a positive association between autonomy-supportive parents and college students’ decision-making proficiency.

The next chapter will generate the literature review, showing existing research studying the numerous benefits college students gain from autonomy from their parents and the paucity of research this study aims to investigate.

CHAPTER TWO: LITERATURE REVIEW

Students making effective decisions in a college environment prepare them for real-world progress (Galotti et al., 2014; Vyas, 2023). Research has shown that children develop their decision-making skills in proportion to the autonomy their parents give them positively (Brighouse, 2003; Mullin, 2014). Researchers have also shown that parents can misuse their love for their children to manipulate their children's ability to make choices and decisions consciously (Baumrind, 1966). As a result of those conditions, parents and children gradually lose each other's perspective, trust, confidence, and ability to practice autonomy and better understand each other's points of view (Deci et al., 2006; Mullin, 2014). Hence, building and maintaining children's autonomy is critical. They confidently make choices or decisions weighing risk factors, learning to pursue vital life milestones and ambitions, and thus become good leaders (Mullin, 2014).

This dissertation employed quantitative research methodology to support the argument that college students' skillful decision-making is highly dependent on the amount of autonomy provided by parents with different parenting styles. As such, the following literature review roadmap will introduce sections and parts to reveal that the research on the autonomy provided by parents influencing college students' decision-making capability is limited and necessitates investigating this topic.

Roadmap for Literature Review

In the first section, I provide important definitions for the concepts to be utilized. Then, I discuss current knowledge of parenting styles and their generally accepted effect on children's development. The second section looks at the specific relationship between autonomy and the decision-making skills of adolescent-aged children. Also, I outline why effective decision-making skills are an essential outcome to consider, as well as why college students are a significant population to study. The review shows inadequate literature studying the impact of autonomous parenting on the decision-making skills of college students. Finally, the review provides a summarized overview and future direction of my research.

Definitions of Relevant Concepts

These essential definitions have been operationally used in the study.

Parenting Style

Parent-to-child communication is different through parenting styles that convey varying attitudes through body language, temper, tone of voice, emotional displays, and quality of attention (Bornstein & Zlotnik, 2008). As such, children perceive different levels of warmth, support, attention, indifference, anger, and so on from interacting with their parents. This will positively or negatively influence their development (Alexander & Harris, 2022; Baumrind, 1966; Clauser et al., 2021). Children with different care and upbringing levels during their development manifest differences in their well-being, studying performance, confidence, and autonomy in making decisions.

Autonomous Parenting Style

Parenting styles that generate autonomous thinking support children in developing awareness and self-esteem in their decision-making in both small and large tasks. Thus, different parenting styles build different autonomy levels in children's development (Baumrind, 1966; Bi et al., 2018). Instead of being controlled and following their parents' expectations in all circumstances, autonomous-directed children are trained, step by step, to make goal-directed decisions, taking responsibility for their actions, their performance, and related consequences from childhood on (Baumrind, 1966; Castelo et al., 2022; Mullin, 2014). Each parenting style builds a certain level of autonomy, which is vital for framing children's decision-making skills.

Different Types of Outcomes for Children

Differences in parenting styles enjoy disparate positive levels of autonomy outcomes, including a sense of self-efficacy, personal agency as individuation, and decision-making (Alexander & Harris, 2022; Baumrind, 2005; Clauser et al., 2021). Accordingly, different levels of decision-making in children are due to the impact that emotional types and distinct levels of parents' inhibition have on children. Specifically, parental behaviors have been correlated to adolescent and college students' career decision-making difficulties (Alexander & Harris, 2022; Sovet & Metz, 2014). Differences in parenting styles imbue different levels of confidence and decision-making processes in children.

Effective Decision-Making

Today's world requires a generation who are good at leadership and influence and who will lead people toward shared goals with effective decision-making that is accurate in vulnerable situations, overcomes unpredictable challenges, and resolves chaos (Yang et al., 2021). In addition, according to Shaw (2023):

> Autonomy is a leadership challenge. It is based on self-determination and the development of a strong will. Strong leaders are admired in business and politics. However, the personal ability to develop strength of character in order to make important decisions must be in harmony with the demands of society and the general good (p. 17).

Developing autonomy in children benefits them by helping them become great leaders with effective decision-making skills. This attribute is exceptionally critical in a world that needs sustainable development while being in a state of constant change and innovation.

College Students

College or undergraduate students potentially emerge as leaders, expanding their leadership capacity and learning (Marshall & Hornak, 2008). They are encouraged to practice relational leadership and work with others to address shared issues, solve common problems, and work toward positive changes. College students are the future leaders responsible for addressing global challenges, especially business leaders who are current business college students, educated and prepared to impact the global economy by generating informed and balanced decisions (Peng & Shin, 2008).

College Students and Autonomous Parenting Styles

The problem is whether differences in autonomous parenting styles influence the decision-making skills that college students practice. Yang et al. (2021) examined the differences in decision-making among college students with different leadership levels and whether these differences relate to their development of emotional constraints and personal control abilities. They are trained to make decisions under favorable conditions and/or complex environments (Marshall & Hornak, 2008). They can be prominent college students who are influential and effective decision-makers concurrently, or influential but not good at decision-making.

Types of Parenting Styles

Each parenting style has different behaviors and associated characteristics in interactions with children (Alexander & Harris, 2022; Baumrind, 1991; Bornstein & Zlotnik, 2008; Clauser et al., 2021). Stylistic differentiation stems from the variability in parents' intervention in their children's freedom with daily activities and their expectation of obedience or compliance. These freedom-granting levels and controls differ from parents' willingness to rear their children to become good people and succeed (Baumrind, 1966, 1978, 1991).

Baumrind (1966, 1991) and Maccoby and Martin (1983) developed and initially introduced three adult control prototypes: permissive, authoritarian, authoritative, and, more recently, a fourth, indifferent. Baumrind (1966, 1991) developed these four parenting styles, referring to the intersectional dimensions of responsiveness and demandingness. These four styles each have different effects (Alexander & Harris, 2022; Bornstein & Zlotnik, 2008; Clauser et al., 2021; Georgiou, 2008; Tan & Yasin, 2020).

Responsiveness relates to parents nurturing their children's individuality and self-assertion by providing affection, autonomy, and effective communication while supporting and accepting their children's needs. In contrast, demandingness involves parents exercising control and intrusively monitoring children's activities, which influences the development of their psychological management and communication skills (Baumrind, 2005). Baumrind (1971, 1991) applied these two main factors of responsiveness and demandingness along orthogonal axes to describe four parenting styles. She explained that permissive parents are responsive but not demanding; authoritative parents are both responsive and demanding; authoritarian parents are demanding but not responsive; and indifferent parents are neither responsive nor demanding.

Indifferent Parenting Styles

With an indifferent parenting style, children have all the space to do what they want and desire. Indifferent parents are concurrently not responsive nor demanding, understood as minimum control and minimum warmth (Baumrind,1991; Maccoby & Martin, 1983; Pinquart & Gerke, 2019; Steinberg, 2001; Wang et al., 2021). In other words, children can develop autonomy at the maximum level (Baumrind,1991). However, children's development without direction, guidance, or parental restriction can develop negatively as they do not receive limitations or affectionate support from their parents. There is no opportunity to learn wisdom from their parents. Indifferent parents are centered in their lives and not particularly interested in their children's development (Baumrind, 1966). The children develop positively or negatively depending on their cognition or other free external effects, such as their peers, rather than from their parents.

Authoritarian Parenting Styles

In the authoritarian style, parents attempt to control and shape by judging their children's behaviors and attitudes based on the parents' principles of conduct, understood as maximum control and minimum warmth (Baumrind,1966, 1967; Maccoby & Martin, 1983; Pinquart & Gerke, 2019). These children need to comply with numerous rules and standards set by their parents. In addition, they generally have the most household responsibilities (Baumrind,1966, 1967). Authoritarian parents are demanding but not emotionally attuned or positively responsive. As such, the children receive significant control and little autonomy from their parents (Baumrind,1966, 1967). Children have little right to behave, act, or react based on what they perceive as correct.

Permissive Parenting Styles

Permissive parents allow their children broad space to do what they want or desire with minimum household responsibilities, minimum control, and no orderly requirements with maximum warmth (Baumrind,1966, 1967; Maccoby & Martin, 1983; Pinquart & Gerke, 2019). Permissive parents not only put forth nonpunitive measures in their interactions but also support children in their actions and desires (Baumrind,1966, 1967). They often discuss their rules and regulations, allow them to use all their resources, and try not to be the ultimate arbiter for their children to follow (Baumrind, 1966, 1967). They extend the best support and provide substantial autonomy to their children. With permissive styles, parents allow their children significant space to do what they want with the least responsibility toward their family (Baumrind,1967). As such, parents interfere less with their children's activities and choices and encourage the autonomy of children at the highest level. Children can develop positively and healthily when parents are exceptionally lenient and deeply caring about their children's security (Baumrind, 1978). Permissive parenting styles care for and follow children's interests.

Authoritative Parenting Styles

An authoritative parenting style seems to be appropriate in helping children develop well. Authoritative parents are positively responsive and demanding (Baumrind,1966, 1967). They set rules and standards based on mutual understanding with their children and ask them to obey (Baumrind,1966, 1967). As they are responsive, they develop children's autonomy, but since they are demanding, children optimize their autonomy within the rules set reasonably between parents and children (Baumrind,1966, 1967). Authoritative parents express warmth, love, support, and care toward their children (Baumrind,1966, 1967). They are open with their children and listen and follow their children's perspectives as if they are acceptable (Baumrind,1966, 1967). This relationship is comparable to peer-to-peer, in which parents' and children's feelings and opinions are exchanged amicably and harmoniously, understood as high control and high warmth (Baumrind, 1966, 1971, 1991; Maccoby & Martin, 1983; Pinquart & Gerke, 2019). An authoritative parenting style's care and positive upbringing benefit children's development, especially where autonomy is concerned.

The Sense of Autonomy Generated from Parenting Style

The analysis of four parenting styles provokes a sense of autonomy level in each parenting style. The relationship between parents and children helps form and develop autonomy from early childhood (Mullin, 2014; Pinquart & Gerke, 2019). The interaction of activities such as feeding, making choices of toys, food, and dress, gradually making choices in social relationships, choosing schools, making friends, expressing preferences for study subjects, and later, choosing a career helps to develop autonomy (Mullin, 2014). Moreover, Brighouse (2003) and Páez-Gallego et al. (2020) argued that one of the key factors affecting the well-being of both adults and adolescents is making significant life decisions, such as choosing a partner, deciding when to marry and have children, developing talents, improving personality and quality, and making everyday choices like selecting clothes and books. The more autonomy in encouraging children to make choices and practice choosing a thing, the more independence the children display from childhood on (Mullin, 2014). From Baumrind's (1966) study regarding parenting styles in connection with different levels of autonomy provided to children: Permissive and indifferent parents grant the highest level of autonomy; authoritative parents offer positive autonomy for children within their reasonable definition; authoritarian parents obviate children's autonomy.

There are numerous studies about the impact of autonomy on the development of children in different aspects, such as making choices, school performance, self-regulation, and well-being. Many parents understand that autonomy is vital for their children's daily activities (Mullin, 2014). It helps them learn how to react positively to meaningful choices rather than feeling strange or indifferent before those choices (Mullin, 2014). Additionally, they will not feel pressured to cope and make choices beyond their goal scopes (Mullin, 2014). The following section presents research on various outcomes of parenting styles on children, especially those at the college level, focusing on autonomy and decision-making.

How Parenting Styles Affect Children

Each parenting style generates typical child outcomes (Alexander & Harris, 2022; Bornstein & Zlotnik, 2008). In other words, Bornstein and Zlotnik (2008) stated that the parenting style affects a child's autonomy development. This development includes children's essential well-being outcomes such as material outcomes, physical health outcomes, cognitive and educational outcomes, and social and emotional outcomes (OECD, n.d.). Respectively, welfare for material and physical health outcomes, academic performance for cognitive and educational outcomes, morality, and decision-making skills for social and emotional outcomes are selected as examples and vital focus elements in this project. The order of discussed areas is aligned with the developmental milestones of a child's basic needs, starting with health, education, morality, and leadership (CDC, n.d.). Specifically, there is a continuum of behaviors carried through to college-aged children.

Effect On Welfare

Welfare or well-being is the foremost essential developmental milestone of a human. Within the limitations of this dissertation in practice, children's welfare is defined as the mental, physical, and economic state of children provided and supported by parents towards children's well-being. Each parenting style has a typical impact on the well-being of college students, even though "parents in all parts of the world want their children to be mentally and physically healthy and satisfied in life" (Jung et al., 2020, p. 1). Parents have different beliefs and convictions about what is precisely suitable for their children; therefore, the outcome of children's sense of well-being differs.

For example, helicopter parents who provide their children with direct support, including their emerging adult children's emotions, finances, and physical health advice, associate positively with authoritarian parents (Odenweller et al., 2014; Reed et al., 2016). As such, helicopter parenting, including authoritarian parenting, negatively correlates with college-age children's well-being (Jung et al., 2020; Odenweller et al., 2014). These parents often overly protect and are involved in their children's emerging adulthood in daily functioning (Jung et al., 2020). They often intervene in their children's affairs and make decisions for them (Reed et al., 2016). These children are given minimum autonomy, so their feeling of autonomy and self-confidence, an essential foundation for their healthy social functioning and well-being, is restrained (Jung et al., 2020). Authoritarian parents establish clear goals, offer their children development paths, and ask for their children's obedience (Baumrind, 1966). Some Vietnamese idioms excellently describe the authoritarian parenting style: "[c]ha mẹ đặt đâu con ngồi đó," "[y]ou sit where your parents put" or "cá không ăn muối cá ương," "fish without salt will be rotten." This implies that a parent's rights are foremost in raising children, enforcing obedience using threats and punishment to shape their children's behavior according to their desires and beliefs without rational discussions (Baumrind, 1966). Apparently, children who are brought up with authoritarian parenting styles and provided with a minor amount of autonomy will not perceive good welfare because they are controlled; obedience to their parents is the only choice (Baumrind, 1966; Jung et al., 2020; Odenweller et al., 2014). Children with authoritarian parents rarely initiate the development of their independence and maturity as they rely on their parents' desires and expectations in their daily life practice and activities (Baumrind, 1991). Additionally, authoritarian parenting positively correlates with helicopter parenting practice (Kouros et al., 2017; Leung & Shek, 2018). This displays inappropriate functioning development for emerging adults by removing all perceived obstacles or difficulties for children, which is problematic for their adjustment and well-being (Kouros et al., 2017; Leung & Shek, 2018). As such, authoritarian parents are likely to enforce limits on children's outcomes (Jung et al., 2020).

Conversely, permissive and authoritative parenting styles have little relation to helicopter parenting by granting the most autonomy and thus building confidence for their children from infancy to college age. These styles are associated with positive college-age children's well-being (Jung et al., 2020; Odenweller et al., 2014). According to Baumrind (1966), permissive parents allow their children to use them as resources and have the exclusive right to regulate their behaviors and not request their children to obey irrational authority; additionally, they permit their children to have minimal responsibilities with the family's household chores, academic performance, and others. Children with permissive parents are less likely to be oriented with goals or developmental paths like those of authoritarian parents' children while receiving significant autonomy support (Baumrind, 1966). As such, they do not seem pressured by performance standards and restrictions. Moreover, as a result, they have favorable well-being development (Jung et al., 2020; Odenweller et al., 2014).

Authoritative parents appreciate and value the self-will of children in interaction and offer open, rational discussion with their children to ensure that they know what and why they act or behave a certain way (Baumrind, 1966; Jung et al., 2020; Odenweller et al., 2014). In daily functioning, children are always provided space and opportunities to discuss their goals, standards, plans, and approaches to execute their desires or dreams (Baumrind, 1966; Odenweller et al., 2014). Parents' healthy, positive guidance and support induce age-appropriate development of children's well-being. They are not overwhelmed with autonomy but have sufficient autonomy to develop healthily (Baumrind, 1966; Odenweller et al., 2014). Primarily, authoritative parents comprehend the differences between children and rationally approach their children's uniqueness (Baumrind, 1966; Odenweller et al., 2014). Thus, children can develop based on their capabilities and strengths. They have the right to discuss their goals and achievement plans with their parents cogently. Authoritative parents celebrate their children's endeavors on the road to final goals and success, sharing how to succeed in their next steps and achievements. As a result, children with authoritative parents are more likely to be assertive, mature, and self-reliant than those with authoritarian and permissive parents (Baumrind, 1966; Odenweller et al., 2014). Accordingly, authoritative parenting positively supports the well-being development of college-age children (Jung et al., 2020; Odenweller et al., 2014).

Effect On Performance in School

In addition to the general welfare, the academic performance of college-aged children is one of the most critical aspects that parents pay significant attention to. Perceived parenting styles are an interrelated factor in college students' success in well-being and academic performance (Stavrulaki et al., 2021). In Stavrulaki et al.'s (2021) study, academic achievement, as measured by quantitative GPA, and self-defined life satisfaction were selected as important indicators of college performance (Krumrei-Mancuso et al., 2013; Lounsbury et al., 2009). Stavrulaki et al. (2021) revealed that both authoritarian and authoritative parenting strongly correlate with life satisfaction, negatively with authoritarian parenting, and positively with authoritative parenting. In addition, perceived authoritarian parenting negatively correlates with GPA, while authoritative parenting is not associated with GPA (Pinquart, 2016; Stavrulaki et al., 2021). In addition, there was a low-level connection between permissive parenting style and authoritarian parenting styles with academic adjustment of college students, while there was a positive outcome resulting from the association between authoritative parenting style and academic adjustment of college students (Love, 2014; Silva et al., 2007).

