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아동가족학석사 학위논문

**The Relations Among Mothers'
Parenting Anxiety, Children's
Prior Learning, Ego Strength,
and Test Anxiety**

어머니의 양육불안, 아동의 선행학습,
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The Relations Among Mothers' Parenting Anxiety, Children's Prior Learning, Ego Strength, and Test Anxiety

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Abstract

The primary goal of the current study was to investigate the relationships among mothers' parenting anxiety, children's prior learning, ego strength, and test anxiety. It aimed to demonstrate that mothers' parenting anxiety affects children's test anxiety, and that children's prior learning acts as a mediating variable in between the two. In addition, it also attempted to establish that children's ego strength can serve as a moderating agent between the relationships children's test anxiety shares with the aforementioned variables.

In order to do so, a survey study designed for 11-12 year-old children and their mothers was conducted in the Seoul Metropolitan Area. During that process, the mothers had the option to participate in the study through an online link, whereas the children all had to submit written survey responses. Included in the questionnaires were basic demographic questions, for both the mothers and the children, and additionally there were items asking them about prior learning. Afterward, the mothers had to respond to a survey scale measuring their parenting anxiety. The children, on the other hand, were required to respond to survey scales measuring their test anxiety and ego strength. By the end of the data collection period, a total of 245 pairs were compiled. However, because some of the data were unusable due to them being incomplete and/or insincere, 38 of them were discarded. A final sum of 207 responses was evaluated for the

current study. The data were analyzed via IBM SPSS 29.0, utilizing varied methods such as descriptive statistics, frequency analysis, correlation analysis, linear regression analysis, and PROCESS macro analysis. The main findings of the current study are as follows:

First, both mothers' parenting anxiety and prior learning affect children's test anxiety in a positive direction. Children reported higher levels of test anxiety when 1) their mothers reported higher levels of parenting anxiety, 2) they were further ahead in their prior learning, or 3) both. Such results are indicative of the fact that children's test anxiety, one of the prime suspects for poor test performance, can be affected by academic and non-academic factors.

Second, prior learning mediates the relationship between mothers' parenting anxiety and children's test anxiety. It was confirmed that the more parenting anxiety a mother feels, the more inclined she is to have her child participate in higher amounts of prior learning, which then contributes to the child's test anxiety. The ironic revelation here is the fact that prior learning, an act intended to boost test performance and grades, can actually be of detriment to those factors.

Third, only some of the subscales under children's ego strength showed to have moderation effects. Children's ego strength as a whole does not moderate the relationships that children's test anxiety shares with prior learning and mothers' parenting anxiety. However, children's sociality moderates the relationship between mothers' parenting anxiety and children's test anxiety, whereas

competence moderates the relationship between prior learning and children's test anxiety. The more competent and self-assured a child feels, he or she is less likely to suffer from test anxiety from prior learning; and when he or she has a good social support system and a reliable group of friends, he or she is less likely to experience high levels of test anxiety due to mother's parenting anxiety.

Lastly, the current study provides implications for future research and potential policies and programs that can develop from here.

Keyword : parenting anxiety, test anxiety, ego strength, prior learning, private education

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I. Problem Statement

One of the most prominent and notable features of Korean society as a whole is its passion for education (Kim, Lee, & Lee, 2005). Perhaps the word “passion” does not even come close to the actual connotation; rather, words like “fervor” or “fever” could be a better fit. The fact that more than 51% of the adult population aged between 25 and 64 in Korea held a tertiary degree (any level of education pursued beyond high school level) in 2021, which is way above the OECD average of 39.9%, corroborates such a fact. Moreover, that number jumps to 69.3% when only people between the ages 25 and 34 are considered, making the country the most “educated” in the world (OECD, 2022; OECD, 2023).

At this point, one might ask why this educational fervor even exists in the first place. Some have argued that it is due to Confucian values--the predominant belief system in Korea--which emphasizes the significance of education and “adoration of learning” (Lee, 2006). Largely, however, it can be attributed to the fact that educational attainment is an extremely helpful tool in social mobility (Kang, 2008; Kim, 2003). In most societies, higher levels of education is typically associated with better paying occupations and higher levels of social recognition and prestige, and Korea is no different (Kang, 2008; Kim,

2003). With such a strong motivator, people have all the reasons to study hard, seemingly without an end in sight. Education is a key tool in surviving the social competition (Adetunji, 2015; PBS, 2011). People vie for better “specs,”¹ trying to get accepted to “better” schools, jobs, neighborhoods, etc. (Han, 2016; Kye & Hwang, 2016; Yeo, 2008). After all, it is only natural for people to want to be better, and feel better, so the education fever seems to be a logical outcome.

This scholarly overenthusiasm, however, started to become a problem—which, of course, is not a surprising outcome given its darker sides. As Confucius once said, “To go beyond is as wrong as to fall short.” Because the importance of grades frequently takes precedence over actually comprehending the subject matter, people became obsessed over grades and going beyond and above to score better than others (Kim, Lee, & Lee, 2005). This culture of the cutthroat race, unfortunately, has permeated through the lives of young children as well, in the form of prior learning.

Prior learning is a type of academic technique, to some extent, that enables a student to study materials that are above his or her level, typically by at least a semester (Ki, 2015). It is an extremely common form of studying in Korea, with most private academies, known as “hagwons,” focusing on prior learning for students. The idea behind such a practice is that if a student preemptively learns

¹ Short for “specifications,” which is a word often used to describe features of technology products such as smartphones and laptops

materials intended for later, that student will perform better than his or her peers when they all reach that level (Lee et al., 2002).

Nonetheless, prior learning--the hallmark of modern Korean education fever--appears to be ineffective for the vast majority of students and subjects (Kim & Shin, 2011; Lee & Lee, 2015; Lee et al., 2016). In fact, there are countless reports of children and adolescents developing mental health issues due to schooling and academic pressures (Jeong, 2021; Jung & Kang, 2014; Kim & Kim, 2015; Park, 2013). A growing number of children are experiencing severe anxiety due to the academic rat race and the environmental factors that maintain such a competitive atmosphere (Yeung & Seo, 2023). There have been terrible incidents in which even students as young as a 5th grader committed suicide over academic stress (Chosun Media, 2016; KBS, 2018). The obsession over schooling and overcompetition have already infiltrated Korean society, and its insidious effects have shown their teeth. Students have verbatim died from academic stress, and many others are suffering greatly from it. Prior learning, to some degree, has become an epidemic in Korean society.

But the prior learning business is still robust as always--rampant, to be exact--at the cost of many, including both the childrens' and parents' mental health, physical health, finances, etc. The question then becomes: "why?" Why does it continue to thrive when its

negative effects have been introduced by empirical research and everyday events? The current study would like to propose that parents' anxiety is what fuels the economy of prior learning at the expense of their children's well-being, based on previous studies (Kim, 2003; Kim, 2017). Primarily focusing on the mothers, it contends that mothers' parenting anxiety will affect children's test anxiety, with prior learning acting as a mediating agent. And because most previous studies have only explored the negative effects prior learning has on children, this study will also attempt to test if children's ego strength can function as a moderating agent for the relationships between mothers' parenting anxiety and children's test anxiety, and prior learning and children's test anxiety.

II. Literature Review

In this chapter, theoretical backgrounds of the current study and an overview of previously done researches and discussions on relevant topics will be presented.

1. Parenting Anxiety

1) Definitions and subcategories of parenting anxiety

Anxiety is an imperative factor for humans and their survival, serving as a built-in warning system for detecting potential dangers and consequences (Bateson, Brilot, & Nettle, 2011; Steimer, 2002; VandenBos, 2007). If humans did not feel any amount of fear or anxiety over some of the common culprits of deaths and injuries—such as heights, vicious animals, fire—the entire human race might have gone extinct long ago. Without a mechanism to detect imminent threats, survival would have been a task with a success rate close to zero.

In modern days, the way in which the aforementioned fear and anxiety present themselves is quite dissimilar from what it used to be

like before—which perhaps can even be described as being a little more advanced and sophisticated—such as worrying about an upcoming presentation, or feeling nervous before an important exam (Bateson, Brilot, & Nettle, 2011).

Parenting anxiety, as the name suggests, refers to the kind of anxiety that is specifically related to parents and caregivers (Park, 2015; We, 2015). An important distinction must be made, however, between the two terms that many often conflate: parenting anxiety and parenting stress. Parenting stress, unlike parenting anxiety, is the kind of tension felt in distressing situations presented by children, through measures such as children’s actions or attitudes that are simply nettlesome (Oh & Kim, 2021; Teshima & Haraguchi, 2003).

Parenting anxiety, however, is not merely defined as “anxiety related to parenting,” and has distinct subcategories that make up the concept. Anxiety, unlike stress, is interpreted as a complex set of affective responses felt in specific situations when the agent perceives an external stimulus as a “threat” (Oh & Kim, 2021; Spielberger, 1972). Different scholars have claimed different sets of subcategories of parenting anxiety, but the ones that pertain to children’s learning may be the following: perfectionism, parenting competence, and anxiety over childrearing. The three subcategories provided are directly from the parenting anxiety scale used by the

current study, adapted from We and Chae (2014)'s study. There are a number of studies that illustrate which traits of parents push them to intervene in their children's education, namely perfectionism (Jung & Kang, 2014).

Additionally, while the term "parenting" may appear somewhat limiting, it can be applied to grandparents, extended family members, foster parents, or any adult who is serving as a primary caregiver for a child. Therefore to some degree, the term "parenting anxiety" is somewhat of a misnomer.

It can be argued that everyone who is raising a child wants to do so *well*--and that can mean two different things (Eom & Song, 2021; Lee & Lee, 2018; Park, 2015). For some, it may mean that they want to perform to their best abilities while achieving the task of childrearing; for others, it may mean that they want the child to be the best version of who they can raise (We, 2015). In other words, the former is more caregiver-focused whereas the latter is more child-focused. One is about the caregiver's competence as a nurturer, and the other is about ensuring the child is the absolute finest version of all possible outcomes (that does not mean, however, that the former does not care about the outcome of the child, as the criterion for how "well" one has raised a child is presented through the child himself/herself). Neither is wrong, nor is one better than the other. Both are dimensions of the wider umbrella of parenting

anxiety, and they are similar in the sense that both are focused on raising the perfect version of the child in the caregiver's mind.

