Research in Management and Humanities

DWIJMH VOL. 3 NO. 4 (2024) ISSN: 2980-4817

Available online at www.dwijmh.org
Journal homepage: http://www.dwijmh.org
ORCID ID: https://orcid.org/0000-0001-6884-3504

Empowerment and burden: The effect of parents' educational involvement, basic psychological needs satisfaction and academic stress

Egdonna A. Quinto: Associate Professor, School of Nursing, Divine Word College of Laoag.

A R T I C L E I N F O

Article history:
Received August 15, 2024
Received in rev. form. October 10, 2024
Accepted November 13, 2024
Published: December 22, 2024

Keywords: ***parental involvement, academic stress, basic psychological needs, autonomy, relatedness needs***

JEL Classification: I25

A B S T R A C T

The study aimed to investigate the effect of parental involvement on basic psychological need satisfaction and academic stress. To provide a deeper understanding, relevant literature was reviewed. The research employed a descriptive assessment and correlational design, focusing on senior high school students at Divine Word College of Laoag. Data were collected through questionnaires and analyzed using inferential statistics, specifically weighted mean and Analysis of Variance (ANOVA).

Findings indicate a significant correlation between parental involvement, basic psychological need satisfaction, and academic stress. This suggests that while parental involvement can support students' well-being by fulfilling basic psychological needs, it can also contribute to academic stress. Specifically, parental emotional involvement correlates with students' need for autonomy, while emotional, cognitive, and behavioral involvement collectively influence their need for competence. Additionally, emotional and cognitive involvement relate to students' need for relatedness. Parental involvement also impacts academic stress: emotional involvement is linked to external pressure, and behavioral involvement significantly affects students' self-efficacy.

Introduction

Most parents aspire for their children to lead successful lives. Education is often seen as a key avenue to achieve this goal, as it provides essential skills for future careers (Davey & Harney, 2023). In the Philippines, many Filipino parents view education as the primary legacy they can offer their children for a brighter future (Alampay & Garcia, 2019). This drives parents to work tirelessly to ensure their children can attend senior high school and pursue higher education (Turley, 2006). Financial capability, undeniably, plays a significant role in providing access to education (Bhalla, 1992).

However, completing higher education requires more than financial support. While research recognizes the importance of financial resources for academic success (Fazli et al., 2020; Moneva et al., 2020; Roksa & Kinsley, 2018; Cooper & Stewart, 2020), other studies highlight that parental involvement also contributes meaningfully to students' academic

* *Corresponding author. ORCID ID: 0000-0002-9693-1541*

performance (Menning, 2002). Parental engagement goes beyond financial backing, and educational involvement is widely acknowledged as a factor in children's academic achievements (Pérez-Sánchez et al., 2013; Tárraga et al., 2017). For instance, Topor et al. (2010) observed that parental involvement enhances children's sense of cognitive competence, motivating them to excel academically. Thus, parental involvement in education is a valuable strategy for encouraging students' academic engagement.

However, a question remains: does parental involvement in education have any negative effects? Previous studies overwhelmingly suggest positive impacts of parental involvement on children's academic performance. Nonetheless, few studies examine its effects on academic stress and basic psychological need satisfaction. A recent study by Obradovic et al. (2021) introduces a different perspective, proposing that excessive parental involvement can hinder children's academic growth. Similarly, Miranda (n.d.) from the University of California suggests that over- involvement may affect students' sense of autonomy, competence, and connection with others—basic psychological needs critical for well-being. A lack of these needs can lead to stress, reduced intrinsic motivation, and increased behavioral and mental health issues, ultimately affecting academic performance.

Notably, studies have yet to examine how parental involvement affects students' basic psychological needs and academic stress in the Philippine context. The current study addresses this gap by exploring the relationships among parental involvement, basic psychological needs, and academic stress within a Philippine setting. The findings aim to provide insights into academic stress and support schools in fostering stronger school-family partnerships to enhance student well-being. This study includes an introduction, literature review, research methodology, data presentation and discussion, and conclusion.

Literature review

The concept of education

The concept of education has long been debated, with philosophers offering varied perspectives that contribute to differing understandings of what education is and should be. Consequently, this diversity of thought is reflected in the distinct curricula across schools (Burnard, 1989). For instance, Socrates, as cited by Lamichhane (2018), viewed education as an effort to draw out universal truths within each person's mind, a perspective that could shape a curriculum focused primarily on intellectual or cognitive development (Parisi et al., 2012). Jeronen (2013) sees education as systematic schooling and training for work, emphasizing knowledge, skills, and judgment. Such variations often lead to confusion about what education truly entails. Therefore, a thorough discussion of the meaning of education is essential for parents, teachers, and students to foster a shared understanding of its purpose (Chazan, 2021).

This clarity helps parents set realistic expectations for what their children can achieve and what they anticipate from the school. Likewise, it guides teachers and administrators in creating educational practices that align with the expectations of both parents and students. With a well-defined concept, parents can assess if their expectations are met, while educators can evaluate if they have fulfilled those expectations.

At the core of this discussion is the question: what is education, and what purpose does it serve? Here, the intent is not to develop new theories but rather to examine parents' perceptions and aspirations and evaluate whether these align with philosophical understandings of education. If they do not, it may be worth considering if a specific educational philosophy tailored to national or cultural aspirations should be developed. To explore this, we must examine the meanings attributed to education by various philosophers, as these insights offer a foundation for understanding education's purpose.