Effect On Children's Morality

Along with educational development, morality is significant in children's development of social and emotional outcomes; Speicher (1982, 1985), cited in Boyes & Allen (1993), and Boyes and Allen (1993) found that the relationship between parent and child levels of moral reasoning is most intensive when the children reach adulthood. "The point at which a person progresses from childhood into adulthood may vary according to different cultures, and the legal definition usually fluctuates between 16 and 21 years" (Canêo & Neirotti, 2017, p. 1). Children's moral reasoning is a parent's ultimate concern: Rearing them to be good people in the future, especially in the contemporary world, where morality becomes the decisive factor in bringing about the world's sustainable development. Different parenting styles generate different moral reasoning in children (Tan & Yasin, 2020).

Saunders (2015) contended that "moral reasoning is something of a radical choice—a choice for which there are no reasons, and moreover, no possible means of adjudication between competing choices and designations" (p. 7). Moral reasoning in children is captured at different levels, corresponding to different parenting styles. The lowest was authoritarian, followed by permissive, and the highest was authoritative, found in both high school and university students (Boyes, 1993). Authoritarian parents provide the lowest autonomy to their children and request their children to follow their rigid rules and standards (Baumrind, 1966; Boyes, 1993). As such, their moral development is restricted and hindered (Boyes, 1993). Authoritative parents provide autonomy and rational discussion (Baumrind, 1966; Boyes, 1993). This encourages the development of moral reasoning in children at a maximum level (Boyes, 1993).

Permissive parenting allows moral reasoning development without guidance; moral reasoning is constrained compared with authoritative parenting but better than authoritarian (Baumrind, 1966; Boyes, 1993).

Meanwhile, Tan and Yasin (2020) posit that authoritative and authoritarian parenting styles effectively encourage children's morality, but permissive parenting styles do not. Indeed, different parenting styles generate different moral effectiveness in children (Tan & Yasin, 2020). They proclaim that parents should be responsible for forming children's morality; their study showed that authoritarian and authoritative parenting was most effective in this aspect, while permissive parenting was not.

Effect On Decision-Making Skills

Leadership is a pivotal aspect of children's social and emotional development, predictably correlated with parental autonomy. College-age individuals face numerous life decisions, including career, living location, marriage, and many others, and decision-making, as a whole, is strongly influenced by the parenting styles they experienced as children. It is essential to consider that parenting styles may positively or negatively impact their decision-making so they can better adjust and control their choices.

Bednar and Fisher's (2003b) study about the relationship between parenting styles and adolescents' decision-making revealed that adolescents with non-authoritative parents, such as authoritarian, permissive, and indifferent, obtain and subsist on their peers' opinions in moral and informational decisions. Adolescents with authoritative parents show deference to their parents for moral and informational decisions. According to Baumrind's (1966, 1991) typologies, authoritarian parents are less responsive and demanding; indifferent parents are less responsive and demanding; permissive parents are more responsive but less demanding; and authoritative parents are more responsive and more expectant with rational discussion. Likewise, adolescents with authoritative or permissive parents discuss moral and informational decisions with their parents; however, the resulting outcomes showed a positive correlation between authoritative parents and their adolescents' moral and informational decisions and no correlating results from permissive parents (Bednar & Fisher, 2003b). Additionally, Bednar and Fisher (2003b) mentioned that the limitation of the result could be due to the study's small sample size of permissive parenting participants. Finally, other non-authoritative parents who are indifferent, authoritarian, or permissive negatively associated with adolescents' moral and informational decisions (Bednar & Fisher, 2003b).

Positive parenting styles or parents' warmth provide favorable conditions for their children to successfully make meaningful decisions; parents who apply overprotective, neglectful, or negative parenting styles adversely correlate to children's decision-making (Liu, 2020; Tian et al., 2021). Accordingly, authoritarian parents limit college-age children from making personally meaningful decisions, while authoritative parents facilitate their children (Koumoundourou et al., 2011; Tian et al., 2021). This result can be aligned with the statement by Odenweller et al. (2014, p. 417):

> According to helicopter parenting experts (e.g., Kantrowitz & Tyre, 2006; Howe & Strauss, 2003), Millennials—many of whom are now college-attending or newly employed, emerging adults—have been exposed to overbearing and overprotective parenting that has hindered their effective decision-making, independence, and self-confidence.

As a result, decision-making is an important focus that can be affected by the autonomy provision from parents.

The Significance of Decision-Making Skills

Decision-making is one of the essential cognitive life skills human beings should possess (Eldeleklioglu,1996; Yildiz & Eldeleklioglu, 2021). Someone skillful in this capability makes their life easier as they smoothly make choices in both comfortable and complex circumstances, from the simplest, such as deciding on bread for a toast, to the most complicated, such as a date meet-up, which will be a permanent fixture in their life. Successful people equip themselves with good decision-making skills to lead a happy life (Alver, 2005).

Making capable decisions in conditions that are intolerant of anxiety is critical for well-being. Yildiz & Eldeleklioglu (2021) investigated the correlation between 19-25-year-old university students' self-esteem in decision-making and decision-making styles and their intolerance to uncertainty, cognitive flexibility, and level of happiness. The study revealed that the student maintained high happiness when she applied the vigilant decision-making style and acted more autonomously with self-confidence.

Making better decisions for globalized organizations in the contemporary context of limited resources and critical competition is crucial. It is becoming more critical within the dynamic task of evaluating the effectiveness of computer simulation-based learning environments, where the prevalence of artificial intelligence dominates the navigation of almost everything. The role of human facilitation is more pivotal to optimizing decision-making efficacy. This role included three gradients: pre-task, in-task, and post-task, and it supplemented decision-making effectiveness in dynamic, complex tasks and conditions

(Qudrat-Ullah, 2014). Thus, practiced decision-making skills are the essence of the modern world of technology. On the one hand, people are concerned about the massive replacement of people with robots and artificial intelligence tools. On the other hand, decision-making skills have become the only way to help resolve problems created by the development of technology (Tiryaki, 1997, cited in Yildiz, M., & Eldeleklioglu, J., 2021).

The emotional subtext of making a decision is an important factor addressed by personal autonomy. Yang et al. (2021) investigated the effect of the distinction in behavior between humans with high- and low-leadership-level college students and the underlying neurocognitive mechanisms in the cognitive and emotional processes involved in economic decision-making. The incorporation of fairness as a prominent factor in the proposal highlights its impact on decision-making and the significance of risk assessment in leadership practices. The study revealed that a lower perception of fairness was strongly associated with a higher likelihood of offer rejection. Interestingly, the influence of emotional management abilities overshadowed the disparity between high and low leadership levels. This finding underscores the inhibitory effect of emotional factors on decision-making skills, emphasizing the importance for students to recognize that making permanent decisions under emotional conditions is an unwise practice. This is also reflected in Shaw's (2023) statement: "Emotions are perceptions of significance and work together with thoughtfulness, bringing value and moral weight to authentic decision-making in the lifeworld" (p. 15). As such, the decision should not be processed as a singular event; multiple rounds of consideration are needed before making a final decision (George & Dane, 2016).

In organizations, the movement between interdepartmental and interlinked projects always requires smooth connections or collaborations (Coy, 2003). The forward process steps cannot proceed without the work-in-progress or the immediate stage products from the previous process. Without these significant steps, the process cannot be completed. Coy (2003) metamorphosed decision-making is the grease that oils the wheel of any complex organizational movement. Strong collaboration is the connector of all processes if they are to be executed effectively. Practices that facilitate smooth and efficient decision-making processes by reducing friction and obstacles. Without this, the organization's movement would have come to a halt abruptly (Coy, 2003). Decision-making skills play a substantially important role in the daily process. Leaders without excellent limited data decision-making skills become small group heads incapable of working in inter-group, inter-team, inter-department, or more significant operations because the worldwide meta-corporation is the interlink among differing corporations that are borderless worldwide.

The world faces significant issues with the globalization of technology, with numerous unknown consequences; for example, artificial intelligence development and complex operations among corporations or countries. These innovations need future leaders with solid synthesis and pattern recognition capabilities and trained competence in making decisions that resolve complex matters effectively. These future leaders are our current college students. Each parenting style generates typical child outcomes (Alexander & Harris, 2022; Bornstein & Zlotnik, 2008). In other words, Bornstein and Zlotnik (2008) stated that the parenting style affects a child's autonomy development. This development includes children's essential well-being outcomes such as material outcomes, physical health outcomes, cognitive and educational outcomes, and social and emotional outcomes (OECD, n.d.).

What Helps Develop Better Decision-Making Skills?

Decision-making is one of the essential cognitive life skills human beings should possess (Eldeleklioglu,1996; Yildiz & Eldeleklioglu, 2021). Someone skillful in this capability makes their life easier as they smoothly make a permissive way.

The Importance of Autonomy

Merriam-Webster (n. d.) defines autonomy as the act or power of making one's own choices or decisions, or the state of being free from the control or power of another. People naturally possess this condition from infancy as a longitudinal development of mental function. Sneddon (2013) described that human development naturally involves two major stages: initially, the growth from doing things inactively to the urge to perform actions actively, and then the growing desire to accomplish things by themselves. This is the growth of natural interest in personal self-rule in fulfilling activities.

The autonomy component bestows upon the rights-holder the freedom to choose whether, and under which circumstances, to assert the relevant right against duty bearers (Parchomovsky & Stein, 2021, p. 1). Autonomy is everyone's fundamental right to practice positive and reasonable consequences for themselves and their communities. Autonomy is the central element of all rights. However, other rights still exert control to ensure the continued well-being of autonomy exercisers and their community. As such, Conly (2012) discussed the dilemma of exercising autonomy, whether good or bad, gain or loss, truth or a flawed decision, harmful or not, a good experience with a lesson learned, or with regret, etc. Children with autonomy exercise it in their choice, which can be advantageous or disadvantageous. It is all about the exercise of choice, which depends on the cognition and willingness of individual people, and people consider themselves happier when they have control over their choices or decisions.

According to Wichmann (2011) and Chirkov et al. (2005), autonomy is fundamental for people's optimal functioning and subjective well-being. Wichmann (2011) stated that if people act autonomously for their values, they likely experience an intense sense of well-being regardless of whether they live in an individualistic or collectivistic society. They can only enjoy the true happiness of their practical experience if they choose based on their values rather than any obligation or the desires of others. Factual or subjective well-being exists when people exercise pure autonomy by opting for it based on their values (Wichmann, 2011). Nonetheless, autonomous action is not always apparent and comfortable. People act because of the external reward rather than their internal interest, and as a result, the decision may release their overall happiness (Kasser, 2003; Ryan & Deci, 2000; Wichmann, 2011). People can maximize their well-being when they have intrinsic rather than extrinsic motivation. Autonomy is a core need for people to optimize their well-being. Consequently, they can perform better with internal rather than external motivation.

With autonomy, people can do as they desire and exercise their rights in choice, decision-making, or freedom from other people's control or authority. Accordingly, Graves and Larkin (2006) examined autonomy throughout people's life span by explaining Erik Erikson's eight stages of psycho-social development, including the similarities and differences between young and older adults in their quests for autonomy. Graves and Larkin's (2006) aim was to provide parents and caregivers with an understanding of the significance of autonomy to provide a safe and secure environment for children to exercise their independence and autonomy, and for the caregivers to provide an appropriate and secure environment to support the older adults' feelings of control, self-directedness, and spiritual harmony.

The Connection Between Autonomy from Parents and Decision-making

As discussed, autonomy development in children in terms of thinking (consideration of alternatives) and behavior (actions have consequences) is the prime characteristic of good parenting. Continuing support, nurturing, and maintaining autonomy in children from infancy to college age are critically significant for their well-being, academic performance, morality, leadership, and decision-making skills. Various meaningful studies have been conducted to investigate the relationship between autonomy from parents and decision-making among children.

Marbell-Pierre et al. (2019b) examined the correlation between two types of parental support, including perspective-taking or open exchange and allowance of choice-making, and adolescents' self-construal moderation. The study involved adolescents from two countries: individualist-oriented in the United States and collectivist-oriented in Ghana. The results showed that parental autonomy support benefited both countries' adolescents, indicating a positive relationship with adolescent outcomes. The adolescents with more independent self-construal, a concept often used in cross-cultural psychology to explain differences in behavior, cognition, and emotion across cultures. The more they experience with parents, the more they make autonomy-supported decisions. In contrast, adolescents with an interdependent self-construal involving their parents in decision-making have less autonomy support.

Furthermore, Brauer (2017) conducted a significant study to investigate the positive associations between parenting in early adolescence and delinquency throughout adolescence using data from the National Longitudinal Surveys. The factors, including behavioral control, psychological control, and decision-making autonomy in early adolescents aged between 10 and 11, are associated with delinquency trajectories throughout adolescence, aged 10 to 17. Decision-making autonomy support was described as parents providing children opportunities to be involved in setting up essential rules or decisions and encouraging children to act based on their interests and values. The results showed that young people with parents providing them with more decision-making autonomy engaged in less delinquency in late adolescence. These findings are consistent with Moffitt's (1993) assertion that adolescent-limited delinquency is motivated by heightened autonomy desires in late adolescence stemming from the maturity gap between biological and social development (Chen, 2010; Haynie, 2003). More generally, decision-making autonomy support may encourage physical and psychological distinctiveness from parents and promote volitional functioning and self-generated behavior (Deci & Ryan, 1987, 2000), which, in turn, may diminish autonomy desires and reduce susceptibility to delinquent peer pressures. (Brauer, 2017, p. 466).

The provision of personal autonomy from parents plays a substantial role in shaping children's ability to make decisions, underscoring the significance of this factor in their development. Doğan and Kazak (2010) implemented a study of the relationship between students' decision-making skills and parental attitudes. The results supported that those students with autonomy provision by their parents excelled in their career decision-making skills (Doğan & Kazak, 2010; Kuzgun & Eldelekliolu, 2005).

People are driven by their intrinsic interests and values, seeking satisfaction and happiness through decisions that return positive outcomes. This natural autonomy exists within every human being. Parents serve as their primary caregivers, helpers, guides, teachers, and leaders for children. They must acknowledge the importance of nurturing and developing children’s autonomy. By doing so, parents can empower children to apply these skills to their decision-making process, encouraging their growth and development.

Limitations of Research on The Effect on College Students

Autonomy from parents plays a notably substantial role in shaping, developing, and maintaining children’s decision-making skills. While the age of adolescents showed a significant correlation with increased decision-making competence, young adults exhibited a more remarkable aptness for decision-making capabilities, particularly in areas such as advice-seeking, evaluation processes, adaptive goal setting, and learning. This suggests that young adults possess more decision-making competence than adolescents in these domains (Byrnes, 2002; Klaczynski et al., 2001). Hence, young-adult-aged college students are recommended as this dissertation's focus population.

Weller et al. (2024) recently conducted a statistical analysis examining the association between parenting practices and children’s decision-making capabilities (DMC) in later life. Parenting practices included monitoring, involvement, firm or lax control, and psychological control. The analysis stated that children with higher levels of psychological control manifest less DMC at the age of 19. This inherently demonstrates a correlation between parenting and children’s decision-making skills. However, the study focused only on the level of psychological control and its relationship with children’s

DMC. The study of the association between autonomous parenting styles and college students still needs to be investigated to support the expected results.

Additionally, Robert (2008) and Doh (2003) indicated that "[a]s the workplace becomes increasingly complex and multicultural, the cry for effective leadership has been answered by a growing popularity of leadership studies in undergraduate, graduate, and executive education programs" (p. 116). While leadership focused on decision-making skills as a proxy of leadership, Bekesiene and Hoskova-Mayerova (2018) affirmed that decision-making was one of the three main characteristics of a good leader.

Sumathy et al. (2015) stated that decision-making is so crucial to management that it is called the heart of management tasks, as the unique way to enable managers to influence the teams toward common goals effectively. In other words, decision-making becomes the principal task of management (Sumathy et al., 2015). Above that, "decision-makers are expected to apply self-management skills to establish a consistent record of achievement and emotional control while simultaneously earning trust from internal and external constituents" (Sumathy et al., 2015, p. 135). Significantly, Drucker (2004) and Sumathy et al. (2015) articulated: "Whatever a manager does, he does through decision-making" (p. 135).

Therefore, understanding how the good decision-making process helps college students succeed in their leadership roles is important in general. How autonomy from parents affects decision-making skills among college students is still a theory that needs study to support this assertion.

Contribution of Dissertation in Practice

As future leaders, college students need to train in effective decision-making. The constantly increasing competition in world development pushes globalization to be a permanent trend. For example, manufacturers have become ambitious to trade directly with consumers (B2C) internationally to create massive, complicated transactions. This requires competent business leaders to communicate effectively and make compelling, albeit complex, decisions in such contexts. Establishing essential resources to facilitate effective operation is noteworthy. However, in public, for example, in the United States, anti-globalization existed in parallel with globalization needs, which rely on the balancing of decisions by future leaders, such as current college students (Peng & Shin, 2008). College students were examined as future leaders, and Peng and Shin's (2008) study found a positive attitude toward globalization. This outstanding result implies that future globalization will be smoothly and popularly realized (Peng & Shin, 2008). Accordingly, training and preparing future leaders: college students with excellent decision skills are ultimately proposed to be capable of coping with complex matters.

Understanding the significance of accurate decision-making in today's life and preparing critical skills for college students is essential. A plethora of research investigates the relationship between autonomy provision by parents and children's decision-making skills. However, the earlier research target was adolescents, not college students, who are capable of much more complex tasks and decisions. Recognizing the significance of the problem, this dissertation in practice researched the relationship between autonomy from parents and the college students' decision-making. The expected finding was a positive correlation between enhanced parental autonomy and college-level decision-making. The findings show that college students recognize the importance of autonomy in decision-making proficiency and continue to nurture and maintain it during their leadership tenure. Moreover, they can advocate for autonomy for those parents. Parents of the children who were the most self-reliant, self-controlled, explorative, and content were themselves behaviorally controlling and demanding (Baumrind, 1971). However, they were warm, rational, and receptive to children's communication (Baumrind, 1971). This unique combination of high control and positive encouragement of children's autonomous and independent strivings was called authoritative parental behavior (Baumrind, 1971). Limited research exists on the outcomes of autonomy in decision-making skills provided by parents with different parenting styles. My contribution to this field was to examine how parental autonomy influences college students' decision-making.