2) Effects of parenting anxiety on children's anxiety

Because anxiety, whichever form it takes, very often influences one's behaviors, parenting anxiety typically alters the affected parent's behavior and mood, which, in turn, can also have an impact on his or her children (Abidin, 1992; Azham & Janon, 2021; Eom & Song, 2021; Harold & Frances, 1995; Park, 2015; Ryoo & Shin, 2018; Parker, 1981; Perlman et al., 2022). There is a substantial body of evidence that illustrates the aforementioned point, with various aspects of a child and his or her life being affected by parenting behaviors and patterns displayed by parents who suffer from parenting anxiety. A study by Eom and Song (2021) delved into the topics such as children's daily stress and depression and revealed that mothers' parenting anxiety has a heavy impact on them. Another research, done by Kim, Yun, and Kim (2022) demonstrated that as the level of parenting anxiety for mothers increased, so did the level of parenting stress and control, which is associated with higher rates of problematic behaviors among children (Sung & Han, 2015; Van den Bergh & Marcoen, 2004). On top of altering the parents'

behaviors, and thus transmitting the anxiety to the children externally, anxiety has also been linked to genetic factors (Craske, 1997; Frank et al., 2006; Van Batenburg-Eddes et al., 2012). Surely, anxiety cannot simply and solely be attributed to either nature or nurture. Anxiety is often a product of both genes and environmental factors, and their interactions (Anagnostaras, Craske, & Fanselow, 1999; Craske, 1997; Frank et al., 2006; Perlman et al., 2022). Studies, however, have exemplified that certain people are genetically predisposed to anxiety, and those who belong to such a group may pass on the genes that can make their children prone to such conditions as well (Craske, 1997; Elizabeth et al., 2006; Manassis & Bradley, 1994; Robinson et al., 1992).

3) Effects of parenting anxiety on children's test anxiety

Since it has been established in the above section that parenting anxiety often affects children's anxiety and can cause other psychological symptoms, this section will now specifically focus on one of the main topics of the current study—test anxiety. In regards to children's test anxiety, there is a significant lack of studies done on the direct relation between parenting anxiety and children's test anxiety. However, there are previous research studies done of the

relationships between children's test anxiety and parent-related factors such as parenting styles, parental attitudes, family interaction patterns, parenting strategies, parental control, etc., which all may be implicitly indicative of parenting anxiety (Besharat, 2003; Otterpohl, Lazar, & Stiensmeier-Pelster, 2019; Peleg-Popko, 2010; Thergaonkar & Wadkar, 2007; Xu et al., 2017).

In a 2007 study done by Thergaonkar and Wadkar, parents were children were assessed on their democratic attitude and test anxiety, respectively. Democratic style of parenting demonstrated a statistically significant negative correlation with children's test anxiety. Thergaonkar and Wadkar implies that higher level of parental control is associated with higher test anxiety level for a child, which is a result that is synonymous with that of Xu et al. (2017). In Besharat (2003)'s study, it was revealed that maternal perfectionistic attitudes were a "significant contribution to [their children's] anxiety associated with an examination" according to its sample. While the study only examined the parents' perfectionism, and not their parenting anxiety, perfectionism is often connected to anxiety, and is sometimes identified as a subcategory under the general umbrella of parenting anxiety (We & Chae, 2015).

2. Children's Test Anxiety

1) Definition of test anxiety

As one progresses through life, it is inevitable that he or she encounters situations in which test taking is required. For the majority of the population, that partake in the formal education system, examinations are a common occurrence that gauge students' academic standings, and their strengths and weaknesses. It is entirely understandable and expected that one may feel a tad uneasy and nervous before an important exam. As explained in the earlier section, anxiety is a survival tool hardwired in the human brain that is designed to elicit a response. In modern times, because tests cause nervousness in people, they are motivated to study for them and progress through the next step (Bateson, Brilot, & Nettle, 2011; Steimer, 2002).

It becomes a problem, however, when one exhibits too many negative symptoms—psychological, emotional, or physical—surrounding a test taking situation, and when they persist for longer than the acceptable amount of time (Hembree, 1988; Im & Bak, 2010; Im & Bak, 2013; Jung & Kang, 2014). The aforementioned symptoms may include but are not limited to the following: insomnia, irritability,

excessive sweating, nausea, fatigue, rapid heartbeat, etc. (McDonald, 2001; Segool, 2009; Spielberger, 2015).

Test anxiety, essentially, is the kind of anxiety that is particular to a specific situation in which one is taking a test where performance evaluation will occur (Choi, 2005; Hong, 2012; Schwarzer, 1981; Spielberger, 1972). Test anxiety may affect the individual before, during, and/or after the examination, and the symptoms may persist throughout the entire process, or appear periodically and intermittently (McDonald, 2001).

2) Negative impacts of test anxiety

The irony of anxiety is that while its primary function is to give a “boost” in situations where it is necessary, it causes damage when there is an excess amount of it, (Bateson, Brilot, & Nettle, 2011; Grogans et al., 2023; Steimer, 2002; Spielberger, 1972). The line between the two is unfortunately very fine, and the threshold is different for everyone depending on various factors such as genetics and environment. As discussed before, a healthy amount of stress is necessary to take certain courses of actions and/or be efficient in a given situation (Bateson, Brilot, & Nettle, 2011; Steimer, 2002).

In the case of tests, an appropriate dose of anxiety will prompt the test taker to prepare for the test beforehand, and make sure he

or she knows the material well to pass it or get a good grade on it (Bateson, Brilot, & Nettle, 2011; Cassady & Johnson, 2002; Steimer, 2002). When that anxiety overflows, however, it will naturally induce a worse outcome for the test taker. Due to the uncontrollable amount of anxiety and the corresponding symptoms, test takers often report not being able to remember the necessary information for the exam, even after having studied for it, or being in physical pain to the point where test taking is impossible (Hong, 2012; McDonald, 2001). In such cases, a student's academic performance will falter, worsening the outcome (Buchwald & Schwarzer, 2010; Eysenck & Calvo, 1992; Mazzone et al., 2007; Park & Im, 2010).

3) Test anxiety in children

Test anxiety in children can present itself in many different forms. Some are physical symptoms, as mentioned above, and others are more psychological, showing high rates of comorbidity with other anxiety related disorders (Beidel & Turner, 1988; King, Ollendick, & Gullone, 2007; McDonald, 2010). Overall, there is an upward trend in the prevalence of test anxiety in children (McDonald, 2010; Wren & Benson, 2007). This uptick in numbers can be attributed to the fact that the world is growing increasingly more competitive, with the number of students applying to college escalating each year (Nietzel,

2023). Because now there are more players in the same game, even just a small mistake has a bigger consequence and poses greater threats to one's security and position on the board. With additional competition, essentially every test becomes high-stake.

Test anxiety has been widely recognized as a critical problem for students by many, especially in European countries and in the U.S. (Cheek et al., 2002; von der Embse, Barterian, & Segool, 2013). In those countries, endeavors to relieve students from their test anxiety have continued. Some schools have hired school psychologists and psychotherapists, while others have implemented classroom activities and programs that can help students learn the skills to cope with such anxieties (Cheek et al., 2002; von der Embse, Barterian, & Segool, 2013). In Korea, however, not a lot of intervention efforts have been made, and therefore the rate of untreated test anxiety still remains fairly high (Park, 2023; Power, 2010).

3. Children's Prior Learning

1) Prior learning as a phenomenon in Korea

“Prior learning,” in itself, is not an uncommon or atypical occurrence in education, worldwide. The term simply denotes that someone has already acquired a skill or knowledge outside of the formal education system (ILO, 2023). Countries such as the United Kingdom, Australia, New Zealand, Canada, and the United States all try to recognize people's prior learning in order to increase efficiency in their fields of employment and study (ILO, 2023; UNESCO, 2023). It is important to note, however, that in those countries the notion of “prior learning” is associated with adults who are either in their postsecondary education institutions or full-time workplaces and that the skills acquired through such a measure is usually related to employment-related capabilities (Aggarwal, 2015; ILO, 2018).

Compared to the countries mentioned above, the circumstances surrounding prior learning are a lot different in Korea. In Korea, when the term “prior learning” is mentioned, it is almost always referring to the practice of students, typically in their elementary and secondary years, studying the materials that are above their

current grade levels (Ki, 2015).

Despite it being a vicious practice, its place and power in Korean society never seems to falter. In fact, the private education sector in Korea is seeing annual growth and in 2022 the total expenditure on private education reached 26 trillion won—an all-time high (Kim, 2023; Yeung & Seo, 2023). The reason prior learning as a socially ingrained practice is able to survive, and not only that but *thrive*, is because the tutors and private academies, commonly known as “hagwons,” prey on parents’ anxiety in order to market their prior learning classes. It is certainly not uncommon to see cruel, borderline unethical, marketing schemes devised by hagwons that promote prior learning even for children who are barely school aged, as shown by the figures below. Unfortunately, there is an ongoing trend of parents being blindsighted by anxiety and rashly signing up for prior learning institutions for their children in the hopes that doing so will help the children academically. The parents, however, are not to blame—at least not as much as the institutions who take advantage of such an anxiety (Hwang, 2023; Lee, 2023; Yeung & Seo, 2023).

In June of 2023, the Korean Ministry of Education under President Yoon announced that it will exclude “killer questions” from the Korean national college entrance exam (Hwang, 2023; Lee, 2023; Yeung & Seo, 2023). The exam’s official full name is the College

Scholastic Ability Test, more commonly known as “Suneung,” and it is an 8-hour long exam that awaits students at the end of their secondary school career that serves as a determining factor for college applications. The “killer questions” at issue here refer to questions on Suneung that are notoriously abstruse and convoluted. The difficulty of those questions, however, are not the only point of contention. It is mainly the fact that those questions involve materials that are not covered in the official public education curriculum. Therefore, only those participating in prior learning are able to solve those questions correctly, in most cases. Due to it being the situation, opinions voicing dissatisfaction and concerns over inequality and discrimination rose which led to the Yoon administration abandoning the killer questions from Suneung in an attempt to eliminate the necessity of prior learning and make the field fairer for everyone. While some have expressed positive reactions, others have called it a “surface-level solution,” and that the practice of prior learning will continue on (Yeung & Seo, 2023). Due to the proposal being extremely fresh, its full effects have not been uncovered. For the time being, however, prior learning is still an ongoing practice in Korea (in July of 2023).

2) Effects of prior learning on children

To put it quite plainly, prior learning has been shown to have little to no positive effect on one's academic skills for the most part (Kim & Shin, 2011; Lee et al., 2016; Lee & Lee, 2015). In fact, not only does it serve no useful function, but it actually is shown to be detrimental to children, especially in regards to their study motivation and well-being (Ahn, 2009; Im, 2003; Kim, 2009; Lee et al., 2002; Park, 2013; Song, 2012; Yun, 2006). Kim and Shin (2011)'s study has suggested that because most students partake in prior learning due to external factors, such as pressure from parents, they are not motivated to learn the materials they are not interested in. This, in turn, makes them a passive learner who are basically "voyeurs" in a classroom; they do not pay attention nor do they actively participate. Such a method is not an effective way of absorbing (and later retaining) information, and has been established to be futile (Kim & Shin, 2011; Lee et al., 2002).