Educational philosophers have provided several interpretations. Scheffler (1960) identified three primary meanings of education. The first, a descriptive meaning, derives from the Latin educare, meaning "to train or mold," suggesting that education serves as a formative process, often linked to workforce training. However, this definition risks simplifying education to practical skills acquisition. Training, according to Fry (1969), focuses solely on skill development to enhance

performance, whereas education involves a more comprehensive acquisition of knowledge, including facts, concepts, beliefs, and values (The Performance Center, n.d.). John Dewey's molding theory, which focuses on shaping students' behavior, similarly reflects this idea (Miovska-Spaseva, 2016).

The second meaning, a programmatic definition, specifies what education should encompass, often tied to widely accepted educational practices (Chazan, 2021; Sheffler, 1960). This view emphasizes practical descriptions grounded in educational application (Smedsrud, 2020). Finally, the third meaning, stipulative, differs by offering contextual definitions that may or may not stem from prior definitions. This type of definition allows each society to adapt educational concepts to its specific context, enabling meaningful discussions on what education should achieve locally (Scheffler, 1974; Smedsrud, 2020; Chazan, 2021).

Examining additional perspectives can help assess whether contemporary education aligns with early educational concepts. Idealist philosophers, for instance, view education as fostering reasoning, with Immanuel Kant asserting that education is distinct from training due to its focus on critical thinking (Tumwine, 2023). Kant's view aligns with Hegel's idea that education shapes moral character and intellect (Tubbs, 2015; Vayrynen, 2016; Crisafi & Gallagher, 2010). Social realists, in contrast, see education as preparation for participation in social life (Hallinan, 2000). Richard Rorty, influenced by Dewey, views education as a blend of cultural adaptation and critical thinking, enabling students to both understand and challenge societal norms (Noaparast, 2014). John Dewey himself argued that education ensures social continuity, enabling society's survival by teaching not only content knowledge but also life skills (Garrison et al., 2012). Similarly, John Locke emphasized social readiness and problem-solving (Goodyear, 2018; Williams, 2017). Montaigne, critical of mere book learning, believed education should develop a "well- formed" rather than a "well-filled" mind, prioritizing practical knowledge (Ferrari, 2023). Aristotle added that education develops intellect, morality, and skills, arguing that these attributes form the core of a complete education (Gotz, 2003).

The range of definitions offered by these philosophers underscores the complexity of education. To synthesize these views, Cremin (1976) defines education as "the deliberate, systematic, and sustained effort to transmit, provoke, or acquire knowledge, values, attitudes, skills, or sensibilities, as well as any learning that results from that effort." This comprehensive definition suggests that education goes beyond practical skills training to include the transmission of knowledge, values, and attitudes. This definition provides a lens through which to assess both the goals of education and the attitudes parents hold toward it, facilitating a more holistic understanding of education's role in personal and societal development.

Parental involvement in education

Educational success is closely tied to parental involvement, particularly across various educational levels such as basic and higher education (Topor et al., 2010). Researchers consistently highlight that parental involvement plays a crucial role in fostering students' academic motivation and achievement (Gonzalez-DeHass et al., 2005; Hara & Burke, 1998; Hill & Craft, 2003; Marcon, 1999). This positive influence is evident when comparing the academic performance of students whose parents are engaged with those whose parents are not. Generally, students with involved parents tend to perform better academically (Topor et al., 2010; Hill & Craft, 2003). However, understanding the exact nature and types of effective parental involvement remains a topic of ongoing inquiry (Hill & Craft, 2003).

Webster-Stratton (1998) defines parental involvement as a positive attitude toward the child's education, teachers, and school environment. Meanwhile, Roy and Giraldo-Garcia (2018) broaden this definition to include parental behaviors—both at home and within the school setting—that actively support a child's educational experience. Epstein (1996) suggests that parental involvement can be gauged through various indicators, such as the home environment, participation in school activities, and maintaining regular parent-teacher contact. Cheung and Pomerantz (2011) and Grolnick and Slowiaczek (1994) identify three distinct types of parental involvement: emotional, cognitive, and behavioral. Emotional involvement involves the parent's care and emotional support regarding their child's schooling. Cognitive involvement includes providing resources, such as books or internet access, to facilitate learning. Behavioral involvement refers to active participation in a child's school life, such as assisting with school-related challenges (Wang et al., 2023; Chen & Mok, 2023).

Research on the effects of parental involvement on student academic achievement indicates both positive and negative outcomes. Peng et al. (2023) suggest that, in some cases, parental involvement can have an adverse effect, as students may feel increased stress when faced with high parental expectations. Similarly, Cetin et al. (2022) emphasize that over-involvement can lead to academic pressure and stress among students. Conversely, numerous studies underscore the positive impact of parental involvement, linking it to improved academic performance (Fan & Chen, 2001; Wang et al., 2023; Xiong et al., 2021; Ates, 2021; Georgiou, 1996). Thus, while parental involvement generally supports academic success, the type and intensity of involvement must be balanced to avoid undue pressure on students.

Basic psychological need: Competence, autonomy and relatedness

According to self-determination theory, three universal psychological needs—competence, autonomy, and relatedness—are essential for optimal functioning and are regarded as basic psychological needs (Deci & Ryan, 2000). Meeting these needs can promote optimal performance, well-being, and personal growth (Deci & Ryan, 2000; Mesurado et al., 2016). They are considered basic because they are thought to be innate and universal. Cross-cultural research shows that fulfilling these needs is essential for healthy development, engagement, motivation, and well- being across diverse populations (Gagne et al., 2014). Gagne et al. (2014) found that when these needs are met, individuals experience enhanced work performance and engagement, reduced stress, and lower turnover rates. Conversely, unmet needs can lead to adverse psychological outcomes. Further studies affirm that satisfying the needs for autonomy, competence, and relatedness is crucial for human flourishing (Sari, 2015).