Summary

Much research affirms that parental autonomy positively affects children's decision-making capabilities. It strengthens the belief that it is a firm foundation for college students' decision-making proficiency, a powerful indicator of leadership skills. Parental styles with different autonomy levels have impacted children's development and well-being outcomes, such as welfare, academic performance, morality, and decision-making proficiency, through their developmental milestones. Autonomy has been shown to favorably impact these well-being outcomes of children in general. Notably, autonomy plays a vital role in children's decision-making skill development. As such, autonomy has a measurably significant association with decision-making proficiency.

Young people will decide the future of the world. They are the new workforce and future leaders, leading a world of tremendous changes and innovations in technologies, the environment, social justice, etc. The world needs more leaders with a solid ethical decision-making base and the capability to transparently allow the affected into the decision-making process to contribute to a world of justice and sustainable development (Kayode et al., 2014). This makes the issue of college students developing essential and advanced leadership skills, precisely, ethically, and inclusively, critical. Technological development helps enhance human involvement in manual operations while creating unintended problems that can only be managed through vital leadership roles. As such, the question: "To what extent do autonomous parenting styles lead to effective decision-making skills for college students?" required further study to demonstrate if there is a positive association between parental autonomy and college students' decision-making proficiency. The findings help college students focus on enhancing their decision-making capabilities. This emphasizes the role of parents in developing, nurturing, and maintaining autonomy in children from infancy to young adulthood. Young people need to recognize the vital role of autonomy in developing productive outcomes, such as decision-making competence and leadership excellence. Accordingly, the next chapter will discuss how the statistical survey methodology is designed to achieve quality and rigorous research.

CHAPTER THREE: METHODOLOGY

The significance of autonomy perceived from parenting style and its influence on developing college students' decision-making proficiency requires further exploration. This study made use of a survey design and multivariate linear regression analysis to investigate the effect of levels of autonomous parenting as perceived by college students on their decision-making proficiencies. This chapter details the research design, the expected participants, data collection, and data analysis methodology, as well as discusses the ethical perspectives of conducting this research.

Research Question

This dissertation’s research question was: To what extent does autonomous parenting influence decision-making proficiency among college students?

Research hypothesis: Higher levels of perceived autonomous parenting styles lead to higher levels of college students' decision-making proficiencies.

Method

A survey design method and multivariate linear regression analysis were selected for this study. Surveys were used to collect data from college students on both perceived autonomous parenting and their decision-making proficiency. This survey also included control variables and demographic questions. As such, the hypothesis that the higher autonomy levels developed from parenting styles enhance the decision-making proficiency of college students was tested. These points have been discussed in detail throughout the methodology section to demonstrate how the study has sustained the quality and rigor of the research results.

Research Design Overview

This survey research design study employed multivariate linear regression analysis to examine the hypothesis. It tested whether the independent variable of college students' perceptions of autonomous parenting styles affects the dependent variable of the individuals' levels of decision-making proficiency. The operationalization of the multivariate linear regression model for this testable hypothesis aligned with the quantitative method, which examined the correlational relationship of variables in which the independent variable and dependent variable are ordinal. The Perceptions of Parent Scales (POPS) gave the ordinal independent variables scores from not true at all to very true, with no assumptions for seven interval distances between seven options, preserving the order of the options of this independent variable.

The 20-item Decision-Making Competence Inventory (DMCI) Index comprises four factors. Factor 1, Informed Awareness, contains seven items that mainly represent the decision-making process and the collection of adequate information for making informed decisions (items 2, 3, 4, 5, 8, 9, and 20). Factor 2, Self-Appraisal, features five items that delve into decision-making tendencies (items 1, 10, 11, 12, and 16). Factor 3, Autonomy, includes six items and highlights an individual's sense of self-determination in evaluating and making choices (items 6, 7, 13, 15, 18, and 19). Finally, Factor 4, Confidence, has two items that relate to an individual's self-confidence in making suitable choices (items 14 and 17).

The results of these four-factor measurements provided the range of the overall decision-making competency index as ordinal values, treated as a continuous dependent variable with result scores from 1 (not at all like me) to 5 (very much like me) (Miller &

Byrnes, 2001). Initially, this tool yielded results with no assumptions for five interval distances between five options, preserving the order of these dependent variable options as an ordinal scale. To create a continuum, a sliding scale was used; the researcher treated this ordinal scale as a continuity scale by allowing participants to move the cursor from "not at all like me" to "very much like me" and choose any point on the scale (Sullivan & Artino, 2013). This contributed to establishing the continuity scale of the score. With this preliminary consideration of the primary independent and dependent variables, the survey design study and multivariate linear regression model were introduced to conduct this study.

Overall, optimization of the use of statistical methods offers a comprehensive research process, from framing the theoretical expectation as a testable hypothesis to conceptualizing a new theory; this study proposed to use the multivariate linear regression model to analyze the data to achieve objectivity in the interpretation of the numerical data application for reliability and confidence in the result. This quantitative study encompassed all necessary steps, from theory and hypothesis formulation to survey employment, multivariate linear regression model application, evaluation of hypotheses, evaluation of causal theory, and deduction of scientific knowledge (Kellstedt et al., 2022). Thus, a thorough and rigorous approach to the survey research was ensured.

Participants

The population and participants' definitions in survey design research must be evident and relevant. It “will lead to profound consequences in the operations of a survey and concerning data analysis and reporting” (Murphy, 2016, p. 31). The survey population was targeted and described as young adult-aged (19-25) college students in the United States. The choice of the USA as the survey population is based on the fact that it is a diverse country with a wide range of parenting styles and cultural backgrounds, which provides a rich and varied dataset for the study. This defined population explicitly guided the participants' selection to achieve the research purpose with appropriate data collection.

The next crucial step was selecting a representative sample. Hadicharalambous and Dimitriou (2020) have highlighted that demographics such as age, gender, and education level are significantly related to parenting styles and correlate with children's school performance. Consequently, purposeful sampling was used to select representative samples with diverse nationalities, cultural backgrounds, genders, races, ethnicities, and GPAs, and they were currently within the defined age ranges. The researcher recruited participants via the Amazon Mechanical Turk (AMT) site, which helped approach the subjects' diversity and obtain sufficient targeted participants (Cobanoglu et al., 2021; Lu et al., 2021; Rivera et al., 2022). This helped reach interested and targeted US college students aged 19-25. This purposive approach was convenient and pertained to a diverse population with a wide range of childhood experiences. This selection can confront a limitation as the study results on this representative sample cannot represent all U.S. undergraduate students.

The sample size is an essential component in enhancing the quality of survey results. The quantitative method facilitates the function availability of a large sample size and provides a defined confidence level (Kellstedt et al., 2022). Kellstedt et al. (2022) stated that “Larger sample sizes will reduce the size of the standard errors, and smaller sample sizes will increase the size of the standard errors” (p. 143). Larger sample sizes are better than smaller ones. By definition, Hanley (2016) stated that the multivariate linear regression model for this survey design study requires at least two subjects per variable to adequately estimate regression coefficients, standard errors, and confidence intervals. This multivariate linear regression model involved autonomous parenting styles as the independent variable and the decision-making proficiency of college students as the dependent variable. Using the Blue Q Qualtrics platform of Creighton, these selected subjects were randomly approached and recruited via the AMT, with the target criteria of the age range of 19-25, various nationalities, GPAs, races, ethnicities, and genders were presented. The objective recruitment of 132 to 134 participants was recommended. G*Power software suggested a priori, a pre-study analysis, to calculate this target of 132 to 134 people participating in a statistical correlation test with a multivariate linear regression analysis (Faul et al., 2007, 2009; Kang, 2021). The determinant proposed: a two-tailed test with an α of 0.05 and a power of 1- β of 0.95. The calculation with these statistical assumptions generated the target sample size of 134; the noncentrality parameter was 3.640, critical t is 1.978, and the actual power is 0.951 (Faul et al., 2007, 2009; Kang, 2021).

The researcher ran the G*Power analysis to determine the minimum required participants, which were allocated appropriately among the controlling variables. These controlling variables are demographic variables, including gender, age, nationality, race, ethnicity, etc. For example, there were quite similar numbers of male and female students, as well as diverse races and nationalities. This sample size, with the required proportion of subjects per variable, achieved the expected data quality for analysis. While the sample sites were purposely selected, the participants were randomly and transparently approached, and they proactively registered through the advertising flyers from these sites. These participants emphasize the role of randomness in sample selection, highlighting the diversification and objectivity of the research approaches. The representativeness of the sample matters for maximizing both reliability and representativeness.

Data Collection

Upon the approval of Creighton University's IRB, the researcher recruited participants via Amazon Mechanical Turk (AMT). The potential participants were targeted college students aged 19-25 currently studying in the U.S., recruited via AMT. They were guided to access Creighton’s Blue Q Qualtrics Platform, where the survey was designed. The researcher utilized this platform to recruit college students to participate in the surveys. Potential participants recruited via Amazon Mechanical Turk (AMT) were instructed to complete and verify their randomized ID. Specifically, the researcher created a human intelligence task (HIT) on AMT and adhered to all AMT’s requirements. Once the researcher’s HIT was live, AMT workers could access the online survey through the provided anonymous link to the Creighton Blue Q Qualtrics Platform to complete the randomized ID, review and consent to the Research Information Sheet, and finish the online surveys. The randomized ID prompted prospective participants to check for their eligibility to participate, and complete other demographic and academic criteria such as age, gender, nationality, race, ethnicity, household income, GPA, and college year.

AMT is a widely used crowdsourcing platform that serves to recruit human subjects for research. It is recognized as a dependable and cost-effective resource, delivering representative data for behavioral research involving human participants, particularly students. Over 40% of the studies published in the Journal of Consumer Research from 2012 to 2017 utilized this crowdsourcing site for data gathering. Moreover, recruiting through AMT offers distinct advantages, including the ability of this platform to help recruit participants suitable for behavioral research, promote demographic diversity, ensure the efficiency of sample recruitment, and guarantee data reliability and subject qualifications (Cobanoglu et al., 2021; Lu et al., 2021; Rivera et al., 2022).

Consequently, the recruitment site was expected to achieve sufficient recruitment and ensure data quality. The target number of participants for recruitment was at least 132 to 134 subjects representing diverse ages, genders, nationalities, races, ethnicities, and GPAs. The researcher monitored daily to assess how well these participants met the recruitment criteria, such as maintaining a balanced volume of male and female college students and adequate racial representation.

Contiguously with this platform, the Research Information Sheet (Appendix A) reached potential participants to inform them about the study participation with the invitation to take two online surveys, one for the Perception of Parents Scales (POPS) and another for the Decision-Making Competence Inventory (DMCI). The participants read and consented to the Research Information Sheet. They were guided to complete the online survey, which took approximately 20 -25 minutes for two surveys. Also included were the study summary, the risks and benefits of participation, compensation, protection of personally identifiable information, contact details, and consent forms signed before attending the surveys. The participants followed the survey’s completion guidance in the

Research Information Sheet to conduct the online surveys. This guide informed the participants of the links shown in the Research Information Sheet, Appendix A, Appendix B, and Appendix C, to access the surveys of POPS and DMCI, the time estimation to complete each study, and the expiration date to access the link.

Data Collection Procedures

The first step was to recruit participants after obtaining approval from the IRB. This step was carried out based on the criteria and participant recruitment procedures described in the Participants section. Following the recruitment step, the Research Information Sheet appeared to the recruited participants through Creighton's Blue Q Qualtrics Platform to inform the participants about the survey participation details and ask for their consent before working on the surveys. Upon participants' answering the survey questions, the data were collected and uploaded to Blue Q, Creighton University's Qualtrics platform, and STATA software for sorting, collating, and analysis. The identity of participants was anonymized, and the researcher analyzed the data only to ensure confidentiality of the information.

Data Collection Tools

Blue Q, Creighton University's Qualtrics platform, was utilized to deploy the complete research process: reaching out to Amazon Mechanical Turk (AMT) for recruiting prospective participants, using the Randomizer Tool to pick up the target participants from the list accepting to participate in the surveys, entering and formatting survey questions, designing the email of a survey request to anonymize individual participants with a link, receiving data, storing the data to be ready for working on the analysis. This platform met the critical requirements of data treatment in a systematic investigation using numerical data projects: specifically, it facilitated the digital holistic data process, from data initiation to data collection, storage, sorting, and arrangement, data confidentiality protection, data anonymizing, and data processing before uploading into STATA software for analysis. Hence, it helped save the researcher time, extended convenience, and provided safe and reliable data protection throughout the research process. Nonetheless, this holistically digital or online research process could not prevent the research study and results based on self-reported data provided subjectively by the participants. The researcher utilized STATA software to study the data and account for missing or unclear data.

Importantly, utilizing the existing validated survey instrument is the most effective and efficient approach regarding a dissertation's time and financial constraints. The Perception of Parents Scale (POPS; Appendix B) is a validated survey instrument that measures individuals' perceptions of autonomy from their parents. This scale is intended for ages that match typical college students' ages. The survey includes 21 questions, each asking about autonomy perceptions from the individual's mother and father, respectively. Each question consists of a Likert scale from 1 to 7 (1 is not at all true, 4 is somewhat true, and 7 is very true). This validated instrument fits the requirement of measuring the amount of autonomy college students perceive from their parents. Each parent's score of 21 questions gives the results of three categories. The scores on these items must be reversed: 2, 6, 12, 13, 14, 15, 20, 21, 23, 27, 33, 34, 35, 36, 41, 42. Accordingly, the calculation subtracts the response from 8 and uses the results as the item score. Then, subscale scores are formed by averaging the scores of the items on that subscale. The results are divided into six categories: mother involvement, mother autonomy support, mother warmth, father involvement, father autonomy support, and father warmth, specifically as shown below.

Mother Involvement:	3, 6(R), 9, 12(R), 15(R), 18
Mother Autonomy Support:	1, 2(R), 5, 8, 11, 14(R), 17, 19, 21(R)
Mother Warmth:	4, 7, 10, 13(R), 16, 20(R)
Father Involvement:	24, 27(R), 30, 33(R), 36(R), 39
Father Autonomy Support:	22, 23(R), 26, 29, 32, 35(R), 38, 40, 42(R)
Father Warmth:	25, 28, 31, 34(R), 37, 41(R)”

The research survey also included questions from another validated instrument, the Decision-Making Competence Inventory (DMCI), found in Appendix C. These four factors utilize a 20-item scale to measure the decision-making competence of college students. First, Factor 1 (Informed Awareness), comprising seven items, assesses the capability of the decision-making process and the adequate gathering of information by decision-makers to make informed choices. The items are 2, 3, 4, 5, 8, 9, and 20. Second, Factor 2 (Self-Appraisal), which includes five items- 1, 10, 11, 12, and 16- addresses the tendency of personal qualities that impact the consequences of choices. Third, Factor 3 (Autonomy), consisting of six items, including 6, 7, 13, 15, 18, and 19, reflects a person’s sense of self-determination in critically evaluating options and making decisions. Finally, Factor 4 (Confidence), with the remaining two items- 14 and 17- demonstrates an individual's level of self-confidence in making appropriate decisions. Each 20-item scale for the four-factor subscales ranges from 1 (not at all like me) to 5 (very much like me), measuring each item and forming the four subscales: informed awareness, self-appraisal, autonomy, and self-confidence. These four factor subscales are detailed below.

Factor 1, Informed-Awareness (7 items): 2, 3, 4, 5, 8, 9, and 20

Factor 2, Self-Appraisal (5 items): 1(R), 10(R), 11(R), 12(R), and 16(R)

Factor 3, Autonomy (6 items): 6(R), 7(R), 13(R), 15(R), 18(R), and 19(R

Factor 4, Confidence (2 items: 14 and 17

The overall DMCI index score, which combines the four component scores, is determined by the unweighted average of standardized scores from these components. This dependent variable indicates that higher scores reflect better performance in decision-making competence. This validated test defines the range of DMCI scores from 1 to 5, allowing for an assessment of college students' decision-making proficiency. The results were used to analyze the correlation, offering insight into the relationship between the autonomy of college students and their decision-making proficiency while accounting for confounding variables.

Data Analysis

This research utilized the STATA software to analyze the data collected and employed a multivariate linear regression model to test the correlational relationship between the independent continuous variable of autonomous parenting styles and the dependent continuous variable of the decision-making proficiency of college students, while applying the other seven control variables.

The choice of the multivariate linear regression model was particularly relevant here, as it allowed examining the relationship between the independent variable (autonomous parenting) and the dependent variable (decision-making proficiency) while also controlling the influence of other variables. Objectivity, quantifiable data, adoption of structured procedures, and numerical data analysis in using a multivariate linear regression model are unique strengths that are appropriate avenues to deliver the study objectives (Babbie, 2017; Kellstedt et al., 2022; Lakshman et al., 2000).

Furthermore, including multiple control variables in the multivariate linear regression models was crucial to achieving statistical control for the major independent variable, increasing confidence in the multivariate relationship. These control variables, including (1) students' ages, (2) gender, (3) ethnicity, (4) race, (5) education performance or grade point average (GPA), (6) household income, and (7) college year, are included to examine potential confounding factors that could influence the relationship between autonomous parenting and decision-making proficiency. These control variables were chosen because they are commonly associated with decision-making proficiency among college students and may influence the relationship between autonomous parenting and decision-making proficiency. Hadicharalambous and Dimitriou (2020) highlighted that demographics such as age, gender, and education level significantly relate to parenting styles and are correlated with children's school performance. This comprehensive approach is the primary method to control for the potential causes of the dependent variable, considering that "…almost all interesting phenomena in social reality have more than one cause" (Kellstedt et al., 2022, p. 201). As such, the controlling variables, which comprise age, gender, ethnicity, race category, GPA, household income, and college year, helped control omitted variable bias. The model used aimed to investigate the hypothesis regarding the reliability and rigor of the study result: Higher levels of perceived autonomous parenting styles lead to better college students' decision-making proficiency. Specifically, this model was designed to show how autonomous parenting styles affect college students' decision-making proficiency while controlling for each age variable, gender, ethnicity, race category, household income, GPA, and college year.