Copious amounts of studies have confirmed that prior learning does affect children's well-being as well, sadly in a negative fashion. Prior learning and children have been linked with increased rates of anxiety reported among children (Lee et al., 2016; Roh et al., 2012).

Prior learning, as it is often forced upon children, frequently interfere with their well-being by adding unnecessary stress onto their lives and sometimes causing clinical anxiety and depression, sometimes even leading children to extreme measures such as

committing suicide to escape the harsh reality (Ahn, 2009; Chosun Media, 2016; Im, 2003; KBS, 2018; Kim, 2009; Lee et al., 2002; Park, 2013).

4. Children's Ego Strength

1) Definition of ego strength

In order to explicate what ego strength is, it is necessary to define what "ego" is and take a look at the concept of ego function. Ego is one of the central ideas in Freudian psychology, roughly translating to "the self" (Freud, 1923; Loevinger, 1979). According to the definition provided by the American Psychological Association, it also refers to "all the psychological phenomena and processes that are related to the self and that comprise the individual's attitudes, values, and concerns" (VandenBos, 2007). The ego is related to the properties that include the self such as self-esteem, self-competence, self-control, self-confidence, etc. (Davis et al., 1983; Heppner & Kernis, 2007; Ward & Vealey, 2012). Therefore, it can be said that those who have a strong sense of ego, a strong sense of self, tend to have a better functioning identity and belief in themselves, boosting the qualities sampled above. Ego function is the "various activities of the ego," which includes functions such as judgment, adaptation to reality, regulation and control, and thought process (Bellak & Hurvich, 1969; VandenBos, 2007). Those who have established a healthy ego are more likely to exhibit better ego functions (Bellak &

Hurvich, 1969).

The term “ego strength” has taken on various meanings, depending on the scholar defining it. Some define it as one’s ability to logically balance and reconcile one’s own desires and the rules one needs to follow in order to harmoniously live in a society, while others argue it is the capability to “tolerate frustration and stress” or having a stable sense of self (Burns, 1991; Lake, 1985; VandenBos, 2007). In the current research, its meaning will be defined as the robustness of one’s ego, indicating how well one’s ego is established and functioning (Kim & Choi, 2013). To be more specific, one’s ego strength is determined by how well one perceives oneself to be an autonomous being with high levels of self-related concepts (e.g. self-efficacy, self-competence, etc.), while being able to harmoniously incorporate various ego functions that deal with cognitive, affective, and societal aspects such as self-regulation, reality testing, adaptive adjustment, and so on (Bellak & Hurvich, 1969; Davis et al., 1983; VandenBos, 2007).

Ego strength as a notion can be approached from many different angles. One such way is through the lens of psychopathology. Not only is a strong, healthy ego necessary for well-being, but ego strength is also a helping agent that affords restorative benefits for pathological symptoms and conditions as well (Curtis, 2012; Einy, Narimani, & Movahhed, 2019; Hosseini, 2022; Kirsch, 2016; Vasel et

al., 2016). A more in-depth coverage of such a topic will be provided in the following sections.

2) Ego strength in children

Higher levels of ego strength in children have been linked with positive aspects such as protection against adverse mental health outcomes, higher life satisfaction, better peer relations, positive stress coping styles, etc. (Hamachek, 1988; Kim, 2015; Kim & Choi, 2013; Ramgoon et al, 2009). Given that higher levels of ego strength serves beneficial roles in adults, such results do not come as a surprise. Based on the previously mentioned studies, it can be concluded that ego strength plays an undeniably crucial role in children's mental health, especially in terms of stressful situations and adverse life events—test and excessive studying, to name just a few.

Ego strength in children, like many other concepts, can be described as having a diverse set of distinctive characteristics, or subcategories, such as coping strategy and frustration tolerance (Lee, Lee, & Yoo, 2021). The current study will, however, mainly focus on the four subscales from the Ego Strength Scale for Children developed by Kim (2012) and later verified by Kim and Choi (2013), as it is one of the primary tools for the current study. Under the scale,

there are four dimensions: Competence, Initiative, Resilience, and Sociality. Competence reflects a child's confidence and self-esteem, supplying the child with a positive outlook. Initiative shows a child's eagerness to work independently via internal self-control, and a drive to power through challenging situations. Resilience is a representation of a child's ability to defend self and maintain his or her emotional equilibrium as much as possible in stressful circumstances, while being able to quickly recover. Lastly, sociality attests to a child's capacity to abide to appropriate social rules and flexibility in social situations.

Due to such characteristics of ego strength, children who report high levels of it tend to do well in academic settings. In school settings, the most advantageous feature of children's ego strength is perhaps its ability to equip the children with tools to adjust to school and various situations—both good and bad—that occur there. Kim (2016)'s study has discovered that ego strength in 6th graders served as a pivotal factor in their school adjustments. Children with stronger senses of ego were more well-accultured and well-adapted within the school environment, which sustains both academic and non-academic situations (Kim, 2016).

In order for a child to successfully develop a strong ego, there are a few important factors such as maternal provision, parenting style, milestones in life, etc. (Besharat, 2015; Erikson, 1963;

Hamachek, 1988; Lee, Lee, & Yoo, 2021; Winnicott, 2016). There is no single factor that determines a child's ego strength. Rather, it is a combination of interactions carried out by both nature and nurture. When these necessary elements are not present in a child's life, he or she will have a much harder time developing a healthy sense of ego, making him or her more vulnerable to life's difficulties (Besharat, 2015).

3) Ego strength as a moderator of anxiety

As mentioned above, ego strength can serve as an excellent shield against the blades of depression, stressful situations, and, perhaps most importantly for the purpose of the current study, anxiety. The reason that the current study--unlike some of the previous studies that concentrated on other variables such as self-efficacy, self-esteem, or any other factors related to the ego and its functioning--decided to select ego strength as a focal point in particular is the fact that ego strength has the potential to combat psychopathology (Curtis, 2012; Einy, Narimani, & Movahhed, 2019; Hosseini, 2022; Kirsch, 2016; Vasel et al., 2016). Directly or indirectly, ego strength often aides people in developing more positive outlooks on life, which can help them establish healthier habits. Therapies focusing on boosting ego strength have been verified to show healing

qualities (Einy, Narimani, & Movahhed, 2019; Vassel et al., 2016).

Those with high ego strength have reported on low measures of anxiety, as they find their loci of control and emotional coping as being internal (Schill & Tata, 1988; Shepherd & Edelman, 2009). Perceiving one's locus of control as being within oneself is a crucial element in managing anxiety. Since anxiety is often associated with a sense of loss of control, being secure in holding the power to make decisions for oneself is tantamount to recognizing oneself as an autonomous and self-sufficient individual. All of those processes are supported by a strong sense of ego. In addition, people with high levels of ego strength are more likely to engage in positive relationships, further expanding their friend groups and social support, which can also help reduce anxiety (Fend, 1990). Surprisingly, having a higher level of ego strength is not only indicative of a healthier mind, but is also related to better physical health as well as faster recovery, if one is already ill (Settineri et al., 2012). Since being able to stay physically healthy is one of the key elements of reducing anxiety, having a strong sense of ego and a healthy body can only help, in terms of moderating anxiety levels.

Currently, there is a lack of scientific evidence that ego strength moderates or affects test anxiety in particular.

III. Research Questions and Definitions

1. Research Questions

The main purpose of this study is to examine the relationship between mothers' parenting anxiety and children's prior learning, ego strength, and test anxiety. Specifically, it will aim to demonstrate that prior learning mediates the relationship between mothers' parenting anxiety and children's test anxiety and that children's ego strength moderates the relationships that children's test anxiety shares with mothers' parenting anxiety and prior learning. The research questions of interest are as follows:

【Research Question 1】 Does mothers' parenting anxiety affect children's test anxiety?

【Research Question 2】 Does mothers' parenting anxiety affect children's prior learning²?

【Research Question 3】 Does children's prior learning affect children's test anxiety?

【Research Question 4】 Does children's prior learning mediate the relationship between mothers' parenting anxiety and children's test

² children's prior learning includes the amount for those who are participating in it

anxiety?

【Research Question 5】 Does children's ego strength moderate the relationship between mothers' parenting anxiety and children's test anxiety?

【Research Question 6】 Does children's ego strength moderate the relationship between children's prior learning and children's test anxiety?

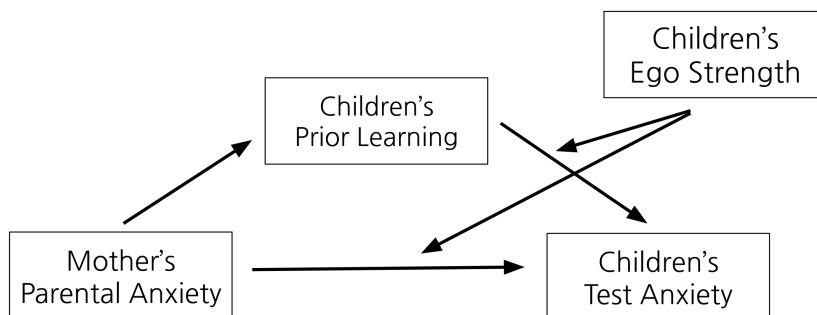


Figure 1. Research model based on the hypotheses

2. Working Definitions of Key Terms

For the purpose of the current study, four key terms have been defined as follows according to the definitions and

interpretations provided by previous studies.

1) Parenting anxiety

The term “parenting anxiety” will be defined as a kind of negative affect that is felt by mothers when they raise their children (Kim, 2019; We, 2014). The worries that are involved with such an anxiety, as the name suggests, are related to childrearing and family (Berk & Hanson, 1991; Kang, 2003). The concept of parenting anxiety used for the current research consists of five subcategories, which are parenting competence, perfectionism, attachment anxiety, anxiety over childrearing, and anxiety over social support (We & Chae, 2015). As evident from the names of each category, some are related to the mothers’ concerns about themselves, whereas others are related more to the children and their well-being (Park, 2015; We & Chae, 2015).

2) Test anxiety

Test anxiety in this study refers to the kind of anxiety—a both emotional and physical response—that is felt in a specific situation in which one understands he or she is being judged based upon performance and/or over a situation that involves test taking in

general (Choi, 2005; Hong, 2012; Schwarzer, 1981; Spielberger, 1972). Test anxiety may affect the individual before, during, and/or after the examination. The concerns surrounding a test may involve those about the test itself, the outcome, one's future, etc. The current study views test anxiety as the kind of negative psychosomatic response exhibited by children before, during, and/or after an academic assessment test.

3) Prior learning

In the current study, "prior learning" is defined as prematurely learning academic materials that are at least a semester ahead of a student's current grade and semester (Ki, 2015). For instance, a student studying a chapter or two in advance for his or her class the following week would not count as prior learning. If the student started to watch online classes intended for older students, however, such an action can be referred to as prior learning.