Autonomy

Gagne (2014) defines autonomy as acting with a sense of volition, endorsement, willingness, and choice. This need entails that individuals act in alignment with their own free will and personal endorsement. In other words, self- construction and functioning should be directed by the individual (Moreno, 2013). For autonomy to flourish, the social environment should support this freedom, avoiding the use of punishment or rewards as motivators. External pressures, such as strict deadlines, can inhibit autonomy by restricting personal control and decreasing intrinsic motivation (Łuków & Różyńska, 2016). Ideally, environments should present situations that promote autonomy. This need reflects an individual's desire to feel voluntary in their actions and to experience a sense of choice and ownership over their behavior (deCharms, 1968; Deci & Ryan, 2000). Hackman and Oldham (1976) further describe autonomy as the substantial freedom, independence, and discretion to decide one's actions. Deci (1971) argues that when individuals receive external rewards for behavior that is already intrinsically motivated, it diminishes intrinsic motivation. When behavior becomes reward-driven, autonomy is undermined.

Competence

The second fundamental psychological need is competence, which refers to an individual's ability to master their environment and feel effective in interacting with it (Deci & Ryan, 2000; White, 1959). White (1959) introduced competence as a concept related to performance motivation, a term later popularized by Boyatzis (1982). Unlike Freud, White focused on the coping strategies of typical individuals, highlighting that people are motivated by a need to be competent and effective in their world (Mccoubrey, 2001). Competence is considered an innate need, as individuals naturally tend to explore and manipulate their surroundings and actively seek challenges to expand their skills. This ability to master tasks helps people adapt to changing environments (Deci & Ryan, 2000).

Deci and Ryan (2000) found that providing unexpected positive feedback on a task enhances intrinsic motivation, as it fulfills the basic need for competence. Positive feedback not only boosts intrinsic motivation but can also reduce reliance on extrinsic motivators. Conversely, negative feedback diminishes intrinsic motivation and undermines the sense of competence (Vallerand & Reid, 1984).

Relatedness

The third component of basic psychological needs is the need for relatedness, initially proposed by Alderfer based on

Maslow's hierarchy of needs (Fuchs, 2008). Alderfer categorized Maslow's hierarchy into three needs: existence, relatedness, and growth, commonly known as ERG (Gibson et al., 2000). Existence needs refer to the essentials required for survival and correspond to physiological needs in Maslow's theory (Lester, 2020). Relatedness needs encompass every person's drive to connect with others, aligning with Maslow's social and external esteem needs, such as forming relationships with friends, family, and coworkers (Nisbet & Zelenski, 2014). Each person has a social need to build relationships, feeling inherently inclined to connect, be part of a group, and give and receive care (Baumeister & Leary, 1995).

According to Deci and Ryan (2000), relatedness needs are fulfilled when individuals experience a sense of communion and form close, meaningful relationships. Satisfying these desires requires social interaction and is consistent with Maslow's concept of social needs. Lastly, growth needs refer to a person's drive for development and self-actualization (Maslow, 1968, 1970). This intrinsic need encompasses personal growth and the pursuit of one's potential, as each individual has an innate desire to achieve their unique aspirations (Goldstein, 1939).

Academic stress

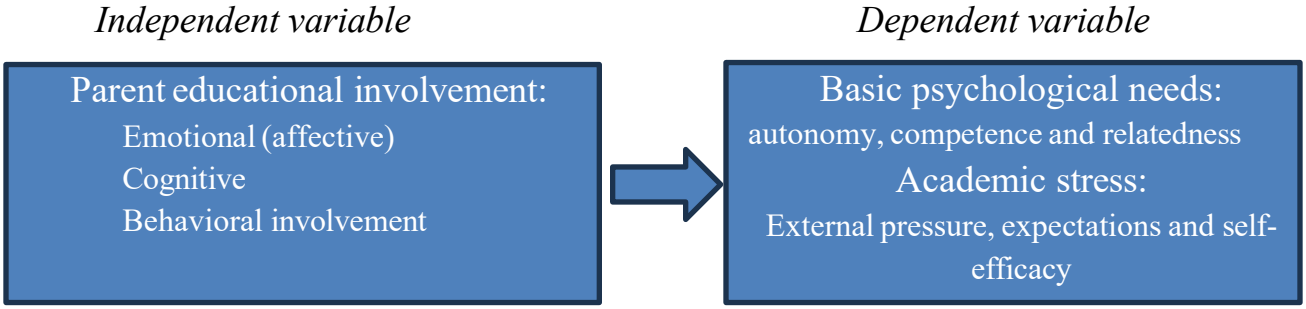
Stress is a common experience for students, with Johnson (1979) noting that 10-30% encounter some degree of academic stress. Academic stress is considered a significant challenge for educational institutions, as it can negatively impact students' academic performance (O'Neill et al., 2019; Paralkal & Knutson, 2021; Reddy et al., 2018). According to Jimenez-Mijangos et al. (2022), stress and anxiety are leading causes of students' academic failures. Understanding academic stress and its stressors is essential for teachers and administrators to design programs that improve students' well-being. Effective interventions require a comprehensive understanding of academic stress and its causes (Cooper & Marshall, 1978). Thus, examining past research provides the foundation needed to design effective intervention programs.

Researchers define academic stress in various ways. Jagiello et al. (2024) and Pascoe et al. (2020) describe it as the temporary experience of pressure, anxiety, or distress linked to fears of academic failure. Wilks (2008) views academic stress as the body's reaction to academic demands that exceed students' abilities. Similarly, David (2010) and Hafeez et al. (2022) describe it as feelings of fatigue from numerous assignments, pessimism about outcomes, and self-doubt. Sun et al. (2011) characterize academic stress as anxiety and discomfort from the demands of academic learning. These definitions highlight academic stress as psychological and physical discomfort from workload overloads and coping challenges.