Methodological Integrity

The systematic investigation using numerical data aimed to exclude all the personal perspectives, utilized Amazon Mechanical Turk (AMT) to recruit the participants, used the Blue Q system to collect data and storage, applied a multivariate linear regression model with seven variables, and used STATA software for data analysis to help minimize personal bias in research processing. Although the population was purposely selected, the recruitment and randomization in sampling and diversity criteria of subjects participating in the study were strictly complied with to enhance the objectivity and integrity of data quality. For example, terminology was interpreted in a familiar way to comprehend but still delivers the essence of the scientific nuance (APA, 2020). Notably, the researcher is responsible for helping the readers fully understand the reported research and for drawing valid conclusions from the work (APA, 2020). The researcher has especially complied with the APA (7^{th} ed.) manual to ensure all the requirements of methodological integrity for quantitative studies, including a discussion of the quality of measurement instruments, psychometrics, and data diagnostics. The research report has underscored the inclusion of the Belmont Report's principal principles, such as Respect for Persons, Beneficence, and Justice, which have helped protect participants from all harm from involvement with the survey projects (Babbie, 2017).

Additionally, recruiting participants through Amazon Mechanical Turk (AMT) could cause concerns that needed to be addressed with countermeasures to mitigate their risks. For example, some international respondents may still identify as U.S. undergraduate students using fake addresses and accounts. As such, the researcher used the selection tool in the software to exclude responses with an internet protocol (IP) from outside the U.S., with the support of the Creighton Blue Q Qualtrics Platform in filtering and accepting IP from the U.S. (Cobanoglu et al., 2021; Rivera et al., 2022).

Additionally, the researcher calculated and presented the Cronbach's Alpha value to assess whether the aggregate measures exhibit acceptable reliability or internal consistency. Typically, values within the range of 0.70 to 0.90 are regarded as acceptable, indicating a reliable estimate of the test items that assess the same latent construction on the same scale. A low alpha value might indicate a small number of questions, weak interrelatedness among items, or diverse constructs. Conversely, an alpha value exceeding 0.90 suggests redundancy among items, indicating that different items may rephrase the same question, signaling the need to shorten the test length. A maximum alpha of 0.90 is recommended (Peters, n.d.; Tavakol & Dennick, 2011).

During data analysis, the researcher performed robustness checks that assessed multicollinearity (ensuring independent variables are uncorrelated), heteroscedasticity (verifying consistent variance of errors across all values of independent variables), and the normality of errors (confirming that the residuals—differences between observed and predicted values of the dependent variable—follow a normal distribution). This interdependence test was conducted as a series of assessments examining each independent variable's dependence on the other members of the set (Farrar & Glauber, 1967).

Ethical Considerations

Relevant ethical considerations required for this investigation using numerical data were addressed appropriately. First, this research complied with ethical standards concerning protecting the participants' personally identifiable information (PII) as well as data and information integrity. This research involved college students as the participants. Permission from the IRB was obtained through the Research Information Sheet presented in Appendix A. The researcher obtained pertinent IRB approval for this research and then rolled out the recruitment campaign via the Psychology Department of Creighton University and Amazon Mechanical Turk (AMT). Recruitment via the AMT site could facilitate the investigator's access to the participants' personal information. This stresses that the investigator needs to pay much stricter attention to PII security (Gelinas et al., 2017). Then, the investigator provided the anonymous link for them to access, obtained the prospective participants' consent to use their related information for the research, and simultaneously declared the investigator's commitment to ensure PII security. Second, the researcher ensured the authors' consent to the POPS and DMCI scales before submitting the proposal to the IRB for approval. Appendices D and E are for the approval of the instrument's creators, POPS and DMCI. The Research Information Sheet includes the Bill of Rights so that the subject can provide their understanding and consent to participate in the surveys. In addition, in the Research Information Sheet, the right to withdraw and participate voluntarily is mentioned explicitly to ensure that the survey participation is voluntary and that one can withdraw at any time without compensation or harm. The Research Information Sheet also clarifies the security of data collection, storage, and use, with the highest safety of personal information usage, and maintains the high security of personal information confidentiality and identification. Identifiers were removed from identifiable private information using coding, providing anonymity throughout the research and report. The data is stored safely with both a lock and a password.

Importantly, the study might discuss the ethical conundrums of cultural sensitivity when interpreting autonomy that can impact the decision-making proficiency of college students. As such, the researcher uses "figurative expressions with restraint and colorful expressions with care; because these expressions can be open to interpretation and even cultural differences, they generally do not add to understanding for all possible readers" (APA, 2020, p. 141). The verticality and care in interpreting these matters have been considered carefully to ensure the ethical standard is served.

Finally, this cross-sectional study was conducted at a single point in time, so longitudinal assessments are not feasible. Although the sample size was adequate, future research should aim for larger, more diverse samples to enhance generalizability. In regression analysis, correlation—particularly when control variables are included—is important and useful; however, it does not establish causation. For example, autonomous parenting perception is associated with higher decision-making skills, but we cannot claim it directly causes better decision-making competence.

Summary

This quantitative study tested the hypothesis that higher levels of perceived autonomy from parenting styles enhance college students' decision-making proficiency. Moreover, the study employed the seven-variable linear regression model to analyze the data, which was collected from 380 college students via the two mentioned sites, of various ages, genders, ethnicities, races, household income, GPA, and college year participating in the two surveys of the POPS scale and DMCI scale. Quantitative methods, purposive sampling, Blue Q systems, and STATA software applications with multivariate linear regression models, integrated as online statistical methodology, were used for this study to promote the objectivity of the research process for the quality and rigor of the results. Moreover, methodological integrity and research ethics have been highlighted as the most critical aspects of the study process and completion. Overall, the methodology aligned with answering the research question effectively, aiming for impeccable results. In the next chapter, the results and findings from the study are discussed.

CHAPTER FOUR: RESULTS AND FINDINGS

The study employed quantitative research methodology and a multivariate linear regression model to address the research question, hypothesis, and purpose statement. The research adequately addresses the research question: To what extent does autonomous parenting influence decision-making proficiency among college students? It also supports the hypothesis that higher levels of perceived autonomous parenting styles lead to higher levels of college students' decision-making proficiency. The employment of a survey design study also effectively addresses the study's purpose: to investigate the effect of levels of autonomous parenting styles received by undergraduate students on the extent of their decision-making proficiency. Therefore, this chapter outlines the study's methodology, leading to the hypothesis's positive results. It also presents statistical descriptive data in tables and figures, along with the findings, a discussion of the results, and a summary of the chapter to address the research question and fulfill the study's purpose.

Results

The researcher recruited participants via the Qualtrics Platform and utilized STATA for data evaluation and analysis. The recruitment was made via the Psychology Department of Creighton University and Amazon Mechanical Turk. The researcher recruited 393 participants, of which two were from the Psychology Department of Creighton University (the Psychology Department) and the rest were from Amazon Mechanical Turk (AMT). For participants recruited via the Psychology Department, upon receiving approval from the IRB, the researcher sent the recruitment flyer, Appendix D, to the Psychology Department for distribution to the department's students via offline and online methods. All participants were required to meet two criteria: be a college student in the U.S. and be between the ages of 19 and 25. Participants scanned the QR code or clicked on the anonymous link on the flyer to be directed to the Qualtrics Platform to begin the survey. The study began with obtaining consent on the Research Information Sheet, followed by completing two criteria to ensure eligibility. Subsequently, the two surveys were administered, with parental autonomy (PA) serving as a continuous independent variable and decision-making competence (DMC) as a continuous dependent variable. Additionally, other controlling independent variables, such as gender, age, ethnicity, race, household income, GPA, and college year, were considered demographic variables to ensure the quality of the results.

For participants recruited via AMT, after receiving the approval of the IRB, the researcher published the batch on AMT. Similar to participants recruited through the Psychology Department, participants clicked on the anonymous link on the AMT Platform to be directed to the Qualtrics Platform to begin the survey. Beginning with consent on the Research Information Sheet, the participants complete two criteria to ensure eligibility before proceeding to answer the two surveys, which test parental autonomy (PA) and decision-making competence (DMC), respectively.

Demographic Variables, Controlling Variables, and Descriptive Statistics

Including control variables such as gender, age, ethnicity, race, household income, GPA, and college year is crucial for conducting accurate multivariate analysis, thereby reducing bias and increasing confidence. These factors, linked to decision-making proficiency, are often associated with parenting styles and academic performance, as noted by Hadicharalambous and Dimitriou (2020). Controlling for these variables helps address potential confounders, reflecting the idea that most social phenomena have multiple causes (Kellstedt et al., 2022). The model examines whether higher perceived autonomous parenting enhances decision-making among college students, while accounting for demographic and academic factors.

All the anonymized data collected in the Qualtrics Platform was extracted for data evaluation and analysis. The exported file was imported into the STATA software for data evaluation and analysis. For data evaluation, the research excluded observations from non-college students and individuals outside the 19- to 25-year age group. The qualified observations were 380, with demographic criteria including gender, age, ethnicity, race, and household income, as well as academic criteria such as GPA and college year.

Participants by Gender

Table 1 indicates that 113 female undergraduate students, representing 29.74 percent, and 267 male undergraduate students, representing 70.26 percent, participated in the surveys.

Table 1
Genders of Participants

Gender	Frequency	Percent	Cum.
Female	113	29.74	29.74
Male	267	70.26	100.00
Total	380	100.00	

Participants by Age

Table 2 shows the components of age between 19 and 25, in which there were three college students with an age of 19, taken 0.79 percent, 25 college students with an age of 20, taken 6.58 percent, 21 college students with an age of 21, taken 5.53 percent, 57 college students with an age of 22, taken 15 percent; 62 college students with an age of 23, taken 16.32 percent; 79 college students with an age of 24, taken 20.79 percent; 133 college students with an age of 25, taken 35%.

Table 2
Age of Participants

Age	Frequency	Percent	Cum.
19	3	0.79	0.79
20	25	6.58	7.37
21	21	5.53	12.89
22	57	15.00	27.89
23	62	16.32	44.21
24	79	20.79	65.00
25	133	35.00	100.00
Total	380	100.00	

Participants by Ethnicity

Table 3 shows that there were 184 Hispanic participants, accounting for 48.42 percent, and 196 non-Hispanic participants, making up 51.58 percent. The number of participants in each group is nearly equal; the non-Hispanic group is slightly larger by eight, or 3.16 percent.

Table 3
Ethnicity of Participants

Ethnicity	Frequency	Percent	Cum.
Hispanic	184	48.42	48.42
Non Hispanic	196	51.58	100.00
Total	380	100.00	

Participants by Race

Table 4 shows that most participants were White or Caucasian, with 363 out of 380, accounting for 95.53%. The remaining participants included four who were Black or African American, representing 1.05 percent; two who were American Indian or Native

American or Alaska Native, accounting for 0.53 percent; and eleven who were Asian, making up 2.89 percent.

Table 4
Race of Participants

Race	Frequency	Percent	Cu.m.
White or Caucasian	363.00	95.53	95.53
Black or African American	4.00	1.05	96.58
American Indian/Native American or Alaska Native	2.00	0.53	97.11
Asian	11.00	2.89	100.00
Total	380.00	100.00	

Participants by Household Income

Table 5 describes the components of participants' household income. The frequency for incomes below $25,000 is 13, accounting for 3.42 percent; for $25,000 to $49,999, the frequency is 71, or 18.68 percent; for $50,000 to $74,999, the frequency is 125, or 32.89 percent; for $75,000 to $99,999, the frequency is 111, or 29.21 percent; for $100,000 to $149,999, the frequency is 40, or 10.53 percent; and for incomes above $150,000, the frequency is 20, or 5.26 percent.

Table 5
Household Income of Participants

Household Income	Frequency	Percent	Cum.
Less than $25,000	13	3.42	3.42
$25,000 - $49,999	71	18.68	22.11
$50,000 - $74,999	125	32.89	55.00
$75,000 - $99,999	111	29.21	84.21
$100,000 - 149,999	40	10.53	94.74
$150,000 or more	20	5.26	100.00
Total	380	100.00	

Participants by GPA

Table 6 displays the study performance of participants with various GPAs. One college student had a GPA below two, accounting for 0.26 percent; 35 students had GPAs from 2 to 2.5, representing 9.21 percent; 147 students had GPAs from 2.5 to 3, making up 38.68 percent; 133 students had GPAs from 3 to 3.5, constituting 35 percent; and 64 students had GPAs above 3.5, totaling 16.84 percent.

Table 6
GPA of Participants

GPA	Frequency	Percent	Cum.
Below 2	1	0.26	0.26
2 - 2.5	35	9.21	9.47
2.5 - 3	147	38.68	48.16
3 - 3.5	133	35.00	83.16
Above 3.5	64	16.84	100.00
Total	380	100.00	

Participants by College Year

Table 7 presents the statistical data for the college year during which participants were studying. There were 36 undergraduate freshmen, making up 9.47 percent; 35 undergraduate sophomores, accounting for 9.21 percent; 121 undergraduate juniors, representing 31.84 percent; and 188 undergraduate seniors, comprising 49.47 percent.

Table 7
College Year of Participants

College Year	Frequency	Percent	Cum.
Undergraduate Freshman	36	9.47	9.47
Undergraduate Sohpomore	35	9.21	18.68
Undergraduate Junior	121	31.84	50.53
Undergraduate Senior	188	49.47	100.00
Total	380	100.00	

General Commentary on Demographic Data

The purposive approach to site recruitment through the Psychology Department and AMT, along with a total of 380 qualified respondents, fell within the target range for participant recruitment, which was from 132 to 384, with a minimum of 132 and a maximum of 384. This met the requirement of improving the quality of survey results. Additionally, the researcher designed the questions at the beginning of the surveys to ensure that participants met the essential eligibility criteria: being between 19 and 25 years old and being undergraduate students studying in the U.S. If participants did not qualify, they were asked to end the survey. The researcher then used STATA to code and exclude all participants who did not meet these two criteria, resulting in clean data for analysis. Consequently, the final sample of 380 participants was considered for analysis, with the assumption that all were undergraduate students studying in the U.S. and between 19 and 25 years old, thereby enhancing the quality of the research outcomes. Moreover, Hanley (2016) states that the multivariate linear regression model for this survey design requires at least two subjects per variable to adequately estimate the regression. The statistical data indicate that every variable met this condition, making the results of this study relatively reliable.

Primary Variables and Descriptive Statistics

Data collected from two scales—one measuring college students' perceived autonomy (parental autonomy) and the other assessing decision-making skills (decision-making competence)—assist the researcher in gathering data and evaluating results: this involves testing the reversed-coded questions and calculating the outcome scores for each main variable.

Data Collection Evaluation

The researcher tested the recoded variables from the survey, which are reverse-coded for two scales: one assessing the autonomy level provided by parents to college students (POPS) and another evaluating the decision-making proficiency of college students (DMCI). For the POPS survey, for each variable in in Q18_1 Q22_1 Q28_1 Q29_1 Q30_1 Q31_1 Q36_1 Q37_1 Q41_1 Q45_1 Q51_1 Q52_1 Q53_1 Q54_1 Q59_1 Q60_1 {replace `var' = 8- `var'}. For each variable in survey DMCI number 1, Q65_1 Q70_1 Q84_1 Q74_1 Q75_1 Q85_1 Q76_1 Q78_1 Q86_1 Q80_1 Q81_1 {replace `var' = 6 - `var'}. Table 8 shows that the correlation between the regular and reversed questions is low, indicating that the results are accurate.

Table 8
Reversed Coded Questions Testing Results

Questions	Q17_1	Q18_1	Q22_1	Q19_1	Q45_1	Q42_1	Q44_1
Q17_1	-						
Q18_1	-0.73	-					
Q22_1		0.26	-	-0.30			
Q19_1	0.76			0.00			
Q45_1					-		-0.34
Q42_1					-0.35	-	
Q44_1						0.80	-

Primary Variables and Descriptive Statistics

The outcome scores for the two main variables in this study were calculated from respondents' average scores. For the Perception of Parents Scale (POPS), the Likert scales of 42 questions, from Q17_1 to Q61_1, provided the average value for parental autonomy (PA). Respondents answered each question by sliding their choice along a scale from 1 (i.e., Not At All) to 7 (i.e., Very True). This sliding response converted their choice into a continuous value, rather than an ordinal variable. For the decision-making competence index (DMCI), the Likert scales of 20 questions, from Q65_1 to Q85_1, provided the average value for decision-making competence (DMC). Respondents answered each question by sliding their choice from 1 (i.e., Not at all like me) to 5 (i.e., Very much like me). This sliding response also yielded a continuous value, not an ordinal variable. Table 9 shows data for 380 respondents on both main variables, DMC and PA. The DMC scores had a mean of 3.09, a standard deviation of 0.31, a minimum of 2.68, and a maximum of 4.76. PA scores had a mean of 4.59, a standard deviation of 0.62, a minimum of 2.79, and a maximum of 6.22.

Table 9
Descriptive Statistics of Parental Autonomy and Decision-Making Competency

Variable	N	M	SD	Min	Max
DMC	380	3.09	0.31	2.68	4.76
PA	380	4.59	0.62	2.79	6.22

Decision-Making Competence

The researcher calculated average scores for decision-making competency (DMC) as follows: egen dmc = rowmean (Q65_1 - Q85_1) label variable DMC "Decision Making Competency." The coding in STATA yields an average value of DMC with a mean of 3.09 and a standard deviation of 0.31.

Parental Autonomy

The researcher calculated average scores for parental autonomy (PA) as follows: egen PA = rowmean (Q17_1 - Q61_1) label variable PA "Parental Autonomy." Running this code in STATA produced an average PA with a mean of 4.59 and a standard deviation of 0.62.

Strength of Association Between Primary Variables

Table 10 displays the positive and statistically significant relationship between the two main variables, with a p-value of 0.000 and a correlation coefficient (r) of 0.48, between parental autonomy and decision-making competence.