4) Ego strength

Ego strength is the soundness and robustness of one's ego function (Kim & Choi, 2013). According to Erikson's theory of psychosocial development, whenever an individual reaches the

appropriate milestones set for each stage of life, he or she can develop a sense of competence and therefore a stronger sense of ego—ego strength, in other words (Erikson, 1963; Lee, Lee, & Yoo, 2021). An individual with a high level of ego strength is able to take full advantage of his or her ego function and better adapt to reality, showing psychological and emotional stability (Kim & Choi, 2013). In this study, children’s ego strength refers to how well-constructed a child’s ego function is, and how well he or she is able to utilize it in reality.

IV. Research Methods

In this chapter, methodological explanations pertaining to the current study will be provided. In order to answer the research questions, a survey study was designed and conducted. Every process involved in the study was based on previously published research results.

1. Participants

In Korea, those who decide to participate in prior learning typically do so at around 11-12 years of age (Ki, 2015; Kim, 2017). This is due to the fact that being 11 to 12 years old means being in the 5th and 6th grades in elementary school, which is the step right before entering middle school. It is not uncommon for students and their parents to start worrying about college once the students enter middle school in Korea (Hong & Park, 2019). This concern for the future pushes them to “prepare” for middle school by covering the academic materials in advance, while they are still in elementary school, making them believe that doing so will prove advantageous in the race towards college entrance. For that reason, the appropriate participants were determined to be children aged 11-12 and their

mothers.

In order to estimate the approximate number of sample needed for this study, G*power version 3.1 was used. According to G*power computations, to execute regression analyses, verifying the research questions of interest, a total of 129 sample were needed ($f^2=.15$, $\alpha=.05$, $1-\beta=.95$; Faul, Erdfelder, Buchner, & Lang, 2009). Accounting for potential defective data such as incomplete, inconsistent, or insincere responses and outliers, the final number of responses needed to be collected was determined to be 200. It should be noted that the number 200 specified here refers to the number of pairs, not individuals.

Participants were gathered from the Seoul Metropolitan Area (also known as the Seoul Capital Area; includes the city of Seoul, Incheon, and Gyeonggi Province in South Korea). The participants were pairs, comprised of a mother and her child. The only condition for participating in the study was that the child had to be either 11 or 12 years of age (5th or 6th grade in the Korean education system). A total of 245 pairs participated, but 38 out of the 245 were eliminated from the analysis process, as those responses were unusable due to them being incomplete, inconsistent, insincere, or outlying. Therefore, the final number of data for the statistical analyses was determined to be 207 pairs of children and their mothers.

Among the 207 children, 80 (38.6%) were boys and 127 (61.4%)

were girls, with 111 (53.6%) of them being 11 years old and 96 (46.4%) being 12 years old. With only 22 (10.6%) of the children responding that they are not participating in prior learning, 185 (89.4%) responded that they are at least a semester ahead of their peers ($M=2.25$, $SD=1.57$). Among those who responded they were participating in prior learning, the highest number of children reported being 2 semesters (1 full academic year) ahead ($n=65$; 35.1%). That number was followed by 51 children (27.6%) being ahead by 1 semester, 33 children (17.8%) being ahead by 4 semesters, 18 children (9.7%) being ahead by 3 semesters, 10 children (5.4%) being ahead by 6 or more semesters, and lastly 8 children (4.3%) being ahead by 5 semesters. From the 185 children who responded they were studying ahead, 124 children (67%) reported that they were studying 2 or more subjects ahead. It was also revealed that among the 185 children, more than half ($n=104$, 56.2%) of them answered that they were engaging in prior learning due to external reasons and that they did not choose to do so themselves.

As for the mothers, it was discovered that most of them were in their 40s of age ($n=113$, 54.6%), with 87 of them being in their 30s (42%), 6 in their 50s (2.9%) and 1 identifying as being younger than 30 (.4%). Regarding the mothers' subjective socioeconomic statuses, 84 of the mothers (40.6%) reported that they view themselves as being in the Middle-High class, followed by 70 responses that said Middle

class (33.8%), 23 Middle-Low class (11.1%), 22 High class (10.6%), and 8 Low class (3.9%). Therefore, it can be said that the majority of mothers view themselves as being somewhere in the “middle” spectrum (n=177, 85.5%). In addition, the overwhelming majority of them held a postsecondary degree (n= 135, 65.2%), with 37 holding a secondary degree (17.9%) and 35 holding a postgraduate degree (16.9%).

<Table 1> Demographics

N=207

		n (%)
Children's age	11	111 (53.6)
	12	96 (46.4)
Children's gender	Male	80 (38.6)
	Female	127 (61.4)
Prior learning	Participating	185 (89.4)
	Not participating	22 (10.6)
Reason(s) for prior learning	Own volition	81 (43.8)
	External	104 (56.2)
Number of subjects studied	One	61 (33)
	More than one	124 (67)
Amount ahead (if participating in prior learning)	1 semester	51 (27.6)
	2 semesters	65 (35.1)
	3 semesters	18 (9.7)
	4 semesters	33 (17.8)
	5 semesters	8 (4.3)
	6 semesters or more	10 (5.4)
Mothers' age	Less than 30	1 (.4)
	30-39	87 (42)
	40-49	113 (54.6)
	50 or above	6 (2.9)
Mothers' subjective socioeconomic status	High	22 (10.6)
	Middle-High	84 (40.6)
	Middle	70 (33.8)
	Middle-Low	23 (11.1)
	Low	8 (3.9)
Mothers' level of education	Postgraduate	35 (16.9)
	Postsecondary	135 (65.2)
	Secondary	37 (17.9)

2. Tools

In order to examine the relationship between mothers' parenting anxiety and children's prior learning, ego strength, and test anxiety, a survey study was conducted. The following sections describe in depth the intended data the survey questionnaire attempted to obtain, with examples of some of the items.

1) Demographic information

For the mothers, the survey questionnaire was divided into two parts, one on demographics and the other on parenting anxiety. The first set of questions were about demographics, and included items such as the mother's age, subjective socioeconomic status, level of education (highest degree attained), and an inquiry about whether her child(ren) was participating in prior learning or not.

For the children, the survey questionnaire was comprised of four sections, each asking the child to fill out answers about demographics, prior learning, test anxiety, and ego strength. The part on demographics included items regarding the child's gender, grade, and age. The part on prior learning asked the child if he or she is participating in prior learning, what subject(s) he or she studies, if the participation is through one's own will or others', and

how “ahead” he or she is.

2) Mothers’ parenting anxiety scale

The latter half of the questionnaire incorporated a parenting anxiety scale modeled by We and Chae (2015). Among the questionnaires available for measuring parenting anxiety, this particular set was deemed the most appropriate as it included subsections pertaining to factors such as perfectionism and concerns over parenting competence.

We and Chae (2015) adapted and developed their Parenting Anxiety Scale based on previous studies, and created a set of items that are apt for parents living in Korea. There were five subscales, each measuring Parenting competence, Perfectionism, Attachment anxiety, Anxiety over childrearing, and Anxiety over social support. Some of the items, such as “I’m nervous even after always consulting books on *infant care*, the internet, and counseling services [italicization added for emphasis],” were deemed not age-appropriate for the subjects of the current study, so in some instances the language was changed to better fit the age of the subjects. There were a total of 26 items, and all of them were measured using a 5-point Likert scale (Cronbach’s $\alpha=.89$). Each of the number equals to the following reactions: 1 = Strongly disagree, 2 = Disagree, 3 =

Neutral, 4 = Agree, 5 = Strongly agree. Higher score equates to higher level of parenting anxiety.

3) Children's test anxiety scale

The section in which the child was asked to answer questions on test anxiety used the Test Anxiety Inventory from Hong (2012)'s study, which was adapted and translated by Ko in 1992 (Ko, 1992; Spielberger, 1980). It is one of the most widely used inventories for measuring test anxiety, with studies from both Korea and other countries employing it (Choi, 2016; Crişan & Copaci, 2015; Hong & Choi, 2017; Hong, 2021; Ko, 1992; Mousavi, Haghshenas, & Alishahi, 2008; Thyer & Papsdorf, 1982).

The scale included subscales such as Total, Emotionality, and Worry. Emotionality refers to items that are related to affective aspects of test anxiety, while Worry refers to those that are related to the cognitive sides. Total refers to items that showed high correlation with those in both Emotionality and Worry. Examples of the items included in the scale are: "Sometimes I worry whether or not I can get into schools I want to go to" and "I cannot answer some questions while taking an exam because I forget the materials that I even studied for due to anxiety." As shown through the examples, the test anxiety scale asks the children about their mindsets, attitudes, and

emotions towards and during an exam (however, it is not limited to those, as it also includes items that ask them about how they feel before and after an exam as well). The scale included a total of 20 items, and used a 4-point Likert scale (Cronbach's $\alpha=.86$). Each possible number from the survey correlates to the following responses: 1 = Almost never, 2 = Sometimes, 3 = Frequently, 4 = Almost always. Higher score means higher level of test anxiety.

4) Children's ego strength scale

The last part of the survey used the Ego Strength Scale for Children developed by Kim (2012) to assess the child's ego strength. The scale was later verified by Kim and Choi (2013), and demonstrated high levels of both reliability and validity. The scale included subcategories such as Competence, Initiative, Resilience, and Sociality. Each of those subcategories serve as a hallmark for a well-developed ego, and oftentimes work conjointly.

Kim and Park (2013)'s study revealed that each of the subcategories have shown to have high levels of correlations with one another as well. Some of the items that were contained in the scale include: "I know what I want to be in the future, and I feel like I will be able to achieve that dream" and "I like to cooperate with friends in a team or compete against them in a healthy way." The

scale contained a total of 26 items, all of them using a 5-point Likert scale (Cronbach's $\alpha=.88$). Each possible numerical response correlates to the following: 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree. Higher score means higher level of ego strength.

3. Procedures

1) Recruitment

After having been approved by the Institutional Review Board of Seoul National University (No. 2305/003-006), procedures for the actual research process began. The research sample was recruited from the Seoul Metropolitan Area, using a flyer promoting the current research study. Those who wished to participate contacted the researcher, who then provided further instructions on how to proceed. For mothers, who had the choice to complete the survey through an online link provided by Google Forms, either the link itself or the QR code leading to the link was provided. For children, because the Institutional Review Board at Seoul National University prohibits minors from participating in online surveys, all survey forms were delivered through paper copies, and the responses were all handwritten.

The researcher also contacted elementary schools in the Seoul Metropolitan Area, and one school located in the city of Siheung in Gyeonggi Province was willing to participate. The researcher visited the said school and distributed printed copies of the questionnaires to the students in the 5th and 6th grades.³ One homeroom class,

³ To ensure anyone and everyone who wished to participate could do so, even at a later time, a

comprised of 20 to 29 students, from each grade was visited. However, data were collected from a little over 30 students from each grade due to some of the students introducing the current study to their friends who are in different homerooms. Completed questionnaires were collected by the researcher. Responses from Siheung accounted for about 32% of the entire sample.