Many studies show that academic stress is influenced by students' perceptions of their ability to meet academic goals (Lazarus & Folkman, 1984; Kristensen et al., 2023; McKay et al., 2014). Kumaraswamy (2013) identified common sources of academic stress, including excessive assignments, peer competition, examinations, and time management challenges. Other sources include heavy course loads, financial concerns, family pressures, and adjusting to new environments (Misra & Castillo, 2004; Byrd & McKinney, 2012; Pedrelli et al., 2015). Academic concerns tend to heighten stress around exams (Spielberger & Vaag, 1995) and assignment deadlines (Ma, 2023). Since academic stress is closely tied to perceived capability, individual stress levels vary based on students' self-assessed ability to complete tasks (Barbayanis et al., 2022). For example, perceptions of academic stress differ by gender, with female college students reportedly experiencing higher stress levels than males (Misra et al., 2000; Eisenberg et al., 2007; Evans et al., 2018), likely due to differences in stress response (Misra et al., 2000; Verma et al., 2011). Additionally, the year of study can affect stress levels (Misra et al., 2000). As Yumba (2010) pointed out, academic stress does not affect all students equally.

Although the effects of academic stress vary, most research highlights its negative impacts on students' mental and physical well-being and academic performance (Barbayannis et al., 2022; Deng et al., 2022; Kaur, 2012; Córdova- Olivera et al., 2023). However, some researchers suggest that academic stress may positively impact performance. For instance, Hasanah et al. (2023) and Ma (2023) argue that academic pressure can motivate students to study harder and develop diligence. Murdiana et al. (2023) found that a moderate level of academic stress can enhance academic performance, creating a positive relationship between stress and achievement. Ardi (2022) supports this view, suggesting that stress can boost motivation, resilience, and the ability to overcome challenges effectively.

Conceptual framework



Source: Cheung and Pomerantz (2011). Deci & Ryan (2000), Jagiello, et al (2024).

Figure 1: the framework reflects a correlation between parent educational involvement basic psychological needs and academic stress. The study intends to examine the influence of parent educational involvement on the autonomy, competence and relatedness needs of students and academic stress.

Statement of the problems

The study examined the interconnectedness of parent educational involvement and basic psychological needs and academic stress of students. It specifically answers the following questions:

1. What is the parent's educational involvement in terms of:
- **a. emotional involvement**
- **b. cognitive involvement**
- **c. Behavioral involvement**

2. What are the basic psychological needs satisfaction of students in terms of:
- **a. autonomy**
- **b. competence**
- **c. relatedness need**

3. What is the academic stress of students in terms of external pressure expectations, and self-efficacy?

4. Is there a relationship between parent educational involvement and basic psychological need satisfaction?

5. Is there a relationship between parent educational involvement and academic stress in terms of external pressure, expectations and self-efficacy?

Hypothesis

Numerous studies have demonstrated the significant influence of parental involvement on students' academic achievement (Peng et al., 2023; Fan & Chen, 2001; Wang et al., 2023; Xiong et al., 2021; Ates, 2021; Georgiou, 1996). Building on this research, the current study seeks to explore the impact of parental educational involvement on students' needs for autonomy, competence, and relatedness, as well as its effect on academic stress.

Scope and delimitation of the study

The scope of the current study is confined to the Divine Word Colleges in the Ilocos Region and their students. The investigation focuses specifically on the role of parental involvement—encompassing affective, cognitive, and conative

(behavioral) dimensions—on the satisfaction of basic psychological needs and academic stress experienced by the students.

Research methodology

The study adopts a quantitative approach, utilizing a descriptive assessment alongside a correlational research design. Conducted at Divine Word Colleges, the research focuses on grade XII senior high school students. Data collection is carried out through questionnaires, and the statistical analysis employs both descriptive and inferential statistics, specifically weighted means and ANOVA.

To begin the data collection process, the researcher obtained approval from the college president to distribute the questionnaires. This process was facilitated through designated employee representatives. Ethical considerations were taken into account, and due to the absence of sensitive human issues, an ethical review was deemed unnecessary.

The following ranges of values with their descriptive interpretation will be used:

Statistical Range	***Descriptive Interpretation***
4.21-5.00	*Strongly Agree/Very High/very satisfied*
3.41-4.20	*Agree/High/satisfied*
2.61-3.40	*Somewhat Agree/Moderate/somewhat satisfied*
1.81-2.60	*Disagree/Low/dissatisfied*
1.00-1.80	*Strongly Disagree/Very Low/very dissatisfied*

Data presentation and analysis

The data are presented following the statement of the problems of the current study. The study aimed to answer the following questions:

Problem 1: What is the parent's educational involvement in terms of:

- ***a. Emotional involvement***
- ***b. Cognitive involvement***
- ***c. Behavioral involvement***

Table 1. Parents' educational involvement (n=242)

	Parents' educational involvement	Weighted mean	Descriptive interpretation
A.	**Emotional involvement**		
1.	My parent care about the health and well-being of my child and see to it that he/she is healthy and going to school	4.32	Agree/high
2.	My parent often asked me about my school activities and if I can handle them	3.68	Agree/high
3.	My parent sees to it that I have enough allowance for my food	4.38	Agree/high
4.	My parent often allows me to watch TV for some time for relaxation	3.92	Agree/high
	Composite Mean	**4.08**	**Agree/high**
B.	**Cognitive involvement**		
1.	My parent buys books that I need to enhance my knowledge	3.48	Agree/high
2.	My parent provides internet access for learning materials	4.64	Agree/high
3.	My parent often asks me about the difficulty in class and if they can help	3.46	Agree/high
4.	My parent provides other reading materials at home for me to read	3.14	Agree/high
	Composite Mean	**3.68**	**Agree/high**
C.	**Behavioral involvement**		
1.	My parent sometimes visits the class adviser to check my academic development.	2.83	Somewhat agree/moderate
2.	My parent comes to school to pay tuition fee	3.86	Agree/high
3.	My parent often participates in parents-teachers association meeting	3.63	Agree/high
4.	My parent gets involved in the projects initiated by the parent association	3.25	Somewhat agree/moderate

Composite Mean	**3.39**	**Somewhat agree/moderate**
OVERALL MEAN	**3.72**	**Agee/high**

Source: Cheung and Pomerantz (2011).