Table 10
Correlation Between Parent Autonomy (PA) and Decision-Making Competence (DMC)

Variable	1	2
1. PA	-	
2. DMC	0.48	-
N = 380		
p -Value = 0.000		

Regression Analysis and Hypothesis Testing of Primary Variables

The multivariate linear regression model was properly made to test the hypothesis that higher autonomy levels developed from parenting styles enhance college students' decision-making skills. Specifically, the average parental autonomy and decision-making competence were the main continuous variables used in a multivariate linear regression model. They were most suitable for initially examining the correlation between DMC, the dependent variable, and the independent variables, with PA as the primary independent variable. Secondly, it evaluates the relationship between these two main variables while controlling for the seven other variables: gender, age, ethnicity, race, household income, GPA, and college year. The following presents the results of the tests, specifically the correlation between PA and DMC, as well as the correlations of DMC with all independent variables, including the primary independent variable and the seven control variables.

By averaging each participant's survey response and running the regression, the hypothesis is confirmed: higher perceptions of parental autonomy are likely associated with greater decision-making competence. Additionally, controlling for gender, age, ethnicity, race, household income, GPA, and college year, the relationship remains significant. First, Table 11 shows the F-test, with one and 378 degrees of freedom and a *p*-value of 0.000, indicating that the model as a whole fits significantly better than an empty or null model (i.e., a model with no predictors). The R-squared value of 0.23 indicates the proportion of variance in the outcome explained by the model. Additionally, the adjusted R-squared value of 0.23 accounts for the number and quality of predictors.

Table 11
Simple Linear Statistic

Source	SS	df	MS
Model	8.29	1	8.29
Residual	27.15	378	0.07
Total	35.44	379	0.93
Number of obs	380.00		
F(1, 378)	115.37		
Prob > F	0.000		
R-squared	0.23		
Adj R-squared	0.23		
Root MSE	0.27		

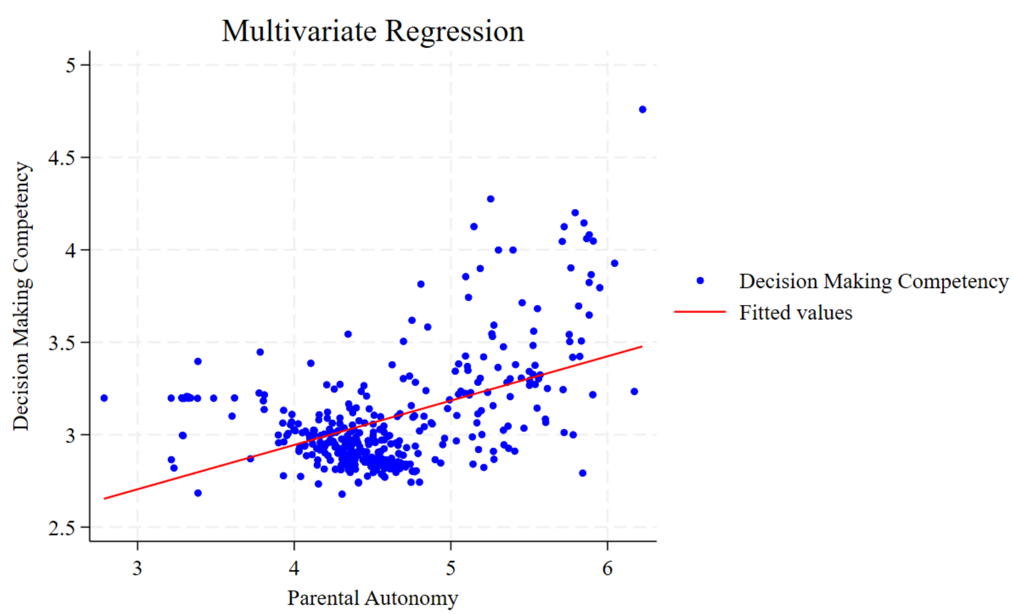
Table 12 presents the coefficients, their standard errors, t-statistics, the associated *p*-value (0.000), and the 95% confidence intervals for the coefficients. Both parental autonomy and decision-making competence are statistically significant. For each one-unit increase in parental autonomy, the expected value of decision-making competence rises by 0.24 units.

Table 12
Simple Linear Regression Results

DMC	B	SE	t	P > l t l	[95% CI]
PA	0.24	0.02	10.74	0.00	[0.20, 0.28]
Constant	1.99	0.10	19.21	0.00	[1.78, 2.18]

Figure 1 illustrates the covariance between decision-making competence and perceived parental autonomy among college students in the U.S. The direction indicates that higher parental autonomy is associated with greater decision-making competence.

Figure 1
Scatter Graph Demonstrating the Decision-Making Competence Versus Parental Autonomy



Second, Table 13 displays the F-test, with eight and 371 degrees of freedom and a *p*-value of 0.000, indicating that the model as a whole fits significantly better than an empty or null model (i.e., a model with no predictors). The R-squared value of 0.29

indicates the proportion of variance in the outcome that is explained by the model. Additionally, the adjusted R-squared value of 0.27 accounts for the number and quality of the predictors.

Table 13
Multivariate Linear Statistic

Source	SS	df	MS
Model	10.11	8	1.26
Residual	25.33	371	0.07
Total	35.44	379	0.09
Number of Obervations	380		
F(8, 371)	18.51		
Prob > F	0.000		
R-Squared	0.29		
Adj R-Squared	0.27		
Root MSE	0.26		

Table 14 presents the coefficients, their standard errors, t-statistics, the associated p-values (all below 0.001), and the 95% confidence intervals for the coefficients. Both parental autonomy and decision-making competence are statistically significant. For every one-unit increase in parental autonomy, the expected value of decision-making competence rises by 0.204 units. Additionally, a statistically significant correlation exists between ethnicity and decision-making competence, with a p-value of 0.000. It appears that non-Hispanic college students perceive higher parental autonomy and exhibit better decision-making competence than Hispanic students. However, decision-making competence and all other control variables are not statistically significant, with respective *p*-values of 0.286 for gender, 0.218 for age, 0.704 for race, 0.044 for household income, 0.707 for GPA, and 0.717 for college year. Since all these p-values are above 0.001, there is no statistical significance between decision-making competence and any of these rest control variables.

Table 14
Multivariate Linear Regression of Parental Autonomy on Decision-Making Competency

Regression of Parental Autonomy on Decision-Making Competency

DMC	Coef.	SE.	t-value	p-value	[95% Conf	Interval]	Sig
PA	.204	.026	7.91	0	.153	.254	***
Gender	.035	.033	1.07	.286	-.029	.099	
Age	.011	.009	1.23	.218	-.007	.029	
Ethnicity	.128	.031	4.14	0	.067	.189	***
Race	-.01	.026	-0.38	.704	-.061	.041	
Household Income	.025	.012	2.02	.044	.001	.048	**
GPA	.006	.017	0.38	.707	-.027	.04	
College Year	.005	.015	0.36	.717	-.024	.035	
Constant	1.738	.139	12.52	0	1.465	2.011	***

Mean dependent var	3.086	SD dependent var	0.306
R-squared	0.285	Number of obs	380
F-test	18.506	Prob > F	0.000
Akaike crit. (AIC)	67.244	Bayesian crit. (BIC)	102.706

*** *p<.01*, ** *p<.05*, * *p<.1*

In addition to the statistical data shown in the above table, which indicates the statistical significance between the two primary variables of decision-making competence and parental autonomy and ethnicity, Figures 2 to 5 illustrate the impact of parental autonomy on the decision-making competence of college students in the U.S. by gender, ethnicity, household income, and GPA. However, these graphs of demographic variation do not indicate a statistically significant relationship between decision-making competence and the related controlling variables, except for ethnicity. Specifically, Figure 2 shows that female college students with higher parental autonomy perform better in decision-making competence, with a steeper curve compared to male college students, who also demonstrate a similar trend but with a less steep curve.

Figure 2

Scatter Graph Demonstrating the Decision-Making Competence Versus Parental Autonomy by Gender

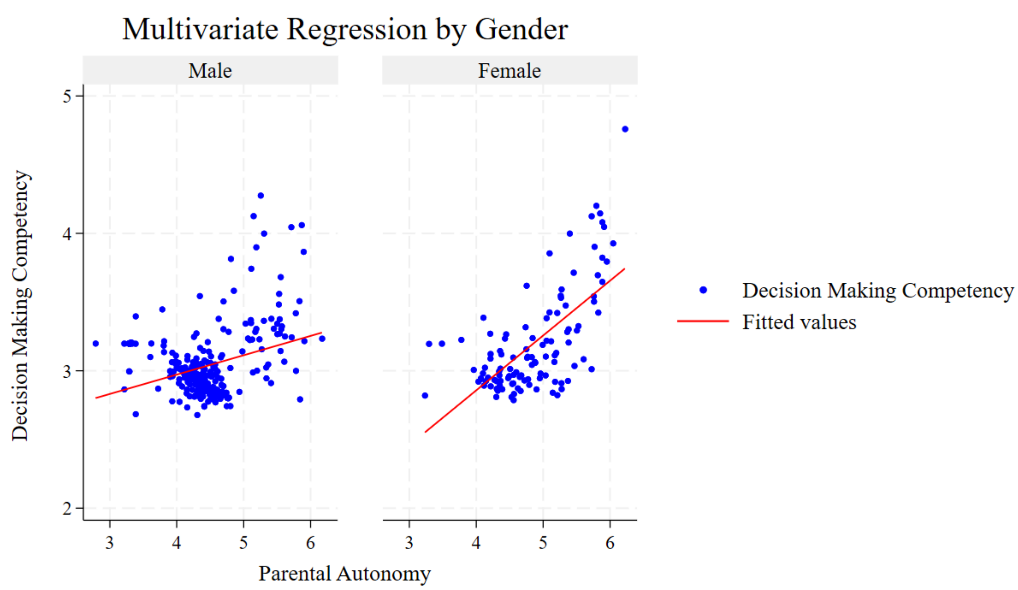


Figure 3 shows that non-Hispanics exhibit higher parental autonomy, which leads to better decision-making skills in their children as college students. In contrast, Hispanic families do not appear to show this statistically significant trend.

Figure 3

Scatter Graph Demonstrating the Decision-Making Competence Versus Parental Autonomy by Ethnicity

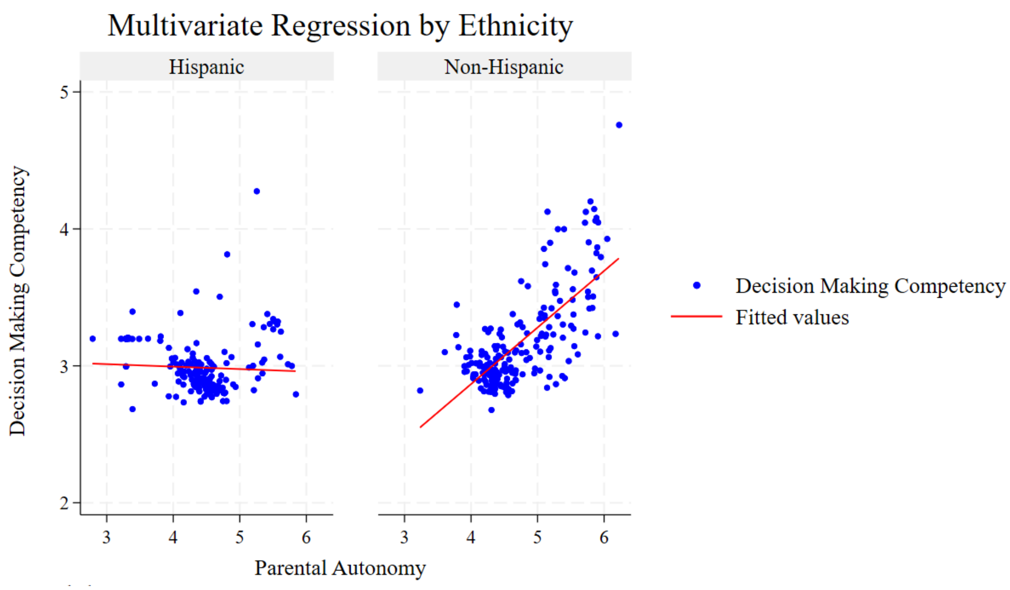


Figure 4 shows that families with higher incomes and greater parental autonomy for their children demonstrate better decision-making skills during college years.

Figure 4

Scatter Graph Demonstrating the Decision-Making Competence Versus Parental Autonomy by Household Income

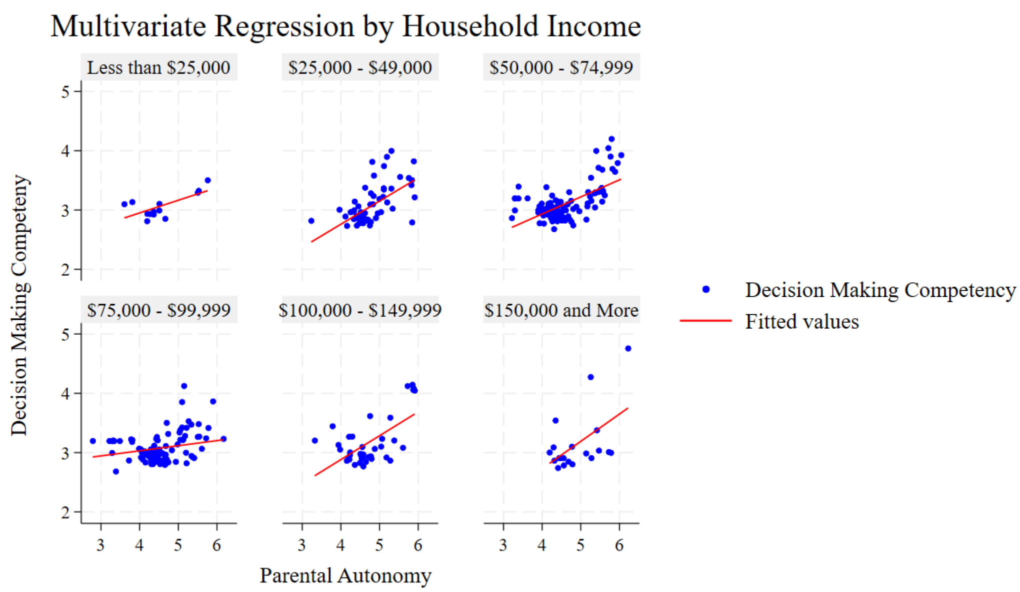
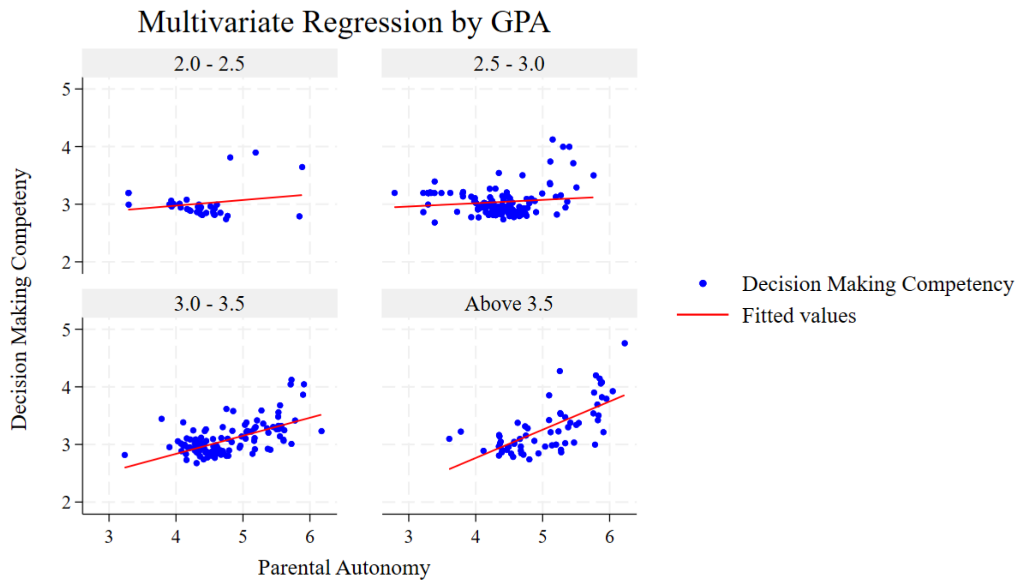


Figure 5 shows that college students in the U.S. who performed better academically and received higher parental autonomy also exhibited stronger decision-making skills, especially among those with study performance scores of 3 and above.

Figure 5

Scatter Graph Demonstrating the Decision-Making Competence Versus Parental Autonomy by GPA



Robustness Check

The researcher conducted robustness checks that evaluate multicollinearity (ensuring that independent variables are not correlated), heteroscedasticity (confirming consistent error variance across all values of independent variables), and the normality of errors (verifying that residuals—differences between observed and predicted values of the dependent variable—follow a normal distribution). This interdependence test is performed as a series of assessments examining each independent variable's dependence on the other members of the set (Farrar & Glauber, 1967).

Multicollinearity

The researcher uses the VIF after regression to check for multicollinearity. VIF stands for variance inflation factor and indicates that a variable with a VIF value greater than 10 may need further investigation, while a value less than 5 is considered safe

(OARC Stats, n.d.). Table 15 shows that the multicollinearity results are below 5, indicating no multicollinearity exists. The data quality is reliable.

Table 15
Multicollinearity Testing Result

Variable	VIF	1/VIF
PA	1.40	0.72
Ethinicity	1.32	0.76
GPA	1.25	0.80
Gender	1.24	0.81
Age	1.19	0.84
College Year	1.14	0.88
Household Income	1.10	0.91
Race	1.06	0.94
Mean VIF	1.21	

Normality of Errors

Performing the Shapiro-Wilk test for normality, the Wilk test yielded a *p*-value of 0.000 in Table 16, indicating that we can reject the hypothesis that r is normally distributed.

Table 16
Shapiro-Will W Test for Normal Data of Variable DMC

Variable	Obs	W	V	z	Pr > z
DMC	380	0.81	50.23	9.30	0.000

Heteroscedasticity

Table 17 shows that the *p*-value is very small, 0.000; the researcher would need to reject the null hypothesis and accept the alternative hypothesis that the variances are not equal. In this case, the evidence supports the alternative hypothesis that the variances are not equal.