All participants submitted written informed consent prior to completing the questionnaires.

2) Data collection

Data were collected through both online and offline measures. Every response from the children were written, as they cannot take part in online studies under the policies established by the Institutional Review Board at Seoul National University prohibits. Therefore the mothers, being over the Korean age of majority (19), had the option to complete the survey online, whereas the children did not. Both the mothers and children at the elementary school, however, submitted physical copies of their questionnaires to the researcher. The survey data from the rest of the mothers were a mixed collection of online and written data, whereas the data from children were all written. Data collection process took place over a

digital copy of the surveys was also sent to one of the faculty members so the surveys could be readily printed whenever necessary.

period of 15 days, and every participant were awarded with the promised coupon after the data collection period.

4. Analytical Methods

In order to statistically analyze the data collected, the IBM SPSS Statistics software version 29.0 and PROCESS macro, an unofficial extension pack for SPSS developed by Andrew F. Hayes, were used. PROCESS macro uses bootstrapping methods in which the dataset is resampled and simulated multiple times to ensure accuracy and efficiency (Hayes, 2012; Hayes, 2017).

Prior to performing the analyses that are applicable to the established research questions, frequencies were calculated using IBM SPSS Statistics 29.0. Afterwards, descriptive statistics were performed to summarize the data.

Then, to ensure the scales used in the survey were all reliable, reliability tests were done. All of them had a Cronbach's alpha value of .86 or higher, and a factor analysis value of .4 or higher, so it can be concluded that in terms of reliability the scales were dependable.

For the main analyses, correlation analysis, linear regression analysis, and PROCESS macro analysis were performed in order to explore the research questions and examine the relationship between each variable.

V. Results

This chapter will describe in detail the results of the study and statistical analyses. It will first provide the descriptive statistics, and address the research questions one by one, in order.

1. The relationships among mothers' parenting anxiety, children's prior learning, children's ego strength, and children's test anxiety

To first report on the survey scores, the mean scores for mothers' parenting anxiety, children's test anxiety, and children's ego strength were 68.12 (SD=20.76), 38.18 (12.02), and 101.58 (20.94), respectively. As evident from the results, most of the respondents show low to moderate levels of anxiety—both parenting and test—and most of the children who participated have demonstrated fairly high levels of ego strength as well.

In regards to the dimensions each scale attempted to measure, there were some differences in the scores. For mothers, the subcategory that caused them the highest level of anxiety was parenting competence (M=18.09, SD=5.77). For children, the

subcategory that caused them the highest level of anxiety was emotionality (M=15.04, SD=5.54). As for children's ego strength, children typically scored the highest on competence (M=28.66, SD=5.64).

<Table 2> Descriptive Statistics of Mothers' Parenting Anxiety, Children's Test Anxiety, and Children's Ego Strength **N=207**

	Range of Possible Score	Min. Score Recorded	Max. Score Recorded	M(SD)
Mothers' Parenting Anxiety*	26 - 130	27	122	68.12 (20.76)
Children's Test Anxiety**	20 - 80	20	77	38.18 (12.02)
Children's Ego Strength***	26 - 130	40	130	101.58 (20.94)

*On a 5-point Likert scale, 26 items total

**On a 4-point Likert scale, 20 items total

***On a 5-point Likert scale, 26 items total

<Table 3> Descriptive Statistics of the Subscales

N=245

	Subscales	Range	Min.	Max.	M(SD)
Mothers' Parenting Anxiety	Parenting competence	6-30	6	30	18.09(5.77)
	Perfectionism	6-30	6	29	15.02(5.65)
	Attachment anxiety	5-25	5	25	11.38(4.83)
	Anxiety over childrearing	5-25	5	24	14.47(4.69)
	Anxiety over social support	4-20	4	20	9.15(3.87)
Children's Test Anxiety	Total	4-16	4	15	8.46(2.30)
	Emotionality	8-32	8	32	15.04(5.54)
	Worry	8-32	8	32	14.68(5.33)
Children's Ego Strength	Competence	7-35	13	35	28.66(5.64)
	Initiative	7-35	7	35	27.33(6.14)
	Resilience	6-30	6	30	21.64(5.69)
	Sociality	6-30	6	30	23.95(5.78)

Then, correlation analysis was conducted to examine the general relationship between each variable and the individual factors. For binary variables such as children's gender, point-biserial correlation analyses were conducted to validate the correlations.

Focusing on the main variables discussed in the current study, mothers' parenting anxiety showed negative correlations with mothers' age ($r=-.27, p<.01$), education attainment level ($r=-.23, p<.01$), and subjective socioeconomic status ($r=-.18, p<.01$), but a positive correlation with children's test anxiety ($r=.18, p<.05$) and the amount of prior learning children have done ($r=.19, p<.01$). This indicates that in general, mothers who are older, have a higher education attainment level, and perceive themselves to be more "stable" in terms of subjective socioeconomic status tended to be related to "less" anxiety. It is crucial to note, however, that at this stage this analysis does not indicate direction and therefore it cannot be said that mothers who present such features *are* necessarily less anxious *because* of those factors. Nonetheless, the higher the score on the parenting anxiety scale, the lower the score on the ego strength scale for children and vice versa. Mothers who were more anxious were also closely related to higher levels of prior learning.

Children's test anxiety exhibited correlations with reason(s) for prior learning⁴ ($r_{pb}=.32, p<.01$), mothers' parenting anxiety ($r=.18,$

⁴ For the reason(s) for prior learning, which was a nominal variable based on a yes/no question, 1 was coded as "have decided to participate in prior learning

$p < .01$), the amount of prior learning they have done ($r = .18, p < .01$), children's ego strength ($r = -.54, p < .01$), and mothers' subjective socioeconomic status ($r = .16, p < .05$), with the first three having a positive correlation and the rest negative. Such results point to the fact that highly anxious children share a relation with externally-driven and higher amounts of prior learning and higher parenting anxiety levels from mothers. Children's ego strength and mothers' subjective socioeconomic status, however, will be at opposite directions from children's test anxiety.

Children's ego strength demonstrated positive correlations with mothers' subjective socioeconomic status ($r = .28, p < .01$) and children's gender ($r_{pb} = .15, p < .05$)⁵, while showing negative correlations with reason(s) for prior learning ($r_{pb} = -.28, p < .01$) and children's test anxiety ($r = -.54, p < .01$). As for the children's gender, it has been noted in Kim and Choi (2013)'s study that certain subscales of the Ego Strength Scale for Children were gender-dependent, with a particular gender showing higher scores over the other at times, so this result is reflective of such facts. According to the results, it can be said that generally children who display a high level of ego strength share a negative relationship with externally-driven prior learning and high levels of test anxiety.

through own volition," and 2 was coded as "have decided to participate in prior learning due to external reasons."

⁵ 1 = male, 2 = female

Lastly, the amount the children were “ahead” of their peers academically was positively correlated with children’s age ($r_{pb}=.15$, $p<.05$), mothers’ parenting anxiety ($r=.19$, $p<.01$), and children’s test anxiety ($r=.18$, $p<.01$). It is clear from the figures that typically, as children get older and approach their middle school years, they tend to be associated with partaking in prior learning further, being semesters ahead of their current academic grade.

<Table 4> Correlation relationship of demographic and main variables

	1	2	3	4	5	6	7	8	9	10
1. Mother's age	-									
2. Mother's level of education	.08	-								
3. Mother's subjective socioeconomic status	.05	.36**	-							
4. Child's age	-.01	.00	.06	-						
5. Child's gender	-.04	.06	.17*	.20**	-					
6. Reason(s) for prior learning	-.12	-.00	.02	-.02	.02	-				
7. Mother's parenting anxiety	-.27**	-.23**	-.18*	.11	.01	.10	-			
8. Child's test anxiety	-.13	-.07	-.16*	-.02	-.10	.32**	.18**	-		
9. Child's ego strength	-.08	.09	.28**	.12	.15*	-.28**	-.08	-.54**	-	
10. The amount of prior learning	.02	-.08	-.03	.15*	.14	.03	.19**	.18**	-.04	-

2. Direction of influence between variables

In order to further assess the research questions posed at the beginning, regression analyses were performed. In order to do so, IBM SPSS 29.0 and PROCESS macro Models 1, 4, and 15 were used. The number of bootstrapping was set at 5,000 and the confidence interval was set at 95%. The conceptual diagrams for each model have been provided below.

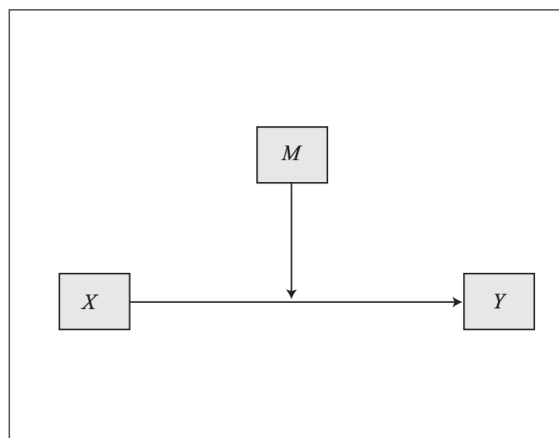


Figure 2. Model 1 of PROCESS macro by Andrew F. Hayes

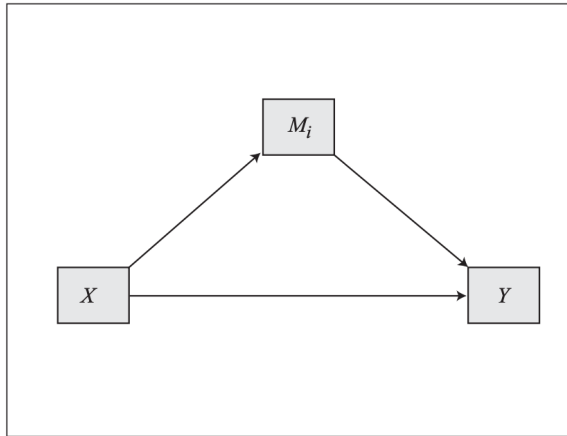


Figure 3. Model 4 of PROCESS macro by Andrew F. Hayes

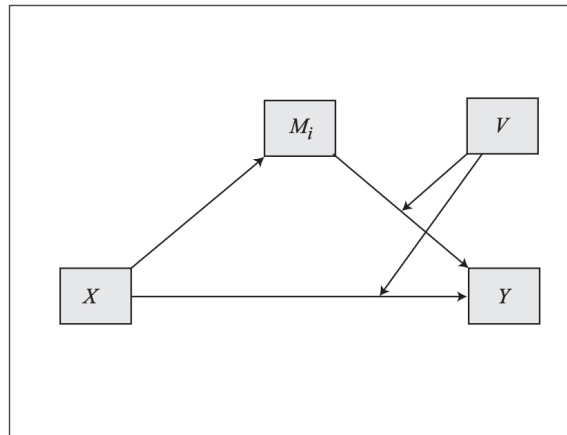


Figure 4. Model 15 of PROCESS macro by Andrew F. Hayes

First, in order to test the original research model, PROCESS macro Model 15 as suggested by Hayes (2017) was used, while controlling for mothers' subjective socioeconomic status, mothers' level of education, children's gender, and children's age, to calculate the following results:

According to the mediation effect model, the independent variable mothers' parenting anxiety affected the dependent variable prior learning in a statistically significant way ($\beta = .3231$, $p < .01$), showing a positive relationship. This result indicates that when mothers show a higher level of parenting anxiety, the amount of prior learning their children engage in increases.