***Legend**:*

Range of Mean Values	***Descriptive Interpretation***
4.21 - 5.00	*Strongly agree/very high/very satisfied*
3.41 - 4.20	*Agree/high/satisfied*
2.61 - 3.40	*Somewhat agree/moderate/somewhat satisfied*
1.81 - 2.60	*Disagree/low/dissatisfied*
1.00 - 1.80	*Strongly disagree/very low/very dissatisfied*

The data presented in the table indicates that overall parental involvement in education has an average rating of 3.72, categorized as "agree/high." This rating suggests that while parental educational involvement is not exceedingly high, it is also not low or moderate, positioning it within a high range. However, when examining the dimensions of involvement individually, it is evident that emotional and cognitive involvement are rated highly, at 4.08 and 3.68, respectively, whereas behavioral involvement is rated low.

Students reported that their parents show emotional involvement by caring for their psychological and physical well- being. In terms of cognitive involvement, students confirmed that their parents provide reading materials at home and frequently inquire about classroom difficulties to offer assistance. Conversely, parental behavioral involvement appears to be limited, as indicated by students stating that their parents seldom visit class advisers to monitor academic progress, pay tuition fees, attend parent-teacher association meetings, or participate in projects organized by the parent association.

Research has consistently demonstrated a positive correlation between parental involvement and school outcomes, such as academic performance (Herman & Yeh, 1983) and social-emotional development (Martinez-Yarza et al., 2024). However, excessive parental involvement can have detrimental effects, potentially negatively impacting academic performance (Peng et al., 2024).

Problem 2: What are the basic psychological needs satisfaction of students in terms of:

- ***a. autonomy***
- ***b. competence***
- ***c. relatedness need***

Table 2. Basic psychological needs satisfaction of students (n=242)

	Basic psychological needs of students	**Weighted mean**	**Descriptive interpretation**
A.	**Autonomy**		
1.	I feel like I can decide on how I am going to study	3.98	Agree/high
2.	I am free to express my ideas and opinions on the things I want to do	3.77	Agree/high
3.	I am not dictated by my parent to study at home	3.46	Agree/high
4.	I feel like I can pretty much be myself at home	4.15	Agree/high
5.	There is much opportunity for me to decide for myself how to go about my study	3.95	Agree/high
	Composite Mean	**3.86**	**Agree/high**
B.	**Competence need**		
1.	I feel competent that I can pass the examination	3.68	Agree/high
2.	My parent often tells me I am good at what I do.	3.78	Agree/high
3.	I am interested to learn new things in my study	4.38	Strongly agree/ Very high
4.	Most days I feel a sense of accomplishment for my study	3.80	Agree/High
5.	In the class, I have a chance to show how capable I am.	3.58	Agree/high
	Composite Mean	**3.84**	**Agree/high**

C.	**Relatedness need**		
1.	I like my parent and I get along with my parent	4.06	Agree/high
2.	I consider the people I work with to be my friends	4.06	Agree/high
3.	People at home and the school care about me	3.79	Agree/high
4.	There are many people at the school that I am close to	3.60	Agree/high
5.	My classmates seem to like me very much	3.28	Somewhat agree/moderate
6.	My classmates and my teachers are pretty friendly toward me	3.87	Agree/high
	Composite Mean	**3.78**	**Agree/high**
	OVERALL MEAN	**3.82**	**Agree/high**

Source: Ryan and Deci (2000).

***Legend**:*

Range of Mean Values	***Descriptive Interpretation***
4.21 - 5.00	*very satisfied*
3.41 - 4.20	*satisfied*
2.61 - 3.40	*somewhat satisfied*
1.81 - 2.60	*dissatisfied*
1.00 - 1.80	*very dissatisfied*

Regarding basic psychological need satisfaction, the data indicates that students achieved an overall mean rating of 3.82, which is interpreted as "satisfied" (high). This rating signifies that students are neither very satisfied nor very dissatisfied, but rather, they are generally satisfied with their basic psychological need satisfaction, which is deemed high. Notably, when examining the dimensions individually, all three dimensions are rated similarly, reflecting a state of "highly satisfied."

In terms of autonomy and satisfaction, students expressed agreement that they have the freedom to make decisions about whether to study, as well as what and how to study. For competence need satisfaction, students reported that they can pass examinations, are interested in exploring new things, feel a sense of accomplishment, and can demonstrate their capabilities to their friends, with their parents often affirming their abilities. Regarding relatedness need satisfaction, students agreed that they maintain good relationships with their parents and friends, and they have close friendships.

Research has consistently shown a positive association between basic psychological need satisfaction and various factors, including levels of grit (Cinar-Tanriverdi & Karabacak-Çelik, 2023), learning regulation capabilities (Hidayatullah & Scikos, 2023), and academic success (Wang et al., 2019).