Table 17
Hettest Results

Hettest
Breusch-Pagan/ Cook-Weighberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of dmc
H0: Constant variance
chi2(1) = 44.36
Prop > chi2 = 0.000

Source	Chi2	df	p-Value
Heteroskedas	138.51	42	0

Running robustness checks, the results did not indicate multicollinearity but did show heteroscedasticity, indicating that errors are not normally distributed. A robust regression model should also help address this issue. Therefore, running a robust regression analysis was necessary and revealed a statistically significant relationship between the dependent variable, decision-making proficiency, and the independent variable, autonomy perceived from parents. Table 18 shows the F-test, with 8 and 371 degrees of freedom and a *p*-value of 0.000, indicating that the model as a whole fits significantly better than an empty or null model (i.e., a model with no predictors). The R-squared value of 0.29 indicates the proportion of variance in the outcome explained by the model.

Table 18
Robustness Test Statistic

Linear Regression	
Number of Observati	380
F(8, 371)	8.73
Prob > F	0.000
R-squared	0.29
Root MSE	0.26

Table 19 displays the coefficients, their standard errors, t-statistics, associated *p*-values, and 95% confidence intervals for the coefficients. Both parental autonomy and decision-making competence are statistically significant, as is ethnicity, in relation to decision-making competence. For each one-unit increase in parental autonomy, the expected value of decision-making competence rises by 0.20 units. Similarly, the average difference in the effect of parental autonomy perception on decision-making competence, between non-Hispanic respondents (=1) and Hispanic respondents (=0), controlling for other variables, is 0.13 units. However, the control variables—gender, age, race, household income, GPA, and college year — are not statistically significant. Even though household income shows a statistically significant result at the 90% confidence level in relation to decision-making competence, with a p-value smaller than 0.1.

Table 19
Robustness Test Results

DMC	B	Robust SE	t	P>t	[95% CI]
PA	0.20	0.03	5.91	0.000	[0.14, 0.27]
Age	0.03	0.03	1.11	0.268	[-0.03, 0.10]
Gender	0.10	0.01	1.3	0.194	[-0.01, 0.03]
Hispanic	0.13	0.03	4.7	0.000	[0.07, 0.18]
Race	-0.01	0.02	-0.53	0.594	[-0.05, 0.03]
Household Income	0.02	0.01	1.74	0.083	[-0.00, 0.05]
GPA	0.01	0.02	0.38	0.708	[-0.03, 0.04]
College Year	0.01	0.01	0.42	0.678	[-0.02, 0.03]
Constant	1.74	0.20	8.69	0.000	[1.34, 2.13]

Findings

The multivariate linear regression examined the statistical correlation between the independent variable, decision-making proficiency of college students, and the dependent variable, parental autonomy, while controlling for the impact of other variables, including age, gender, ethnicity, race, household income, GPA, and college year. This supports the hypothesis that higher levels of perceived autonomous parenting styles lead to higher levels of college students' decision-making proficiency.

Examining the effects of controlling variables in running the multivariate linear regression model reinforced the reliability of the results. Ethnicity was the only independent controlling variable that showed statistical significance in relation to the primary variable of decision-making competence. This indicated that non-Hispanic parents provided their children with higher autonomy, leading to better decision-making proficiency in their college years, whereas Hispanic parents did not. For other controlling independent variables, although all p-values were above 0.005, each suggests certain effects. For example, female college students in the U.S. exhibited better decision-making proficiency than males when given higher parental autonomy. U.S. college students aged 19 to 25 showed that decision-making competence across most age groups—20, 21, 22, 24, and 25—is quite similar, with scores ranging from below 3 up to almost 4 under higher perceived parental autonomy. In contrast, the 23-year-old group had scores just below 3 to slightly above 3, indicating stable decision-making performance influenced by parental autonomy. Additionally, regarding race, White or Caucasian families providing higher levels of parental autonomy helped their children perform better in decision-making during college. Notably, families with higher household incomes and those that granted more parental autonomy exhibited better decision-making abilities during their college years. Similarly, students with higher study performance scores of 3 and above, who received greater parental autonomy, demonstrated stronger decision-making skills. Regarding college year, upperclassmen—such as juniors and seniors—showed improved decision-making competence associated with increased parental autonomy.

The above examination used a multivariate linear regression model to test the correlation between two primary variables: parental autonomy and decision-making competence. It also took into account the effects of other control variables, including gender, age, ethnicity, race, household income, GPA, and college. The analysis showed statistical significance for both simple and multivariate linear regression analyses, with p-values of 0.000. Additionally, robustness checks indicated that there was no multicollinearity, although heteroscedasticity was present. Nevertheless, running a robust regression still revealed a significant relationship between the dependent variable of decision-making proficiency and parental autonomy, with a p-value of 0.000. This confirms that the methodology was properly applied and that the results are both accurate and reasonable for this study.

In addition to numerous studies confirming that parental autonomy has a positive impact on children's decision-making abilities, the findings of this study reinforce the notion that it lays a firm foundation for college students' decision-making proficiency, a powerful indicator of leadership skills.

Discussion

The findings support that parental autonomy helps improve the decision-making skills of college students. This supplement discusses the current limitations of research on the effects on college students. First, while the age of adolescents has been shown to have a significant correlation with increased decision-making ability, these findings extend the impact of parental autonomy from adolescents to college-age individuals, specifically from 19 to 25 years old. Moreover, decision-making skills can be enhanced by parental styles that promote autonomy in children. This finding is important and serves as a reminder to parents in educating their children. Recognizing this significance, parents can help equip children with one of the key leadership skills: good decision-making.

Similarly, in the research and findings of Weller et al. (2024), who recently conducted a statistical analysis examining the link between parenting practices and children's decision-making capabilities (DMC) in later life, this study reveals a statistical relationship between parental autonomy and college students' decision-making skills.

However, this cannot confidently establish causality, i.e., parental autonomy variation cannot be said to cause high or low decision-making competency.

Building on previous research, this study examines the impact of parental autonomy on the welfare, academic performance, morality, and leadership skills of college students, with a particular focus on their decision-making ability. This aims to develop a comprehensive understanding of how parental autonomy influences college students' overall development.

This study was conducted with a sample size of 380, which cannot fully represent all college students in the U.S. as a limitation. Future research could consider using a larger sample size or different sample pools outside the U.S. to increase the study's credibility. Additionally, while quantitative research has clear strengths, its limitations in capturing deeper insights from participants suggest that future studies should incorporate qualitative methods. These methods could gather more in-depth perspectives, enriching and improving the results, while also strengthening the theoretical framework.

Summary

The multivariate linear regression model was thoroughly applied in the studies, providing statistical descriptive data that is presented in tables and figures. Significant findings supported the hypothesis that higher autonomy perceived from parents leads to greater decision-making proficiency among college students. The results were reliable and accounted for other variables, including gender, age, ethnicity, race, household income, GPA, and college year. The correlation between parental autonomy and decision-making competence was statistically significant with a p-value of 0.000 in all tests. These findings also addressed the study’s goal of developing a new theoretical framework, demonstrating that increased perceived parental autonomy enhances students' decision-making skills. This extends the value of parental autonomy beyond well-being, academic performance, and morality to include leadership abilities, such as decision-making proficiency. The findings aim to inform parents about the importance of the autonomy they provide during childhood. Additionally, these results and recommendations serve as the basis for a theoretical framework that will inform practical applications, which will be detailed in Chapter Five.

CHAPTER FIVE: PROPOSED SOLUTION AND IMPLICATIONS

Autonomous parenting styles have been extensively examined in numerous studies, demonstrating that they contribute to a child's development throughout their college years in various aspects, including well-being, morals, and academic performance. During the literature review of this complex, real-world problem, research has focused on the significance of parental autonomy in developing children's decision-making skills during their college years. The study results show a statistically significant relationship between parental autonomy and the decision-making proficiency of college students. Determining the practical solutions needed to introduce this new theoretical concept into the real world for application is crucial to enhance both awareness and real-world practice. As such, this chapter will reintroduce the study's aim, recommend a workshop structure and format as the optimal effective solution to introduce the theoretical concept to the real world, describe the procedures for implementation, evaluate the outcome of implementing the solutions, and discuss practical, research-related, and leadership-related implications. The chapter will conclude with a summary to close the DIP.

Aim Statement

Autonomous parenting is essential for college students to become effective leaders, as it enables them to develop emotional intelligence, enhancing their ability to make informed, ethical decisions. Autonomous traits and decision-making are essential for authentic leadership, fostering trust and supporting long-term objectives. Leaders with autonomous traits tend to be confident and motivated, which, in turn, improves their own and their team's performance. In chaotic settings, autonomy strengthens leadership by generating a feedback loop between leaders and followers, enhancing motivation and success. Effective leadership is crucial for achieving shared, sustainable goals in complex environments. Shaw (2023) stated that effectiveness relies on self-actualization through self-determination and character growth. Successful college students will recognize that autonomy is essential for building confidence, making sound decisions, and fostering authentic leadership.

Proposed Solution(s)

The proposed solution derived from the DIP's findings, grounded in the theoretical concept of autonomous parenting, works to enhance the decision-making skills of college students through an in-person workshop (IPW) titled *Using Parental Autonomy to Benefit College Students' Decision-Making Proficiency*. This practical dissemination approach will share the DIP's findings, invite real-time practice and feedback, and generate further research opportunities in related topics for broader and deeper application in real-world practice. Importantly, the IPW will introduce these new findings, focusing on supporting decision-making skills for adolescents with different parental experiences. The following sections will present evidence supporting this recommendation and discuss potential challenges, along with tentative resolutions to mitigate or eliminate associated risks and negative impacts.

Evidence that Supports the Solution

Researchers have demonstrated that effective decision-making is crucial for successful college students, who will become future leaders of the country and the world (Marshall & Hornak, 2008; Peng & Shin, 2008; Yang et al., 2021). Autonomy is the key attribute that enables children to develop into decisive, effective leaders (Shaw, 2023;

Yang et al., 2021). The literature review in Chapter Two of this DIP covered relevant pieces of evidence. Advancing autonomy in children fosters effective leadership and decision-making, which are essential in a constantly changing world that demands sustainable development. Today's world generally requires a generation equipped with leadership and influencing skills, capable of guiding others in overcoming challenges, and managing chaos (Yang et al., 2021).

Autonomy presents a challenge that requires self-determination and a strong will to drive it. While valued in business and politics, personal strength in decision-making must align with societal needs (Shaw, 2023). College students can become emerging leaders by developing interpersonal skills, gaining knowledge, and engaging in relational leadership to collaborate with others on shared issues. These students, future business leaders, are trained to influence the global economy through informed decision-making (Marshall & Hornak, 2008; Peng & Shin, 2008). The question was whether different autonomous parenting styles influence these decision-making skills. Yang et al. (2021) studied decision-making differences among students with varying leadership levels and explored how these differences relate to their emotional regulation and personal control. Being a student means one learns to make decisions in both simple and complex situations (Marshall & Hornak, 2008). Some may be influential college students who are effective decision-makers, while others may be influential but less skilled at decision-making.

This study's findings reinforce that parental autonomy offers a strong foundation for college students' decision-making skills, which are vital for leadership development. Using a quantitative approach and multivariate linear regression, the results highlight the importance of this relationship. It is recommended that parents, educators, counselors, leadership trainers, and students recognize and share these insights to emphasize its significance and incorporate them into practice for better understanding and acknowledgment.

To ensure these findings are most effectively recognized, an in-person workshop (IPW) that incorporates both in-person and recorded components is the most suitable approach. It aims initially to share these theoretical results with the broader community, encouraging parents to provide their children with positive autonomy, and teaching them to support their children in making decisions till college age throughout the interactive activities of the workshop. By combining the advantages of intrapersonal communication, IPW effectively bridges the gap between research and practice. Unlike passive methods such as reports and articles, IPW enables parents to actively discuss findings, share feedback, and apply these novel theoretical insights in real-world settings. They foster dialogue and facilitate the translation of research into practical skills, primarily to support advancing adolescent decision-making across diverse parental backgrounds. Although workshops may be limited in scale and resources, their benefits in terms of collaboration, knowledge transfer, and engagement make them effective in ensuring that research is understood and applied (de Wit-de Vries et al., 2019; Huppenkothen et al., 2018; Sufi et al., 2018). Furthermore, the workshop will be recorded so that other interested audiences can watch or refer to it later.

The IPW is accessible, as the preparation and deployment of the workshop plan will take only a few months, and it will directly affect the end users of the dissertation's findings. Whereas publishing an article or book requires more time and resources, introducing via a conference of leadership educators will not recognize the practical interactions with the end users of the findings, parents, and college students. The IPW will generally gather a significant number of parents, educators, counselors, and leadership trainers, who are the ideal audience. They can help disseminate these new findings effectively, with a focus on supporting decision-making skills for those adolescents with varying parenting backgrounds.

Notably, the significance of these findings shared through an IPW can remind parents to raise and educate their children, supporting autonomy provision, as well as college students to continually foster their own self-actualized autonomy. These theoretical insights will enable students to critically understand the importance of parental autonomy, reflect on their current position in this process, and explore ways to enhance their decision-making abilities. As such, the researcher will first proceed with developing workshops to ensure the study's findings can be practically implemented and effectively disseminated to the target end users, enhancing the study's overall aim.

This approach will be planned and prepared for effective deployment through a three-stage arrangement, including planning before the workshop, during the workshop, and after the workshop. This structure can ensure that the preparation and deployment of the in-person workshop (IPW) are effectively and efficiently planned, while also addressing challenges and their solutions.

Evidence that Challenges the Solution

As with any understanding directed to a specific learning process, the workshop may encounter challenges such as limited participants, time constraints, resource demands, varying levels of engagement, cognitive dissonance from short-term, incomplete exposure, the potential of bias, and issues related to stakeholders (Bourner et al.,1994; Carnes et al., 2021; Global Water Partnership, n.d.; Munarini, 2025; Women in Tech Network, n.d.). Addressing these issues with effective strategies can help mitigate risks, lessen negative impacts, and uphold the quality of the IPW. Since in-person workshops are usually small, fewer participants will experience the new DIP findings than in publications or online sharing. To broaden the reach, the IPW will be recorded and disseminated through various channels for asynchronous access. Moreover, the researcher can distribute workshop summaries, infographics, or policy and practice briefs via email, websites, or academic platforms to target specific audiences.

As a challenge, the IPW may involve tasks that are time- and resource-consuming, requiring careful planning, facilitation skills, and sometimes funding for venues, materials, and refreshments. To address these limitations, the researcher will seek support from institutions or grants, collaborate with local organizations like schools, colleges, or community centers, or consider hosting virtual events to reduce costs. Additionally, digital materials can replace printed handouts, and free platforms such as Zoom, Google Meet, and Microsoft Teams can help alleviate financial constraints. Another obstacle is uneven participant engagement, with some individuals dominating discussions while others stay passive. The researcher will design the workshop with structured facilitation methods, breakout groups, guided questions, interactive polls, and equal speaking opportunities. Efforts will also be made to promote inclusivity by assigning roles such as note-taker, presenter, and questioner within small groups to ensure balanced participation and engagement.

Additionally, the IPW may encounter the issue that participants forget or fail to apply what they have learned. The researcher should offer follow-up materials or support, such as take-home resources like toolkits, handouts, slide summaries, and post-workshop emails containing key findings, practical tips, or reflection prompts. Long-term reinforcement could also involve a community of practice, online forums, or short refresher webinars. The IPW may be an audience primarily comprising certain groups, such as already engaged educators and parents, rather than the full spectrum of stakeholders. Therefore, the researcher should actively broaden recruitment by inviting diverse stakeholders, including parents from various backgrounds, practitioners, students, and administrators. Additionally, attention should be given to balancing voices by gathering pre-workshop surveys to understand different needs and perspectives. Combining panel discussions with activities can help ensure all stakeholder groups feel represented.

Finally, stakeholder-related issues such as low attendance and diverse participant backgrounds need to be considered (Munarini, 2025). While the registered number of participants might suffice for the IPW, actual turnout could be low, potentially affecting workshop quality. To address this, reminders should be sent on the event day to help participants remember and attend. Including participants from varied backgrounds, especially parents, can enrich the IPW by showcasing different parenting styles. Managing their expectations about workshop benefits and keeping them engaged, especially those with short attention spans or fatigue, can be challenging. Careful design of group tasks may help mitigate these issues.

Implementation of the Proposed Solution(s)

A comprehensive implementation plan aims to ensure that sharing new findings on parental autonomy effectively generates enhancement to a college student's decision-making skills, maximizing the benefits and minimizing the drawbacks of the in-person workshop (IPW) method. The key factors, stakeholders, timelines, and evaluation measures will be considered to assess the effectiveness of an IPW, ensuring its successful implementation.

Factors and Stakeholders Related to the Implementation of the Solution

Identifying the key factors and stakeholders necessary to implement the IPW is the most crucial step in ensuring its successful execution. It is important to consider the target audiences and design a comprehensive implementation plan that incorporates logistics preparation, such as selecting venues, preparing materials for the workshop, securing human resources, and securing funds for the workshop implementation. Importantly, all these factors and stakeholders are incorporated throughout three critical stages of the implementation plan, including before, during, and after the workshop, ensuring the future IPW is implemented effectively and efficiently.

The most important factor to consider is identifying the direct target audiences for this DIP, which are parents and college students in the U.S., who will benefit from the new findings of this study. This reinforces the idea that parental autonomy provides a strong foundation for college students' decision-making skills. For the purpose of this IWP, the research aims to invite parents in the U.S. to participate in this workshop. As such, parents can use these findings to be more attentive in providing autonomy to their children when raising and educating them at an early age. This helps children develop well not only in their well-being, study performance, and moral development, but also in becoming excellent leaders with strong decision-making skills.