According to the moderation effect model, mothers' parenting anxiety affected children's test anxiety in a statistically significant way ($\beta = .1330$, $p < .05$), showing a positive relationship. Such a result reflects the fact that when mothers show a higher level of parenting anxiety, their children also show higher levels of test anxiety. Prior learning affected children's test anxiety in a positive direction as well ($\beta = .0660$, $p < .05$), signifying that the more ahead a child is in his or her prior learning, the more anxious he or she feels. At this stage, it becomes evident that prior learning mediates the relationship between mothers' parenting anxiety and children's test anxiety.

The results, however, failed to evidence that children's ego strength, altogether, moderates the relationships between mothers' parenting anxiety and children's test anxiety, and prior learning and children's test anxiety. Therefore, additional regression analyses were administered to replace children's ego strength as a variable with its individual subscales.

The research model that represents the findings to the original research questions is presented below.

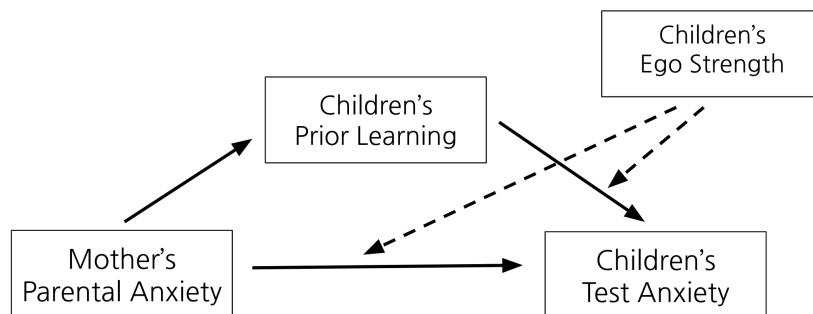


Figure 5. Model based on the original research questions

<Table 5> Analyses on the roles of prior learning as a mediator and children's ego strength as a moderator in the relationship between mothers' parenting anxiety and children's test anxiety

N = 207

Variable	β	se	t	LLCI	ULCI
Mediation Effect Model (dependent variable: prior learning)					
Constant	.588	.745	.790	-.880	2.056
Mothers' parenting anxiety	.323	.139	2.322**	.049	.597
Mothers' subjective SES	-.008	.122	-.066	-.249	.233
Mothers' level of education	-.131	.197	-.666	-.520	.258
Children's age	.345	.220	1.570	-.088	.779
Children's gender	.379	.227	1.663	-.070	.824
Moderation Effect Model (dependent variable: children's test anxiety)					
Constant	1.960	.284	6.907***	1.401	2.520
Mothers' parenting anxiety	.133	.053	2.574*	.033	.239
Prior learning	.066	.027	2.459*	.013	.119
Children's ego strength	-.138	.166	-.834	-.465	.189
Mothers' parenting anxiety × children's ego strength	-.086	.058	-1.494	-.199	.028
Prior learning × children's ego strength	-.010	.028	-.374	-.066	.045
Mothers' subjective SES	-.075	.047	-1.602	-.166	.017
Mothers' level of education	.026	.075	.352	-.122	.175
Children's age	-.039	.084	-.460	-.205	.127
Children's gender	-.127	.087	-1.457	-.298	.045
R² Change for the interaction					
				R² Change	F
Mothers' parenting anxiety × children's ego strength				.007	2.233
Prior learning × children's ego strength				.001	.140

* $p < .05$, ** $p < .01$, *** $p < .001$; LLCI = lower limit confidence interval, ULCI = upper limit confidence interval

In order to test if the subscales of children's ego strength showed any noteworthy results, regression analyses were conducted again, using each of the subscales as a moderator. The results are as follows:

For the relationship between prior learning and children's test anxiety, "competence," under the children's ego strength scale, confirmed to be an effective moderating agent. Children's gender also had a statistically significant impact.

For the relationship between mothers' parenting anxiety and children's test anxiety, "sociality," under the children's ego strength scale, confirmed to be an effective moderating agent. Children's age also had a statistically significant impact.

<Table 6> The moderation effect of competence on the relationship between prior learning and children's test anxiety

N = 207

Variable	β	se	t	LLCI	ULCI
Constant	1.376	.326	4.224***	.734	2.018
Prior learning	.278	.092	3.020**	.097	.460
Children's competence (ES)	.056	.022	2.527*	.012	.0990
Prior learning \times children's sociality	-.022	.008	-2.697*	-.037	-.006
Mothers' subjective SES	-.088	.046	-1.913	-.179	.003
Mothers' level of education	.014	.074	.193	-.131	.159
Children's age	.299	.102	2.927*	.097	.500
Children's gender	-.166	.085	-1.953	-.334	.002
<i>R</i> ² Change for the interaction					
			<i>R</i> ² Change	F	
Mother's parenting anxiety \times children's sociality			.032	7.272**	

p*<.05, *p*<.01; LLCI = lower limit confidence interval, ULCI = upper limit confidence interval

<Table 7> The moderation effect of sociality on the relationship between mothers' parenting anxiety and children's test anxiety

N = 207

Variable	β	se	t	LLCI	ULCI
Constant	1.560	.610	2.558*	.357	2.763
Mothers' parenting anxiety	.547	.217	2.517*	.118	.975
Children's sociality (ES)	.014	.138	.103	-.259	.287
Mother's parenting anxiety × children's sociality	-.115	.051	-2.275*	-.214	-.015
Mothers' subjective SES	-.027	.042	-.638	-.109	.056
Mothers' level of education	.000	.066	.002	-.130	.131
Children's age	.240	.091	2.637**	.061	.420
Children's gender	-.091	.077	-1.191	-.243	.060
<i>R</i> ² Change for the interaction					
			<i>R</i> ² Change		F
Mother's parenting anxiety × children's sociality			.018		5.177*

p*<.05, *p*<.01; LLCI = lower limit confidence interval, ULCI = upper limit confidence interval

In conclusion, the research model that was originally proposed as the hypotheses on the relationships between the variables explained to be partially valid. The newly formed research model that is appropriate for the results is presented.

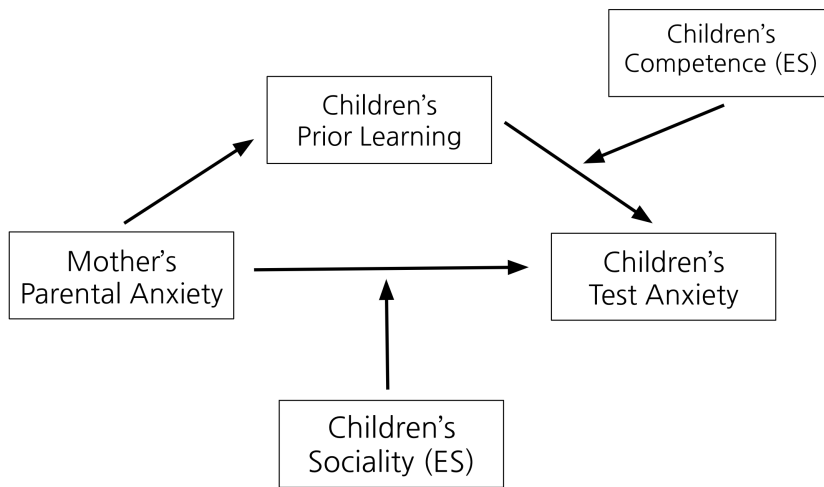


Figure 6. Final model based on the findings of the current study

VI. Discussion and Conclusion

In this chapter, the results of the analyses performed in the preceding chapter will be discussed in detail, based on theories and ideas proposed by previous studies. In addition, the current study's limitations, implications for future research, and conclusions will be included here.

1. Discussion

The findings of the current study illustrate the current situation in Korea regarding children's prior learning, and the factors that can exacerbate or mitigate children's test anxiety.

Some individual factors, such as a child's gender or age, did not significantly affect his or her test anxiety. Anxiety in children, in general, is known to affect girls more than it does boys (Asher, Asnaani, & Aderka, 2017; Lewinsohn et al., 1998; Walsh et al., 2004). However, the results may be different here due to the type of anxiety being very specific. Children's gender and age were still controlled for the analyses. For mothers, however, individual factors such as their subjective socioeconomic statuses and levels of education made an impact on their parenting anxiety levels, and therefore were

controlled for the results.

First and foremost, the current study successfully discovered that mothers' parenting anxiety has an effect on children's test anxiety and that prior learning can be a mediator between that relationship. The more anxious a mother feels, the more likely she is to have her child participate in prior learning, and have him or her further "ahead" of peers. The result may not come as a surprise for many, given that private academies prey on parents' anxiety to sell their products, and anxious parents are, obviously, more likely to fall for the marketing scheme. This result is in sync with the results from previous studies that have presented that parenting anxiety changes parenting behaviors (Abidin, 1992; Azham & Janon, 2021; Eom & Song, 2021; Harold & Frances, 1995; Park, 2015; Ryoo & Shin, 2018).

Unfortunately, it was revealed that children's ego strength as a whole did not function as a moderator in the relationships between mothers' parenting anxiety and children's test anxiety, and, the amount of prior learning and children's test anxiety. While there is not a lot of studies done on children's ego strength, this result is not synonymous with the results of previously done studies. Shepherd & Edelman's study in 2009 took a look at social anxiety within university students, and has discovered that students with high ego strength reported lower anxiety levels. Kim (2016)'s study has also revealed that in children, high ego strength is associated with lower

performance anxiety.

Only a few subscales—sociality and competence—were supported to have statistical significance. However, this result is still meaningful in that it has given us a glimpse into what may be helpful, at least by a little, to alleviate the test anxiety felt by children. Especially, given that what mitigates the effect of mothers' parenting anxiety of children's test anxiety is sociality, we can understand more clearly how important a social circle/support system may be for a child. Given that prior learning often takes away time from children—time that can be spent with friends—this result may be another message in itself.