Problem 3: What is the academic stress of students in terms of external pressure and expectations, self-efficacy? Table 3. Academic stress of students (n=242)

	Academic stress of students	**Weighted mean**	**Descriptive interpretation**
A	**External pressure and expectations**		
1.	I am ashamed of my parents and friends if I will get low grades	3.89	Agree/high
2.	I don't want to be looked down on by my teachers, friends and parents	4.13	Agree/high
3.	I do not want to fail and disappoint my parent's expectations	4.41	Strongly agree/very high
4.	4. I am worried about the future if I fail my study	4.56	Strongly agree/very high
	Composite Mean	**4.24**	**Strongly agree/very high**
B.	**Course requirement overload and examination**		
1.	I enrolled in many subjects and each subject has requirements	3.60	Agree/high
2.	I am rushed to finish my many assignments	3.51	Agree/high
3.	I am worried that I cannot meet the deadline	4.22	Strongly agree/very high
4.	I am afraid if I fail the coming examination	4.38	Strongly agree/very high
	Composite Mean	**3.92**	**Agree/high**
C.	**Self- efficacy**		
1.	I cannot answer the examination correctly	2.48	Disagree/low

2.	I am not confident that I can finish my study	2.64	Somewhat agree/moderate
3.	I am not confident I can focus on schoolwork when faced with many distractions	2.40	Disagree/low
4.	I am confident I can meet the deadline with a few reminders from the teachers	2.49	Disagree/low
	Composite Mean	**2.50**	**Disagree/low**
	OVERALL MEAN	**3.55**	**Agree/high**

Source: Jagiello,et al. (2024).

Analyzing the data reveals that students' overall academic stress has an average mean rating of 3.55, which is categorized as "agree/high." This rating indicates that the level of stress experienced by senior high school students is not extremely high, nor is it very low, but rather falls within a high range. When examining the specific dimensions of stress separately, the data demonstrates that students experience significant stress related to external pressures, expectations, course requirement overload, and examinations, while self-efficacy-related stress is rated as moderate.

In terms of external pressure and expectations, a majority of students strongly agree that they feel stressed due to concerns about disappointing their parents and friends, fearing failure, and worrying about their future if they do not succeed. Regarding course requirement overload and examinations, students express strong agreement that they experience stress from managing multiple subjects and assignments, as well as from the anxiety of meeting deadlines and the fear of failing examinations. Conversely, related to self-efficacy, students moderate their agreement, indicating they feel stress from uncertainties about answering exam questions correctly, completing their studies, and dealing with distractions while trying to meet assignment deadlines.

High levels of academic stress can have detrimental effects on students' mental well-being (Barbayannis et al., 2022) and can contribute to poor academic performance (Jimenez-Mijangos et al., 2023).

Problem 4: Is there a relationship between parent educational involvement and basic psychological need satisfaction?

A. Parents' Educational involvement and autonomy

The collective parental educational involvement—encompassing emotional, cognitive, and behavioral dimensions—significantly predicts students' basic psychological needs for autonomy, as indicated by the analysis: $F(3, 238) = 17.070$, $p < .01$. This finding reveals a 17.70 percent overlap between the three predictor variables and students' autonomy. Consequently, the variations observed in students' autonomy are attributable to differences in parents' educational involvement across these dimensions.

When examining each factor of parental involvement individually, only emotional involvement emerges as a significant predictor of students' psychological need for autonomy, with a regression coefficient of $B = .384$, $p < .01$. The Y-intercept for the equation is quantified at 1.901. This suggests that the variations in students' psychological need for autonomy are primarily influenced by the degree of parents' emotional involvement.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.421[a]	.177	.167	.62054

a. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.719	3	6.573	17.070	.000[b]
	Residual	91.646	238	.385		
	Total	111.365	241			

a. Dependent Variable: Basic psychological need of students-autonomy

b. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.901	.280		6.802	.000
	Parents' emotional involvement	.384	.079	.340	4.864	.000
	Parents' cognitive involvement	.048	.066	.056	.739	.461
	Parents' Behavioral involvement	.064	.054	.087	1.187	.236

a. Dependent Variable: Basic psychological need of students-autonomy

B. Parents' educational involvement and competence need

When parents' emotional, cognitive, and Behavioral involvements were considered as a group, they could significantly predict the basic psychological need of the students in terms of competence, F (3, 238) = 40.613, $p <$ *.01* with 3.39 per cent overlap between the three predictor variables and students' competence need.

Particularly, parents' emotional involvement $B = .327$, $p < .01$, cognitive involvement B =.225, $p < .01$, and Behavioral involvement $B = .118$, $p < .01$, 1.281 quantified the Y-intercept of the regression equation.

Hence, the variations observed in the students' competence needs are due to observed differences in the parents' educational involvement in terms of emotional, cognitive, and Behavioral involvement.

Furthermore, when analyzed individually, all three predictor variables—parents' educational involvement in terms of emotional, cognitive, and behavioral dimensions—were found to significantly predict students' basic psychological need for competence. This indicates that students' basic psychological need for competence is influenced by the emotional, cognitive, and behavioral involvement of their parents.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582[a]	.339	.330	.55829

a. Predictors: (Constant), parents' behavioral involvement, parents' emotional involvement, parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.976	3	12.659	40.613	.000[b]
	Residual	74.182	238	.312		
	Total	112.158	241			

a. Dependent variable: Basic psychological need of students - competence

b. Predictors: (Constant), parents' behavioral involvement, parents' emotional involvement, parents' cognitive involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.281	.251		5.095	.000
	Parents' emotional involvement	.327	.071	.289	4.610	.000
	Parents' cognitive involvement	.225	.059	.260	3.815	.000
	Parents' behavioral involvement	.118	.049	.158	2.418	.016

a. Dependent Variable: Basic psychological need of students - competence

C. Parents' educational involvement and relatedness need

The impact of parents' educational involvement on students' relatedness needs is both significant and intriguing. When

considered as a collective force, the emotional, cognitive, and behavioral dimensions of parental involvement emerge as strong predictors of students' need for connection, with a notable F (3, 238) = 40.613, p < .01 and a 3.11% overlap among the predictor variables.