Together with identifying the appropriate target audiences for sharing the new findings, the researcher develops an implementation plan, which will be divided into three stages: before, during, and after the IPW. Furthermore, Appendix H will summarize to illustrate the workshop elements.

Planning Before the Workshop

The planning stage will encompass preparation and logistics, and will last for some months. The preparation process involves recruiting the target audience, distributing a pre-survey, and developing relevant materials. The key audience will be parents in the U.S. The researcher will recruit the target audience by seeking support from appropriate educational institutions or organizations to reach the parents. For example, I will present and recruit schools at school psychology conferences, obtain their agreement to offer a free workshop for students' parents, and secure their sponsorship of the venue to organize the IPW. These novel findings will benefit both their parents and the school by enhancing students' development in effective leadership and decision-making proficiency. The recruitment of parents will be advertised openly in the designated school to reach out to the diverse parenting practices. Recruited parents would be invited to participate in the IPW and complete a brief pre-survey, a questionnaire designed to assess their knowledge of parental autonomy and the challenges they face in making decisions for adolescents or college-age individuals. Appendix I presents an example of survey questions. After completing the pre-survey, workshop participants will receive the IPW materials in advance, including research summary handouts that provide a brief overview of the DIP study's scope and aim. These will be accompanied by a reflection worksheet for parents, as well as infographics comparing parental styles that reflect autonomy.

The planning stage includes logistics preparations beginning with securing funding, choosing a venue or platform, and allocating human resources. To secure funds, the researcher must seek sponsorships to finance the organization of the workshop. This step is critical because it determines where the workshop will be held and significantly influences the timeline, estimated to last several months. If funding is limited, the workshop may switch to an online platform and use digital materials instead of printed ones. The researcher will be in the primary workforce and will recruit volunteers to assist before and during the workshop. The facilitator will be a researcher, counselor, or educator.

Planning During the Workshop

The IPW will last for about three hours, including welcome and framing, research findings presentation, interactive activity, skill-building session, action planning and reflection, closings, and feedback. The welcome and framing session will kick off with a 20-minute icebreaker activity. For instance, asking participants to recall a recent decision made by their child and describe the situation: how the parents supported or responded, how the decision was processed, and the outcome. Did the child feel happy or unhappy about it, and why? The purpose of this activity is to create a relaxed atmosphere, encourage open discussion, and facilitate dialogue by addressing the ongoing progression of raising and educating children. It also aims to highlight relevant points related to the dissertation's key findings and link research to everyday parenting. Suggesting tools that promote stronger decision-making skills through autonomy could help children learn to make their own choices guided by discussion, rather than parental pressure. This approach may boost children's confidence, decision-making abilities, and sense of responsibility for their choices.

Following the ice breaker activity, a research findings presentation, delivered by the researcher, will last approximately 30 minutes. Key points include covering its purpose, research question, study aims, the role of leadership, a review of the four basic parenting styles with their autonomy levels, the identified gap this study addresses, the research design, and the main findings. The focus will be on key findings that support the hypothesis and answer the research questions.

Following the information session will be a case study breakout, which lasts 30 minutes and is facilitated by the researcher, along with the counselor or educators. The session involves dividing participants into small groups; each group receives a hypothetical vignette featuring a college student from a different parental background, i.e., authoritarian, authoritative, and supportive. The hypothetical vignette illustrated in Appendix G will be used as footage for the workshop (Barnhart et al., 2013). The vignettes for the second or subsequent workshops will be designed based on the practical data obtained during the future qualitative research deployment, as mentioned in the implications of future research section. The task of this activity is to identify the decision-making challenges faced by the student and propose strategies that parents or educators could use. Afterwards, a large group debrief is conducted to highlight common themes and issues.

The case study breakout is followed by a 40-minute session. It consists of two parts: a short lecture and a role-play activity. The lecture will describe strategies to promote autonomy, independence, and resilience in adolescents. For example, parents can encourage decision-making by reflecting with directive responses rather than criticism or judgment. They can also establish safe spaces where children can learn from mistakes and recover. Furthermore, parents can ask coaching questions such as, “What options do you see?” “What might be the consequences?” and “Have you thought about a backup plan for negative outcomes?” The role-play exercise will involve participants practicing guiding versus controlling responses to a student’s dilemma. This exercise reflects how parental autonomy will be promoted to support and guide the children in making informed decisions, rather than controlling how they come to a decision.

As a final activity, the participants are asked to create a “Parent Practice Plan” that identifies one strength they wish to further develop in their daily life and one change to improve decision-making for their children. The session lasts approximately 20 minutes. Afterward, participants are encouraged to discuss their ideas in pairs or small groups.

Finally, the researcher gathers and summarizes key insights before conducting the post-survey reflection cards, where participants note “one idea I will apply this week.” The researcher will lead this 15-minute session.

Planning After the Workshop

The follow-up stage is essential to ensure the effective and successful implementation of the IPW. It involves three main tasks: follow-up resources, ongoing engagement, and the research-practice feedback loop. For follow-up resources, the researcher must distribute all slide decks, summaries of findings, the practical guide "Coaching Questions for Parents," and a reading list on topics such as parenting styles, parental autonomy, and adolescent development. To maintain continued engagement, the researcher offers either optional monthly parent discussion circles or online support groups and provides a brief reflective activity, encouraging participants to share one success or challenge encountered after applying the strategies. Finally, for the research-practice feedback loop, the researcher gathers qualitative feedback on how the findings are applied in real-world settings and uses these insights to inform future publications or workshops.

Timeline for Implementation of the Solution

The entire process of organizing the IPW will take from 6 months to over a year, starting with the plan before the workshop. The primary focus is on finding the avenue to advertise the recruitment, preparing funding for the workshop organization, and determining whether the workshop will be in-person or virtual. The plan during the workshop will last for a day. The plan after the workshop will take some months for the development of follow-up activities.

Evaluating the Outcome of Implementing the Solution

Evaluating the IPW's implementation outcome will assess the success and effectiveness of the DIP's dissemination solutions. The metrics of the outcome will include the number of participants, the number of singular insights collected during the workshop, together with participants' feedback, such as questions, comments, and critiques. The follow-up after the workshop, the theory to be recognized and cited, and leading to other collaborations for further research or publication serve as the foundation for the development and success of the publication, seminar, and further workshops. Most importantly, the evaluation will consider how this outcome impacts the end users, who are college students practicing decision-making during their college years and applying these skills in real life. Additionally, it will, in real time, evaluate parents' roles in providing autonomy to their children during their upbringing and education, helping to nurture their children's independence and shape excellent decision-making skills. With the success of the workshop, the researcher will develop additional workshops for other specific groups, such as college students and parents, to continue directly disseminating these findings. Last but not least, the researcher’s development in academic, scholarly, networking, and career aspects after this will also be a significant metric of the solution’s implications.

Furthermore, by accumulating insights from conducting these workshops, the researcher may initiate an article and subsequently a book publication to disseminate the benefits of these findings more broadly and widely. The strategy is to translate theoretical findings into practical applications, emphasizing the importance of parental autonomy in daily life and practice. This roadmap can help researchers develop more in-depth investigations of the topic of interest and explore relevant areas to create valuable contributions to complex real-world problems, thereby enhancing the well-being of children and young people in all aspects of their lives.

Implications

Practical Implications

Parental autonomy enhances college students' decision-making skills, which benefits future leaders in their personal lives and enables them to make better contributions to their community, country, and the world in which they live. For their own lives, higher parental autonomy has been linked to better well-being, moral development, and improved academic performance in various studies (Baumrind, 1966; Boyes, 1993; Canêo & Neirotti, 2017; Jung et al., Love, 2014; Odenweller et al., 2014; OECD, n.d.; Pinquart, 2016; Saunders, 2015; Silva et al., 2007; Stavrulaki et al., 2021; Tan & Yasin, 2020). Notably, the innovative findings of this study support the idea that parental autonomy encourages students to make good decisions. With this support, college students can be confident and make the right choices during this critical stage of life. Such decisions, like choosing the right study major, determining the appropriate career path, selecting where to live, choosing partners, or deciding on their marriage, are crucial for their happy and successful personal life.

Decision-making is a crucial cognitive skill humans should have (Yildiz & Eldeleklioglu, 2021; Eldeleklioglu, 1996). Successful individuals develop practical decision-making skills to lead a fulfilling life (Alver, 2005). Making confident decisions in stressful situations is essential for well-being. Yildiz and Eldeleklioglu (2021) investigated the relationship between self-esteem, decision-making styles, and factors such as intolerance to uncertainty, cognitive flexibility, and happiness among university students aged 19-25. Results showed that students felt happier when using a vigilant decision-making style and acting more independently with increased self-confidence.

Making informed decisions is crucial for organizations with limited resources and intense competition, particularly in computer simulation-based learning, where AI has a significant impact on multiple areas. Human facilitation enhances decision-making at pre-, in-, and post-task stages, particularly in complex situations (Qudrat-Ullah, 2014).

Strong decision skills are crucial today, despite concerns about AI replacing workers, as developing these abilities is key to managing technological challenges (Tiryaki, 1997, cited in Yildiz, M., & Eldeleklioglu, J., 2021). The emotional subtext influences decision-making and autonomy. Yang et al. (2021) investigated behavioral differences between high- and low-leadership college students, focusing on neurocognitive processes in economic decision-making. Shaw (2023) supported this, stating, “Emotions are perceptions of significance and work with thoughtfulness, adding value and moral weight to authentic decision-making” (p. 15). Effective decisions involve multiple reflections, not a single event (George & Dane, 2016).

A person who is happy with their life lays a strong foundation for becoming a good individual in society, at work, and within their community. The research also supports the idea that college students are capable of making effective decisions, which can help them navigate the complex and rapidly changing world of constant chaotic innovation. This skill is vital for authentic leaders to guide their teams toward a better future. The finding that parental autonomy helps college students make sound decisions in both regular and chaotic situations, especially amid ongoing technological and AI advancements, is significant. They suggest that parents should increase their focus on supporting autonomy when raising children. Meanwhile, college students should recognize the value of maintaining parental autonomy support to enhance their real-world decision-making skills. Sharing these insights with parents and students is essential. Practical applications of these findings can further improve their effectiveness in creating a better world.

Within organizations, seamless connections and collaboration are crucial for effective interdepartmental project transitions (Coy, 2003). Each phase depends on the preceding work-in-progress or stage for products to move forward. Coy (2003) highlighted decision-making as a key element for smooth operations, acting as the lubricant that keeps complex organizations functioning effectively. The world faces significant challenges from technological globalization, which risks unforeseen consequences, including the development of AI and intricate feedback interactions among corporations and nations. Future leaders, particularly college students, must develop strong skills in synthesis, pattern recognition, and decision-making to effectively address these issues. Parenting styles significantly impact child autonomy, influencing key well-being factors such as material security, health, achievements, and social-emotional well-being (Alexander & Harris, 2022; Bornstein & Zlotnik, 2008; OECD, n.d.). These findings aim to encourage parents to support their children's autonomy more actively and confidently, thereby preparing the children to become effective leaders in their communities, countries, and the world. As the world becomes increasingly developed yet unpredictable, future leaders must be proactive and adaptable to make informed choices, ensuring progress, which in turn depends on effective decision-making.

Implications for Future Research

The research was conducted using a quantitative methodology, with participants exclusively from the United States. The study could be improved and its credibility increased in terms of depth and scope. It should be conducted using a qualitative research approach. This approach will yield more insightful and diverse findings, supporting the theory more reliably and with higher quality. For example, these can be designed as practical vignettes of parental styles that college students perceive to be used for the following workshops. Additionally, the investigation could be expanded by recruiting samples from outside the United States to explore how cultural differences in autonomous parenting influence the decision-making abilities of college students. Furthermore, the study could be combined with other research to develop new theoretical insights and findings that can enrich and highlight the impact of these novel findings.

Furthermore, this study is cross-sectional, capturing data at a single point in time. Since parenting effects are likely cumulative, future longitudinal studies might explore how changes in parental perceptions over time influence decision-making and other leadership qualities in college students.

Implications for Leadership Theory and Practice

Training students in decision-making is crucial for addressing complex challenges effectively. Manufacturers engage in direct international trade, resulting in complex transactions that require skilled communicators and informed decision-makers. Establishing key resources ensures smooth operations. Despite globalization, anti-globalization sentiments in places like the U.S. challenge this balance. Peng and Shin (2008) found that college students view globalization positively, indicating future efforts will likely succeed. Understanding the significance of decision-making, the new findings of parental autonomy's effects on the college student's decision-making proficiency might open up a new vehicle for parents to practice the autonomy provision to their children during childhood to help them develop their decision-making proficiency not only in adolescence but also into college (Bednar & Fisher, 2003b).

Additionally, perceiving the importance of decision accuracy in today's world and developing essential skills for college students is crucial. Extensive research examines the relationship between parental autonomy support and children's decision-making abilities. Most research focuses on adolescents, but not college students. Acknowledging this gap, this dissertation in practice examined the link between parental autonomy and college students' decision-making. The results showed a positive correlation, indicating that greater parental autonomy is associated with better decision-making in college. This suggests that college students excel in using autonomy and continue to develop it in leadership roles, possibly advocating for autonomy with their parents.

College students are encouraged to develop autonomous qualities and decision-making skills, which are vital for effective leadership, especially in authentic leadership practice (Leroy et al., 2015; Shaw, 2023; Yang et al., 2021). Specifically, the training emphasizes autonomy and decision-making, both of which are essential for developing authentic leadership. Encouraging parents to give positive autonomy to their children supports their children's improved decision-making skills. This approach helps children build confidence, enhance decision-making abilities, and shape their authentic leadership style. Additionally, consistent autonomous behavior and sound choices characterize strong leaders and foster trust with followers around shared goals and growth. Such an approach promotes decisions aligned with societal needs, rooted in awareness and generosity (Shaw, 2023). In other words, leaders who exhibit autonomous traits are seen as confident and motivated, resulting in better performance for their own success and that of the community. In chaotic environments, autonomy sparks a positive cycle, boosting motivation and effectiveness, and helping manage challenges (Leroy et al., 2015; Yang et al., 2021). Effective leadership is crucial for achieving collective, sustainable goals in complex situations.

The study addressed limited research on how different parenting styles influence the development of autonomy in decision-making skills in adolescent development. This researcher's role was to investigate how parental support affects college students' decision-making abilities. The study's findings support and encourage parents to enhance their children's autonomy, enabling them to develop well-equipped decision-making skills from childhood through college.

Summary of the Dissertation in Practice

The dissertation, which addressed a complex, real-world problem, revealed positive outcomes. Employing the quantitative method with a multivariate linear regression model, 380 qualified college students in the U.S. supported the hypothesis of the study: Higher levels of perceived autonomous parenting styles lead to higher levels of college students' decision-making proficiency with the findings was that there was a statistical significance between parental autonomy and college students' decision-making competence while taking the involvement of controlling variables of gender, age, ethnicity, race, household income, study performance, and college year to heighten the reliability and credibility of the results.

The new findings suggest that the in-person workshop (IPW) is an effective proposed solution for disseminating the novel findings to real-world practice. The IPW will introduce parents who will participate in and engage with activities to apply the findings, serving as a bridge between research and practice. The IPW aims to share new findings and gain insights during workshops and follow-up sessions, thereby opening up opportunities for publication and increasing the reach of the broad target audience. This initiative aims to encourage parents to raise their children by providing them with autonomy, enabling them to excel in all aspects of study performance, well-being, morals, and to become effective leaders with strong and sound decision-making proficiency. They will be happy with their personal life and create a good community when they can offer strong and sound decisions for good results.

The research paves the way for further studies, such as using qualitative methods or expanding the sample beyond the U.S. to gather more meaningful and varied insights. These findings can support the growth of college students across all aspects, aiding in the building of a better world, as they are future leaders of their communities, countries, and the global society.

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Appendix A

Research Information Sheet

EXPERIENCE WITH AUTONOMOUS PARENTING AND COLLEGE STUDENTS'

DECISION-MAKING

Introduction

You have been invited to participate in a research study. The purpose of this Research Information Sheet is to help you decide if you want to participate. Participation in this study is voluntary. If you decide to participate after reading this letter, you can withdraw from the study at any time. If you decide not to participate in this research or you decide to stop participating before the end of the study, there will be no penalty, and you will not lose any benefits to which you are otherwise entitled.

This sheet may include terms that you do not understand. Please ask the researcher to explain any words or procedures with which you are unfamiliar.

Study Summary

The purpose of this study is to examine the relationship between college students having parents who use autonomous parenting styles and these students' decision-making skills in four-year US universities. You are being asked to take part in this research because you are a young adult (19-25) college student in the USA. This study is for research purposes only. Your alternative to participating in this study is not to participate.

If you decide to participate in this study, you will be asked to engage in two surveys: POPS and DMCI. POPS stands for the Perception of Parents Scales, which is a validated survey instrument that measures individuals' perceptions of autonomy from their parents. DMCI stands for the Decision Making Competence Inventory (DMCI), which is a scale that measures how well individuals make decisions. Please kindly follow the links attached for further reference: POPS and DMCI.

We expect that your participation in this study will take no more than 25 minutes for both surveys. The expiration date of the survey would be estimated after 15 days from the day we emailed this Research Information Sheet to you.

Risks and Benefits of Participation

This study is minimal risk research, which means that the risks to you by participating in this study are no greater than the risks you ordinarily encounter in your daily life or during the performance of routine physical or psychological examinations or tests. Risks of participating in this study include confidentiality, privacy of participants, and discomfort with an answer. As with participation in any research study, there may be risks to your confidentiality and privacy because of your participation in this study. The following measures are in place to help guard against these risks: to protect confidentiality, we anonymize all personally identifiable information (PII) with fully encrypted data storage, passwords, and locked offices.

There may or may not be a direct benefit to you as a result of your participation in this study. This study may help researchers learn more about the relationship between autonomy provided by parents and the decision-making skills of college students to highlight the importance of **autonomous parenting** in enhancing **the well-being of children**, especially as adults **making important decisions**. This study aims to serve as a resource for college students, decision-makers, educators, and parents to enhance decision-making competence in the real world.