Children's ego strength as a whole does, however, moderate the aforementioned relationships if and only if the mediating variable "amount of prior learning" is changed to "whether or not the child is doing any prior learning," disregarding the amount. However, it must be noted that when the said variable change occurs, the mediation effect of prior learning for the relationship between mothers' parenting anxiety and children's test anxiety becomes statistically insignificant.

The current study and its results are meaningful in that it has taken into account prior learning and children's test anxiety and that it confirmed that prior learning acts as a mediating agent between mothers' parenting anxiety and children's test anxiety. There have

been studies that probed into prior learning, but so far there has not been a study that incorporated mothers' and children's anxieties at the same time.

2. Limitations

The purpose of the current study was to explore the research questions/hypotheses postulated at the beginning and to test the validity of the research model and has endeavored to do so through scientific methods. Nevertheless, this study is not without its limitations.

First of all, the current study is limited in that when examining the moderation effects of children's sociality and competence on their text anxiety, the scales used to measure such aspects were not specifically designed to measure those concepts. Rather, they were parts of a bigger scale devised to measure children's ego strength as a whole. While the original goal of the study was to test the validity of moderation effects exerted by children's ego strength, the results have shown that instead of working as a whole, only certain aspects of it are statistically significant.

Secondly, concerning the methodology of this study, the current study relied on self-report questionnaires. All data collected through the surveys were all self-reported and the researcher was not always present when the participants were filling out the survey forms. This indicates that the data used in the current study have a stronger predisposition towards being affected by social desirability

biases than those gathered through other methods (Brenner & DeLamater, 2016; Hong & Seol, 2012). Therefore, responses, and ultimately the results as well, may have been influenced correspondingly.

Another limitation of this study is that the sample was only collected in the Seoul Metropolitan Area. While it is noteworthy that the Seoul Metropolitan Area is a very population-dense area with a little over half of the entire Korean population living in it, population samples in other areas were not considered for this study (KOSIS, 2021).

3. Implications for Future Research

Because the current study has certain limitations as addressed in the previous section, further research is necessary to better comprehend and delve deeper into the complex relationship between mothers' parenting anxiety and children's test anxiety, ego strength, and prior learning. Some studies have been done on the effects prior learning has on children's mental health and studying habits, but it is crucial to dig deeper and wider in order to identify other academic, and non-academic, factors that may affect students and factors that can serve as buffers. Through those studies, we may be able to move closer to alleviating the pain for students who are struggling.

Utilizing, or even newly developing, different scales for the moderating variable would be helpful as well, enabling researchers to assess the research questions from a different perspective, or more in detail. If we are able to find out what element(s) are helpful to children, then relevant and suitable programs and services may be able to develop as a result.

Additionally, the current research can be expanded and serve as a basis for supplementary studies to provide parents, teachers, and/or government officials tools to further help students regarding their test anxiety. With the kind of reports this current study delivers,

perhaps we can hope that more adults, who have the power to influence a child's education status, realize that not only is prior learning not particularly beneficial, but actually detrimental in a lot of ways. Ultimately, what the current study wishes to achieve is to serve as a stepping stone towards a society where the anxiety-fueled vicious cycle, that does not allow students to *walk*, is no longer existent.

In addition, based on the results, a few implications can be made for policies and programs as well. First, it would be imperative to find other variables that can act as a buffer for children's test anxiety. The current study has established the moderation effect of some subscales under children's ego strength. However, it would be beneficial to find additional moderating agents that can aid in mitigating children's test anxiety. Not only does test anxiety hinder children's academic performance, but it is also extremely damaging for their mental health (Jeong, 2021; Jung & Kang, 2014; Kim & Kim, 2015; McDonald, 2001; Park, 2013). In a world where the age of onset for anxiety related disorders is getting lower day by day, it is critical that we as a society combat such a phenomenon by identifying, strengthening, and utilizing variables that can act as buffers.

Second, it would be helpful if, based on the findings of this study, new policies regarding prior learning and/or programs that can help children develop sociality and competence were created. Lawmakers

should continue to prioritize public education and attempt to bridge the gap between different groups so that the parents do not feel anxiety over schooling and fallbacks, and send their children to private institutions for prior learning. As for programs, if a parent education program was funded at the state or city level, parents and children within the area would be able to benefit from it altogether. Educators should also bear in mind that class activities or classes structured around enhancing children's sociality and competence can decrease students' test anxiety.

4. Conclusion

In the midst of an epidemic that is the Korean education fever combined with a high rate of test anxiety among children, the current study suggests a few important points to expand people's understanding of the ongoing circumstances in the hopes to mitigate them. Based on the findings of the current study, a few conclusions can be made. First, because mothers' parenting anxiety positively affects children's test anxiety, with children's prior learning as a mediator, it is important for people to foster an environment in which needless academic competitions are removed. With a more relaxed society that encourages individuals to explore themselves at their own paces, the probability of mothers and children experiencing anxiety and the rate at which prior learning takes place will fall.

Second, while ego strength as a whole did not moderate the relationships between mothers' parenting anxiety and children's test anxiety, and prior learning and children's test anxiety, subscales of it—sociality and competence—did. Such a fact highlights the potential significance of children's friendship, social support systems, and a healthy sense of self. It also necessitates future studies done on this topic to delve deeper into the issue, and to find out other resources that can be helpful moderators.

Third, because ego strength did show moderating effects through logistic regression analysis when the amount of studying for prior learning was not taken into consideration, future studies should be done to inspect possible exogenous variables that may be the reason for such a result.

The results of the current study lay out practical implications for parents, teachers, and policy makers to enrich the learning experience for students while minimizing the amount of unnecessary stress that may be felt by them.

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Appendices

<Appendix 1. Survey Questionnaire for Children>

아동용 설문지

안녕하세요? 본 연구는 어머니의 양육불안, 아동의 선행학습, 자아강도, 시험불안 간의 관계 측정 및 각 변인의 관계를 파악하는 연구입니다. 본 설문지는 귀하의 선행학습과 시험불안에 관련된 문항들을 포함하고 있습니다. 읽으신 뒤, 본인의 생각과 일치하는 답변을 골라 주십시오.

개인정보

1. 귀하의 성별은 무엇입니까?
 - a. 여자
 - b. 남자
2. 본인이 현재 속한 학년은 몇 학년입니까?
 - a. 5학년
 - b. 6학년
3. 귀하의 연령은 현재 만으로 몇세입니까?
 - a. 11세
 - b. 12세

선행학습 여부

1. 현재 선행학습을 진행하고 있습니까?
 - a. 예
 - b. 아니오
2. 선행학습을 하는 경우, 어떤 과목을 선행학습 하고 있습니까?
 - a. 국어

- b. 수학
 - c. 과학
 - d. 사회
 - e. 영어
 - f. 2개 이상
3. 선행학습을 하는 경우, 자의에 의해서입니까? 아니면 타의에 의해서입니까?
- a. 자의
 - b. 타의
4. 선행학습을 하는 경우, 현재 속해있는 학년/학기로부터 몇 학기나 앞섰습니까?
- a. 1학기
 - b. 2학기 (1년)
 - c. 3학기
 - d. 4학기 (2년)
 - e. 5학기
 - f. 6학기 (3년) 이상

다음 문제를 잘 읽어보고 자신의 생각과 가장 비슷하다고 생각하는 번호 위에 동그라미 표를 해주세요.					
번호	문항	거의 그렇다	자주 그렇다	가끔 그렇다	거의 그렇지 않다
1	시험을 치를 때 마음 편하고 자신이 있다.				
2	시험을 치를 때 마음이 불안하고 당황스럽다.				
3	성적에 대한 생각 때문에 시험을 제대로 치를 수가 없다.				
4	점수에 대한 걱정 때문에 중요한 시험 때는 더 긴장이 된다.				
5	가끔 나는 내가 원하는 학교에 들어갈 수 있				

	을지 걱정이 되곤 한다.				
6	시험공부를 하면 할수록 더욱 혼란해진다.				
7	시험을 잘못 보면 어쩌나 하는 생각 때문에 시험을 볼 때 집중이 잘 안된다.				
8	중요한 시험을 치를 때는 지나치게 흥분하게 된다.				
9	시험 준비를 충분히 한 때도 몹시 긴장된다.				
10	점수를 확인하기 직전에 마음이 갑자기 불안해지기 시작한다.				
11	시험을 치르는 동안 너무 긴장된다.				
12	시험 때문에 괴로움을 당하지 않았으면 좋겠다.				
13	시험 기간 중에 너무 긴장해서 소화가 잘 안 된다.				
14	중요한 시험을 치르는 동안 자신감을 잃는다.				
15	중요한 시험을 치를 때면 너무 떨려서 공포에 사로잡힐 정도이다.				
16	중요한 시험을 보기 전에 걱정을 심하게 한다.				
17	시험을 치르는 동안 시험에 떨어질 경우를 생각하고 걱정을 하곤 한다.				
18	중요한 시험 도중에는 가슴이 몹시 두근거린다.				
19	시험을 다 본 후에도 걱정이 된다.				
20	시험 중 나는 너무 긴장이 되어서 아는 것도 잊어버린다.				

평소 자신의 생각대로해당하는 번호에 체크 혹은 동그라미 표시를 해주세요.						
번호	문항	전혀 아니 다	약간 아니 다	보통 이다	약간 그렇 다	매우 그렇 다
1	나는 내가 괜찮은 사람이라고 생각한다.	1	2	3	4	5
2	나는 소중한 존재이다.	1	2	3	4	5
3	나는 내가 좋다.	1	2	3	4	5
4	나는 어른이 되어서 하고 싶은 일이 분명하고, 그 꿈을 이룰 수 있을 것 같다.	1	2	3	4	5
5	나는 내 성격이 마음에 든다.	1	2	3	4	5
6	나는 내가 세상에 도움이 되는 사람이라고 생각한다.	1	2	3	4	5
7	나는 앞으로 멋진 사람이 될 것 같다.	1	2	3	4	5
8	나는 한번 시작한 일은 끝을 본다.	1	2	3	4	5
9	나는 누가 시키지 않아도 내 일을 스스로 잘 챙겨 한다.	1	2	3	4	5
10	나는 내가 하고 싶은 일에 대해서는 스스로 계획을 세운다.	1	2	3	4	5
11	나는 누가 시키는 일보다 스스로 하는 일을 더 좋아한다.	1	2	3	4	5
12	나는 어려운 일이라도 내가 하고 싶으면 일단 도전한다.	1	2	3	4	5

13	나는 스스로 최선을 다한다.	1	2	3	4	5
14	나는 의지가 강하다.	1	2	3	4	5
15	나는 갑작스러운 일에 크게 당황하지 않는다.	1	2	3	4	5
16	나는 힘든 일이 있어도 금새 다시 편안해 진다.	1	2	3	4	5
17	나는 속상한 마음을 금방 떨쳐버릴 수 있다.	1	2	3	4	5
18	나는 어디에 가든지 금방 적응한다.	1	2	3	4	5
19	나는 친구들과 잘 어울린다.	1	2	3	4	5
20	나는 몸을 움직이며 사람들과 어울리는 것이 즐겁다.	1	2	3	4	5
21	다른 사람들은 나를 잘 이해해 준다.	1	2	3	4	5
22	나는 다른 친구들과 함께 숙제하고 공부하는 것이 즐겁다.	1	2	3	4	5
23	나는 스트레스를 푸는 방법을 여러 가지 사용한다.	1	2	3	4	5
24	나는 떨리고 긴장되는 상황에서 마음이 편안해 지는 방법을 알고 있다.	1	2	3	4	5
25	나는 어떻게 해야 친구들과 잘 지낼 수 있는지 알고 있다.	1	2	3	4	5
26	나는 친구들과 경쟁하거나 협동하는 것이 즐겁다.	1	2	3	4	5

<Appendix 2. Survey Questionnaire for Mothers>

어머니용 설문지

안녕하세요? 본 연구는 어머니의 양육불안, 아동의 선행학습, 자아강도, 시험불안 간의 관계 측정 및 각 변인의 관계를 파악하는 연구입니다. 본 설문지는 귀하의 간단한 정보와 양육불안에 대한 척도로 이루어져 있습니다. 읽으신 뒤, 본인의 생각과 일치하는 답변을 골라 주십시오.