Diving deeper, the analysis reveals that when these variables are examined individually, parents' emotional involvement stands out as a critical factor, with a coefficient of B = .383, p < .01. Additionally, cognitive involvement makes its mark with B = .177, p < .01, while the Y-intercept of the regression equation is quantified at 1.266.

These findings suggest that the variations in students' relatedness needs can be directly linked to the nuances in how parents engage with them emotionally and cognitively. Interestingly, while behavioral involvement is important, it is the emotional and cognitive dimensions that significantly shape students' sense of connection. Ultimately, this underscores the vital role parents play in fostering their children's social needs, highlighting that their active participation in emotional and cognitive realms can greatly influence their children's ability to build and maintain meaningful relationships.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558[a]	.311	.303	.56133

a. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.895	3	11.298	35.857	.000[b]
	Residual	74.991	238	.315		
	Total	108.886	241			

a. Dependent Variable: Basic psychological need of students-relatedness
b. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.266	.253		5.007	.000
	Parents' emotional involvement	.383	.071	.343	5.369	.000
	Parents' cognitive involvement	.177	.059	.207	2.986	.003
	Parents' Behavioral involvement	.088	.049	.119	1.785	.076

a. Dependent Variable: Basic psychological need of students-relatedness

Problem 5: is there a relationship between parent educational involvement and academic stress

A. Parents' educational involvement and external pressure and expectations

The analysis reveals that the three dimensions of parents' educational involvement—emotional, cognitive, and behavioral—serve as significant predictors of students' academic stress, particularly regarding external pressures and expectations. This relationship is evidenced by the results, F (3, 238) = 2.695, p < .05, indicating a 3.30% overlap between these predictor variables and the students' academic stress related to external demands.

Drilling down into the specifics, it is the emotional involvement of parents that stands out most prominently, with a coefficient of B = .292, p < .01. This highlights that emotional support plays a crucial role in shaping students' experiences of academic stress.

Consequently, the variations in students' academic stress concerning external pressures can be attributed largely to the

differences in parents' emotional engagement. While all three dimensions of involvement were assessed, it is clear that emotional involvement uniquely influences how students perceive and respond to academic expectations. This underscores the importance of parents being emotionally present and supportive, as it can significantly mitigate the stress their children feel in academic environments.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.181[a]	.033	.021	.81464

a. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.366	3	1.789	2.695	.047[b]
	Residual	157.947	238	.664		
	Total	163.312	241			

a. Dependent Variable: Academic stress- external pressure & expectations

b. Predictors: (Constant), parents' behavioral involvement, parents' emotional involvement, parents' cognitive involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.510	.367		9.566	.000
	Parents' emotional involvement	.292	.104	.214	2.818	.005
	Parents' cognitive involvement	-.060	.086	-.057	-.693	.489
	Parents' Behavioral involvement	-.068	.071	-.076	-.958	.339

a. Dependent Variable: Academic stress- external pressure & expectations

B. Parents' educational involvement and academic stress as to course requirement overload and examination

The analysis indicates that the three dimensions of parents' involvement—emotional, cognitive, and behavioral—are significant predictors of students' academic stress, particularly in relation to course requirement overload and examination pressures. This relationship is substantiated by the findings, $F(3, 238) = 6.841$, $p < .01$, which reveal a notable 7.90% overlap between these predictor variables and the academic stress experienced by students in terms of course demands.

Breaking it down further, the coefficients reveal the unique contributions of each type of parental involvement: emotional involvement has a coefficient of $B = .261$ ($p < .01$), cognitive involvement stands at $B = .156$ ($p < .05$), while behavioral involvement presents a coefficient of $B = -.181$ ($p < .01$). The Y-intercept of the regression equation is quantified at 2.902.

These results suggest that variations in students' academic stress associated with course overload and examinations are significantly influenced by the nature of parents' involvement across emotional, cognitive, and behavioral dimensions. Notably, when examining these factors individually, it becomes clear that each dimension contributes uniquely to the students' experiences of stress related to academic requirements. This highlights the importance of a holistic approach to parental involvement, as all three factors play critical roles in shaping students' academic experiences and stress levels.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.282[a]	.079	.068	.69392

a. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.882	3	3.294	6.841	.000[b]
	Residual	114.603	238	.482		
	Total	124.485	241			

a. Dependent Variable: Academic stress-course requirement and overload
b. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.902	.313		9.283	.000
	Parents' emotional involvement	.261	.088	.219	2.960	.003
	Parents' cognitive involvement	.156	.073	.171	2.132	.034
	Parents' Behavioral involvement	-.181	.061	-.230	-2.978	.003

a. Dependent Variable: Academic stress-course requirement and overload

C. Parents' educational involvement and academic stress as to self-efficacy

The analysis reveals that the three dimensions of parents' educational involvement—emotional, cognitive, and behavioral—do not significantly predict students' academic stress concerning self-efficacy, as evidenced by the results, $F(3, 238) = 2.180$, $p > .05$. This indicates that the overall level of parental involvement does not appear to influence students' perceptions of their self-efficacy and associated stress levels.

However, when examining the individual contributions of these factors, the results show that parents' behavioral involvement has a coefficient of $B = .171$ ($p < .05$) and quantifies the Y-intercept of the regression equation at 2.759. This suggests that while the overall dimensions of parental involvement do not significantly correlate with self- efficacy-related stress, parents' behavioral involvement does have a measurable impact.