Compensation

Participants recruited through Amazon Mechanical Turk will be compensated based on the conditions of this site.

What Will Happen to My Personally Identifiable Information (PII)

Although we are asking for your identifiers, such as your name, birthday, nationality, gender, grades, and race, someone is unlikely to identify you because we will conduct various methods to minimize the risk of your identity recognition.

Identifiers will be removed from the identifiable private information. After removal, the information may be used for future research studies or distributed to another investigator for future research studies without additional informed consent from you or your legally authorized representative.

CU Students, Faculty, and Staff

If you are a Creighton University (CU) student, faculty/staff member, your decision to participate in this study will not affect your grades, academic status, or job status at CU. You will not be offered or receive any special consideration if you participate in this research study.

Contact Information

If you have questions or concerns about this study, please contact Thi Kim Cu Le at thikimcule@creighton.edu. If you have questions about research participants' rights, contact the Creighton University Institutional Review Board (CU IRB) at 402-280-2126.

By choosing to participate in this online survey, you consent to participating in this study.

Click here to read the Bill of Rights for Research Participants.

Appendix B

Perceptions of Parents Scales

Perceptions of Parents Scales (POPS)

For College Students

Thoughts about My Parents

Please answer the following questions about your mother and your father. If you do not have any contact with one of your parents (for example, your father), but another adult of the same gender lives in your house (for example, a stepfather), please answer the questions about that adult.

If you have no contact with one of your parents, and there is no other adult of that same gender with whom you live, leave the questions about that parent blank.

Please use the following scale:

1	2	3	4	5	6	7
Not at all true			Somewhat true			Very true

First, questions about your mother.

1. My mother seems to know how I feel about things.
2. My mother tries to tell me how to run my life.
3. My mother finds time to talk with me.
4. My mother accepts me and likes me as I am.
5. My mother, whenever possible, allows me to choose what to do.
6. My mother doesn’t seem to think of me often.
7. My mother clearly conveys her love for me.

8. My mother listens to my opinion or perspective when I’ve got a problem.
9. My mother spends a lot of time with me.
10. My mother makes me feel very special.
11. My mother allows me to decide things for myself.
12. My mother often seems too busy to attend to me.
13. My mother is often disapproving and unaccepting of me.
14. My mother insists upon my doing things her way.
15. My mother is not very involved with my concerns.
16. My mother is typically happy to see me.
17. My mother is usually willing to consider things from my point of view.
18. My mother puts time and energy into helping me.
19. My mother helps me to choose my own direction.
20. My mother seems to be disappointed in me a lot.
21. My mother isn’t very sensitive to many of my needs.

Now questions about your father.

1. My father seems to know how I feel about things.
2. My father tries to tell me how to run my life.
3. My father finds time to talk with me.
4. My father accepts me and likes me as I am.
5. My father, whenever possible, allows me to choose what to do.
6. My father doesn’t seem to think of me often.
7. My father clearly conveys his love for me.
8. My father listens to my opinion or perspective when I’ve got a problem.

9. My father spends a lot of time with me.
10. My father makes me feel very special.
11. My father allows me to decide things for myself.
12. My father often seems too busy to attend to me.
13. My father is often disapproving and unaccepting of me.
14. My father insists upon my doing things his way.
15. My father is not very involved with my concerns.
16. My father is typically happy to see me.
17. My father is usually willing to consider things from my point of view.
18. My father puts time and energy into helping me.
19. My father helps me to choose my own direction.
20. My father seems to be disappointed in me a lot.
21. My father isn't very sensitive to many of my needs.

Scoring Information. First, scores on the following items must be reversed: 2, 6, 12, 13, 14, 15, 20, 21, 23, 27, 33, 34, 35, 36, 41, 42. To do that, subtract the response from 8 and use the results as the item score. Then, form subscale scores by averaging the scores of the items on that subscale, as shown below.

Mother Involvement:	3, 6(R), 9, 12(R), 15(R), 18
Mother Autonomy Support:	1, 2(R), 5, 8, 11, 14(R), 17, 19, 21(R)
Mother Warmth:	4, 7, 10, 13(R), 16, 20(R)
Father Involvement:	24, 27(R), 30, 33(R), 36(R), 39
Father Autonomy Support:	22, 23(R), 26, 29, 32, 35(R), 38, 40, 42(R)
Father Warmth:	25, 28, 31, 34(R), 37, 41(R)

An (R) after an item number is simply a reminder that that item needs to be reverse-scored before being averaged.

Appendix C

Decision-Making Competence Inventory

DECISION-MAKING COMPETENCE INVENTORY (DMCI)

The 20-item Decision-Making Competence Inventory (DMCI). Item starts with the phrase, *When I have a big decision to make,*

Please use the following scales, choose the equivalent number that best describes your answer, and write down the score right after each question. There are 20 items that need to be answered.

Not at all like me	Not much like me	Like me	Much like me	Very much like me
1	2	3	4	5

1. …I often make it without considering how likely it is that things will turn out OK. (-)
2. …I take time to make sure that I am understanding things correctly.
3. …I think about similar past decisions I made and what happened.
4. …I take time to review all of my options before deciding.
5. …I consider possible consequences before making any decision.
6. …I usually hope that the problem goes away and that I don't have to make the decision. (-)
7. Please see Other Items
8. …I make sure that I get all the facts.
9. …I usually seek out advice from people whom I know to be knowledgeable.

10. …I tend to rush into making it. (-)
11. …I tend to forget important things when making the decision. (-)
12. Please see Other Items
13. …I just choose what seems OK at the moment. (-)
14. …I usually believe that I will make a good decision.
15. …I just go with a decision that all my friends are going with (-)
16. Please see Other Items
17. …I am usually confident that things will turn out OK once I make the decision.
18. …I like to let someone else make the decision for me (for example, my parents or a friend). (-)
19. …I usually follow the advice of anyone who gives it to me. (-)
20. …I make it and then pay attention to how it turns out.

Other items:

7. Whenever I have to make the same big decision, I tend to make the same mistakes. (-)

12. When I have a big decision to make about doing something that requires my skill, I often make a bad decision because I either underestimate or overestimate how good I am at something. (-)

16. When I have a big decision to make about doing something that requires a certain skill, I often don't bother to think about how much skill I have. (-)

(-) denotes reverse-scored items.

Scoring Information. First, scores on the following items must be reversed: 1, 6, 7,10, 11, 12, 13, 15, 16, 18, and 19. To do that, subtract the response from 6 and use the results as the item score. Then, subscale scores are formed by averaging the scores of the items on that subscale, as shown below.

Factor 1, Informed-Awareness (7 items): 2, 3, 4, 5, 8, 9, and 20

Factor 2, Self-Appraisal (5 items): 1(R), 10(R), 11(R), 12(R), and 16(R)

Factor 3, Autonomy (6 items): 6(R), 7(R), 13(R), 15(R), 18(R), and 19(R)

Factor 4, Confidence (2 items: 14 and 17

An (R) after an item number is simply a reminder that that item needs to be reverse-scored before being averaged.

Appendix D

Recruitment Flyer for the Psychology Department

RESEARCH VOLUNTEER NEEDED!

Dissertation in Practice (DIP) Study PROJECT TITLE:

" EXPERIENCE WITH AUTONOMOUS PARENTING STYLES AND COLLEGE STUDENT'S DECISION-MAKING "

Are you an undergraduate student between the ages of 19 and 25 studying in the U.S.? You are invited to participate in a research study exploring how parental autonomy influences your decision-making skills.

STUDY OVERVIEW

This research investigates how students' perceived parental autonomy impacts their ability to make decisions. Your participation may help deepen the understanding of the role parenting styles play in shaping young adults' decision-making competence.

IRB Protocol Number: 2004771

Institution: Creighton University

Principal Investigator: Thi Kim Cu (Margaret) Le

Who Can Participate? Undergraduate students Aged 19 to 25 currently studying in the United States

WHAT YOU'LL DO

You will be asked to complete two validated surveys:

Perception of Parental Scale (POPS) – Measures perceived parental autonomy

Decision-Making Competence Inventory (DCMI) – Assesses your decision-making skills

Estimated time: ~25 minutes

Platform: Secure online via Qualtrics

HOW TO PARTICIPATE

Register and complete the surveys by visiting the link below or scanning the QR code:

TAKE THE SURVEY HERE

HAVE QUESTIONS? Contact Thi Kim Cu (Margaret) Le

Dissertation in Practice (DIP) Study

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Link: https://blueq.co1.qualtrics.com/jfe/form/SV_6mcAXTw2Jc6prYW

YOUR TIME AND PARTICIPATION ARE GREATLY APPRECIATED – AND MAY HELP FURTHER RESEARCH IN EDUCATION AND PSYCHOLOGY

Appendix E

Descriptive Statistics of Average Decision-Making Competency

Descriptive Statistics of Average Decision-Making Competency

Variable	N	M	SD	Min	Max
Q65_1	380	2.53	0.99	1.00	5.00
Q66_1	380	3.79	0.97	1.00	5.00
Q67_1	380	3.70	0.97	1.00	5.00
Q68_1	380	3.75	0.98	1.00	5.00
Q69_1	380	3.77	0.96	1.00	5.00
Q70_1	380	2.57	1.10	1.00	5.00
Q71_1	380	3.75	0.96	1.00	5.00
Q73_1	380	3.72	0.97	1.00	5.00
Q74_1	380	2.66	1.20	1.00	5.00
Q75_1	380	2.61	1.16	1.00	5.00
Q76_1	380	2.35	1.01	1.00	5.00
Q77_1	380	3.83	0.99	1.00	5.00
Q78_1	380	2.38	1.03	1.00	5.00
Q79_1	380	3.76	0.99	1.00	5.00
Q80_1	380	2.40	1.01	1.00	5.00
Q81_1	380	2.35	0.96	1.00	5.00
Q82_1	380	3.88	1.03	1.00	5.00
Q84_1	380	2.68	1.14	1.00	5.00
Q85_1	380	2.63	1.12	1.00	5.00
DMC Avergae		3.11	1.03	1.00	5.00
DMC Total		59.12	19.54	19.00	95.00

Appendix F

Descriptive Statistics of Average Parental Autonomy

Descriptive Statistics of Average Parental Autonomy

Variable	N	M	SD	Min	Max
Q17_1	380	5.31	1.24	1.00	7.00
Q18_1	380	2.75	1.47	1.00	7.00
Q19_1	380	5.25	1.41	1.00	7.00
Q20_1	380	5.31	1.48	1.00	7.00
Q21_1	380	5.18	1.45	1.00	7.00
Q22_1	380	3.79	1.93	1.00	7.00
Q23_1	380	5.33	1.52	1.00	7.00
Q24_1	380	5.23	1.46	1.00	7.00
Q25_1	380	5.28	1.49	1.00	7.00
Q26_1	380	5.29	1.49	1.00	7.00
Q27_1	380	5.25	1.45	1.00	7.00
Q28_1	380	3.26	1.68	1.00	7.00
Q29_1	380	3.99	1.94	1.00	7.00
Q30_1	380	3.38	1.68	1.00	7.00
Q31_1	380	3.88	1.87	1.00	7.00
Q32_1	380	5.33	1.52	1.00	7.00
Q33_1	380	5.20	1.43	1.00	7.00
Q34_1	380	5.30	1.45	1.00	7.00
Q35_1	380	5.23	1.46	1.00	7.00
Q36_1	380	4.07	1.94	1.00	7.00
Q37_1	380	3.72	1.87	1.00	7.00
Q40_1	380	5.16	1.44	1.00	7.00
Q41_1	373	2.83	1.52	1.00	7.00
Q42_1	380	5.13	1.50	1.00	7.00
Q43_1	380	5.29	1.36	1.00	7.00
Q44_1	380	5.12	1.48	1.00	7.00
Q45_1	380	3.95	1.91	1.00	7.00
Q46_1	380	5.20	1.52	1.00	7.00
Q47_1	380	5.10	1.48	1.00	7.00
Q48_1	380	5.12	1.54	1.00	7.00
Q49_1	380	5.21	1.48	1.00	7.00
Q50_1	380	5.24	1.47	1.00	7.00
Q51_1	380	3.42	1.75	1.00	7.00
Q52_1	380	4.04	1.95	1.00	7.00
Q53_1	380	3.50	1.73	1.00	7.00
Q54_1	380	3.91	1.89	1.00	7.00
Q55_1	380	5.19	1.51	1.00	7.00
Q56_1	380	5.18	1.45	1.00	7.00
Q57_1	380	5.16	1.52	1.00	7.00
Q58_1	380	5.27	1.49	1.00	7.00
Q59_1	380	2.79	1.51	1.00	7.00
Q60_1	380	4.07	2.00	1.00	7.00
Q61_1	380	4.18	1.95	1.00	7.00
PA Average		4.59	1.60	1.00	7.00
PA Total		197.35	68.68	43.00	301.00

Appendix G

The Three Hypothetical Vignettes

The following three hypothetical vignettes were extracted from Barnhart et al. (2013), and appropriate names were substituted for the US father version and for the Indian mother and father versions (Barnhart et al., 2013).

1. **"Authoritarian**

   Tammy is a mother of two, Eddie (age 7) and Stephanie (age 11). Tammy believes that she knows what is best for her children, and that children should do what their parents expect without asking questions. In one particular situation, when Eddie and Stephanie came home from school, they wanted to go outside to play. When Tammy told them that they have to finish all of their homework before they could go outside to play with their friends, Eddie and Stephanie became upset. Tammy responded that there would be no further discussion on the matter, and the children had to listen to her and respect her authority.

2. **Permissive**

   Michelle is a mother of two, Charlie (age 7) and Alexis (age 11). Michelle believes that parents should not put restrictions on their children, and that while growing up, children should be free to do what they want. In one particular situation, Alexis and Charlie came home from school and wanted to go outside to play. Michelle asked them if they had any homework, and the children said that they did have homework but did not want to do it right then. Michelle immediately agreed and let them go outside to play for as long as they want.

3. **Authoritative**

Joanne is a mother of two, Johnny (age 7) and Sally (age 11). Joanne believes that parents should establish rules in the family, explain the reasoning, and encourage children to discuss their questions and concerns about those rules. In one particular situation, Sally and Johnny came home from school and wanted to go outside to play. When Joanne reminded Johnny and Sally that they first needed to do their homework, Johnny and Sally started to get upset and said that they would not do their homework. Joanne listened to Johnny and Sally as they explained why they wanted to go outside first, and, ultimately, explained to the children the rules she had originally established which were clear that homework must be completed before going outside to play." (p.692)

Appendix H

Agenda for "Using Parental Autonomy To Benefit College Students' Decision-Making Proficiency Workshop" (IPW)

Target audience: Parents in the U.S.

Time: Morning or Afternoon on a workday

Duration: About 2.5 to 3 hours

Form of workshop: In-person (with recorded option)

Sections	**Minutes**	**Person-In-Charge**
Welcome and framing: - Introduction and icebreaking activities	20	The researcher, with or without a facilitator
Research findings presentation - Purpose, research question, aims of study - Brief literature review of the four basic parenting styles with their autonomy levels and the effects on their children, and the study gap - The research design - The main findings	40	The researcher
Interact activities - Case study breakouts	40	The researcher, with or without a facilitator
Skill-building section - Short lecture - Role plays exercise	40	The researcher with or without a facilitator
Action planning and reflection - "Parents Practice Plan" Activity	20	The researcher with or without a facilitator
Closing and feedback - Summarize insights - Post-survey cards - Closing	20	The researcher, with or without a facilitator
Total	**180**	

Appendix I

Brief Pre-Survey for In-Person Workshop

Part 1. Parenting Styles

As per your knowledge, please describe your confidence in the following concepts, on a scale of 1 to 5, where 1 is not at all confident, and 5 is the most confident:

1. Indifferent Parenting Style
2. Authoritarian Parenting Style
3. Permissive Parenting Style
4. Authoritative Parenting Style

Part 2. Children's Decision-Making

1. Please describe your agreement on the following ideas, on a scale from 1 to 5, where 1 represents the strongest disagreement and 5 represents the strongest agreement.
   Making decisions is crucial for your children, especially during adolescence and college.
2. Explain your selection of scale.
3. What areas do your children or acquaintances that you know encounter most in making decisions (can choose more than one option):

a. Social relationships
b. Choosing a career
c. Choosing the major
d. Others. Please mention here:

4. What do you often do to support them in achieving their choice?

Appendix J

IRB Approval

MODIFICATION ACKNOWLEDGEMENT

DATE: 22-Jul-2025

TO: Thi Kim Cu Le

FROM: Social and Behavioral IRB

PROTOCOL TITLE: EXPERIENCE WITH AUTONOMOUS PARENTING STYLES AND COLLEGESTUDENTS' DECISION-MAKING

PROTOCOL NUMBER: 2004771-02REVIEW

CATEGORY: Exempt

RISK LEVEL: Minimal Risk

DETERMINATION DATE: 22-Jul-2025

DETERMINATION: Acknowledged

Thank you for your submission to the Creighton University IRB. The IRB has determined that the research protocol continues to satisfy all the criteria set forth at 1) 45 CFR 46.111; 2) 45 CFR 46Subparts B, C, or D (as applicable); and 3) CU HRPP policies. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized.

Modifications acknowledged: revised flyers

The research team is responsible for conducting the research as stated in the protocol most recently reviewed and approved by the IRB, which shall include using the most recently submitted study materials. Should there be any additional changes to the project, it will be necessary to submit a Modification Request through InfoEd. No changes may be made to the existing project until modifications have been approved by the IRB.

If you have any questions, please contact the IRB Office at 402-280-2126 or irb@creighton.edu.

Please include your project title and IRB protocol number in all correspondence with this Board.

Sincerely,

Amy Badura Brack, PhD

Chair, Social Behavioral IRB

Creighton University IRB2500 California Plaza

Omaha, NE 68178-0125

creighton.edu/researchservices

A copy of this letter will be retained in Creighton University's IRB records as per the requirements established at 45 CFR 46.115.

8/16/25, 12:43 PM