개인정보

1. 귀하의 연령대는 어떻게 되십니까?
 - a. 30대
 - b. 40대
 - c. 50대
2. 귀하와 귀하의 자녀가 현재 속한 가정의 경제 수준은 어느 정도라고 생각하십니까?
 - a. 상
 - b. 중상
 - c. 중
 - d. 중하
 - e. 하
3. 귀하의 최종 학력은 무엇입니까? (검정고시인 경우에도 졸업으로 표기)
 - a. 고졸
 - b. 대졸
 - c. 대학원졸
4. 귀하의 자녀는 현재 선행학습을 진행하고 있습니까?
 - a. 예
 - b. 아니오

다음은 부모의 양육불안을 측정하는 문항들입니다. 귀하가 평소 생각하시는 것과 가장 비슷한 답에 표시해 주십시오.

번호	문항	전 혀 아 니 다	약 간 아 니 다	보 통 이 다	약 간 그 렇 다	매우 그 렇 다
1	나는 내 아이가 나의 모자란 부분을 닳을까 봐서 걱정이다.	1	2	3	4	5
2	아이를 행복하게 만드는 것이 내 책임인 것 같은 부담감에 불안하다.	1	2	3	4	5
3	아이의 문제는 모두 내 양육의 잘못된 것 같아 불안하다.	1	2	3	4	5
4	내가 잘하지 못해서 경험했던 괴로움을 아이도 겪을까 봐 걱정된다.	1	2	3	4	5
5	나는 아이를 올바른 방향으로 키우고 있는지 불안하다.	1	2	3	4	5
6	나는 부모로서 아이에게 좋은 본보기를 보여 주지 못할까 봐 걱정된다.	1	2	3	4	5
7	나의 부모님은 나의 사고방식이나 생활방식을 존중해 주지 않는 편이어서, 나도 자녀를 존중해 주지 않을까 봐 걱정된다.	1	2	3	4	5
8	나는 아이가 나에게 즐거움을 주는 존재라기 보다 자꾸 챙기고 도와주어야 하는 존재로 느껴져 부담스럽고 두렵다.	1	2	3	4	5
9	나의 부모님은 내 생각이나 감정을 무시하고 수용해 주지 않는 편이어서, 나도 아이가 나에게 감정을 표현할 수 있도록 해주는 것이 불편하다.	1	2	3	4	5
10	나는 나의 부모님에게 따뜻하거나 지지를 받	1	2	3	4	5

	아본 경험이 없어서, 내 아이의 감정과 생각을 나누는 것이 불편하다.					
11	나는 아이가 나에게 의존하려고 하면 불편하다.	1	2	3	4	5
12	아이가 내 기준에 맞지 않아 다그치게 된다.	1	2	3	4	5
13	나는 아이가 다른 사람에게 나쁜 평가를 받을까 봐 불안하다.	1	2	3	4	5
14	나는 아이가 남들만큼 잘하지 못하면 뒤떨어진 사람이 될 것 같다.	1	2	3	4	5
15	아이가 잘못하면 내가 더 마음이 쓰인다.	1	2	3	4	5
16	아이가 성공하지 않으면, 내가 남들 앞에 나서기 힘들 것 같다.	1	2	3	4	5
17	양육에 대해서 주변 사람들에게 도움을 받는 것은 신뢰할 수 없다.	1	2	3	4	5
18	양육에 대한 도움이 필요로 할 때 도움을 받을 사람이 없어서 불안하다.	1	2	3	4	5
19	양육에 관해 서적, 인터넷, 상담에 항상 의존하여도 불안하다.	1	2	3	4	5
20	가까운 곳에 양육에 도움을 받을 만한 전문 기관이 많지 않아서 불안하다.	1	2	3	4	5
21	나는 양육을 할 때 부모로서 매우 높은 기준을 가지고 있는 것 같다.	1	2	3	4	5
22	나는 아이에 대해 높은 기대를 하고 있다.	1	2	3	4	5
23	나는 주변에서 아이에게 지나치게 많은 것을 기대한다는 말을 자주 듣는다.	1	2	3	4	5
24	주변 사람들은 내가 부모로서 완벽주의 성향	1	2	3	4	5

	이 있다고 한다.					
25	나는 아이가 모든 면에서 뛰어나게 잘했으면 하는 마음 때문에 매사 불안하다.	1	2	3	4	5
26	주변 사람들은 내가 아이에 대해서 지나치게 신경을 쓴다고 말한다.	1	2	3	4	5

Abstract (Korean)

본 연구는 어머니의 양육불안, 아동의 선행학습, 자아강도, 그리고 시험불안의 관계를 파악하고자 하였다. 어머니의 양육불안이 아동의 시험불안에 영향을 끼치는지, 그리고 그 관계에서 선행학습이 매개변인의 역할을 하는지 살펴보았다. 후에는 아동의 자아강도가 앞서 언급된 관계들을 조절하는지 알아보았다.

이를 위해, 수도권에 거주 중인 아동과 그 어머니를 대상으로 설문조사를 실시하였다. 이 과정에서, 어머니들은 온라인으로 설문조사에 참여할 수 있는 기회가 제공되었으나, 아동들은 모두 서면으로 설문조사에 응했다. 어머니와 아동 모두에게 기본 사회인구학적 질문이 주어졌고, 그 외에는 선행학습의 여부, 정도, 과목을 묻는 문항들이 주어졌다. 어머니들은 양육불안을 측정하는 설문에 응답하였고, 아동들은 시험불안과 자아강도를 측정하는 설문들에 응답하였다. 자료 수는 200쌍을 목표로 표집을 시작하였고, 표집 기간 종료 직후 245 쌍의 자료가 수집되었으나 중복 응답, 무성의 응답, 미완성 응답 등의 이유로 38개의 자료가 제외되었다. 따라서, 최종적으로는 207개의 자료가 연구에 사용되었으며 수집한 자료는 IBM SPSS 29.0을 이용하여 기술통계분석, 빈도분석, 상관분석, 회귀분석, PROCESS macro 분석을 사용해 분석하였다. 본 연구의 주요 결과는 다음과 같다.

첫째, 자료 분석 결과, 어머니의 양육불안과 아동의 선행학습 두 요인 모두 아동의 시험불안에 정적인 영향을 끼치는 것으로 드러났다. 연구에 참여한 아동의 응답을 조합한 결과, 아동은 1) 어머니의 양육불안 수준이

높을 때, 2) 선행학습의 정도가 높을 때, 혹은 3) 둘 다일 때 높은 수준의 시험불안을 보고하였다. 위와 같은 결과는 아동의 시험 수행에 큰 걸림돌이 되는 주요 요인 중 하나인 시험불안이 학업과 관련된 요소, 그리고 관련되지 않은 요소 둘 다에게 영향을 받는다는 사실을 확인시킨다.

둘째, 아동의 선행학습은 어머니의 양육불안과 아동의 시험불안 간의 관계를 매개한다. 분석 결과에서 알려진 사실은 많은 어머니들이 더 높은 수준의 양육불안을 느낄수록 자녀에게 선행학습을 더 많이 하도록 지시했으며, 결과적으로는 그런 행동이 아동의 시험불안을 증가시키는 것으로 나타났다. 아동이 시험을 더 잘 보고 성적을 더 잘 받았으면 하는 마음으로 시키는 선행학습 때문에 오히려 시험 점수가 더 낮아질 수도 있다는 결과이기 때문에, 선행학습을 둘러싼 역설적인 상황을 여실히 보여주고 있다.

셋째, 아동 자아강도 중 두 개의 하위요인이 아동의 시험불안을 조절하는 것으로 나타났다. 이 때, 독립변수는 어머니의 양육불안과 아동의 선행학습인데, 아동 자아강도 하위요인 중 사회성이 어머니의 양육불안-아동의 시험불안 간의 관계를 조절하였고, 유능성이 아동의 선행학습-아동의 시험불안 간의 관계를 조절하였다. 본인을 생각했을 때, 유능하다고 느끼며 자신감 넘치는 아동일수록 선행학습 때문에 시험불안을 겪는 일이 적었고, 사회적 지지망이 잘 구축되어 있고 또래 관계가 잘 형성되어 있는 아동일수록 어머니의 양육불안 때문에 시험불안을 겪는 일이 적었다.

본 연구의 결과는 아동의 시험불안이 어머니의 양육불안과 아동의

선행학습에 영향을 받는다는 점, 아동의 선행학습이 어머니의 양육불안과 아동의 시험불안의 관계를 매개한다는 점, 그리고 아동 자아강도 하위요인 중 사회성과 유능성이 각각 어머니의 양육불안-아동의 시험불안 간의 관계, 아동의 선행학습-아동의 시험불안 간의 관계에서 조절효과를 가진다는 점을 증명하였다. 본 연구는 선행학습을 둘러싼 현재 한국 사회의 실태를 보여주는 것과 동시에 아동의 시험불안과 선행학습을 둘러싼 정책적, 교육적 함의를 담고 있다. 먼저 후속 연구로 아동의 시험불안을 조절할 수 있는 다른 요인에는 무엇이 있는지 알아보고, 정책적으로는 한국 사회가 공교육에 더욱 집중하여 부모들이 아동의 교육과 관련하여 불안을 느끼지 않도록 하는 것이 우선이고, 시/도 수준에서 관련 부모교육 프로그램을 개설하는 것이 도움이 될 것이라는 근거를 제안하였다.

주요어 : 양육불안, 시험불안, 자아강도, 선행학습, 사교육

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