Consequently, the variations in students' academic stress associated with self-efficacy are largely attributed to differences in parents' behavioral involvement. This finding underscores the nuanced role that specific aspects of parental engagement play in shaping students' academic experiences, particularly in relation to their self-perception and confidence in academic settings. Overall, while emotional and cognitive involvement may not show a significant predictive capacity, behavioral involvement emerges as a key factor influencing students' stress levels concerning self-efficacy.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.164[a]	.027	.014	.88334

a. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive involvement

ANOVA[a]

Model		Sum of Squares	df	MeanbSquare	F	Sig.
1	Regression	5.103	3	1.701	2.180	.091[b]
	Residual	185.709	238	.780		
	Total	190.812	241			

a. Dependent Variable: Academic stress - self-efficacy
b. Predictors: (Constant), Parents' Behavioral involvement, Parents' emotional involvement, Parents' cognitive

involvement

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.759	.398		6.933	.000
	Parents' emotional involvement	-.191	.112	-.129	-1.698	.091
	Parents' cognitive involvement	-.017	.093	-.015	-.179	.858
	Parents' Behavioral involvement	.171	.077	.176	2.215	.028

a. Dependent Variable: Academic stress - self-efficacy

Discussions

The results of the current study are both intriguing and significant. Two key findings warrant further elaboration: the effect of parental involvement in education on the satisfaction of basic psychological needs, and the impact of parental educational involvement on academic stress.

Firstly, regarding the effect of educational involvement on psychological need satisfaction, it is important to note that psychological needs serve as essential nutrients for a person's adjustment, integrity, and growth (Ryan, 1995).

The satisfaction of these needs is crucial for individual well-being; conversely, their frustration can lead to ill-being and defensiveness (Ryan & Deci, 2000a). The findings of this study indicate that students' psychological needs— specifically autonomy, relatedness, and competence—are dependent on their parents' involvement in their education. This suggests that fulfilling these three basic psychological needs is largely contingent on parental support in their academic endeavors. Insufficient parental involvement can therefore frustrate these needs, potentially deteriorating the psychological well-being of students (Vansteenkiste & Ryan, 2013).

The current results yield three significant findings: First, parental emotional involvement positively influences students' autonomy needs. This means that to foster a child's autonomy, emotional support—such as caring—must be provided, without necessarily requiring cognitive or behavioral involvement. Second, all three forms of parental involvement—emotional, cognitive, and behavioral—are essential for developing children's competence needs. The more engaged parents are in these dimensions, the more students' competence needs are fulfilled. Third, the fulfillment of relatedness needs is dependent on the levels of parents' emotional and cognitive involvement, while behavioral involvement does not significantly contribute to this aspect.

Secondly, the study examines the effect of parents' educational involvement on students' academic stress. The findings indicate that students experience high levels of academic stress, which correlates with parental involvement. In other words, both insufficient and excessive parental involvement can produce varying levels of academic stress in students. However, when analyzing the three dimensions of parental involvement separately, specific results emerge.

Firstly, external pressure and parental expectations correlate with parents' emotional involvement. The more emotionally engaged parents are in their children's education, the more students feel pressured. This finding suggests that both excessive and inadequate emotional involvement can lead to different levels of pressure on children, indicating that parental involvement does not always yield positive outcomes and can sometimes generate negative feelings (Liu et al., 2023).

Secondly, academic stress related to subject overload and examinations is influenced by all three dimensions of parental involvement: emotional, cognitive, and behavioral. Excessive or insufficient parental involvement in any of these areas can lead to varying levels of academic stress among students.

Lastly, the study found that students' self-efficacy is generally unaffected by the three types of parental involvement. However, a closer examination reveals that self-efficacy is influenced by parents' behavioral involvement, suggesting that both too little and too much behavioral involvement can impact students' self-efficacy.

The findings of the current study enrich the ongoing discussion about the importance of parental involvement in children's education. While many studies highlight the positive contributions of parental involvement to academic performance and student well-being (Fan & Chen, 2001; Otani, 2019; Wang et al., 2023; Jocson & Karuppiah, 2024), this study presents mixed results. Parental involvement can support students' basic psychological needs while simultaneously contributing to their academic stress. In essence, parental involvement may lead to either empowerment or burden (Peng et al., 2024).

This study acknowledges its limitations, particularly its focus on senior high school students. Future research should expand to include a broader population at the college level to provide more comprehensive insights.

Conclusion

The findings of this study illuminate the complex relationship between parental involvement in education and its effects on the basic psychological need satisfaction and academic stress of students. This dual effect reveals an intriguing dichotomy: parental engagement can simultaneously empower and burden students.

Upon examining the specifics, it becomes clear that the three dimensions of parental involvement—emotional, cognitive, and behavioral—are significantly linked to students' competence needs. Notably, emotional involvement emerges as a crucial factor in fostering students' autonomy, while both emotional and cognitive engagement play essential roles in nurturing students' sense of relatedness.

However, the influence of parental involvement is not limited to support; it also contributes to academic stress. Each dimension—emotional, cognitive, and behavioral—can lead to increased stress levels in students. Specifically, emotional involvement correlates with external pressure, whereas behavioral involvement primarily impacts students' self-efficacy.

In summary, the role of parents in their children's education presents a double-edged sword. On one hand, their involvement serves as a powerful catalyst for satisfying basic psychological needs and enhancing students' overall well-being. On the other hand, it can also become a source of stress, complicating the educational experience. Therefore, finding a balance in parental involvement is vital, as it can be a source of empowerment; when mismanaged, it can inadvertently create burdens that hinder students' academic journeys. Understanding this delicate balance is vital for fostering an environment where students can thrive both emotionally and academically.

***Authors' contribution*:** Conceptualization, research methodology, data gathering and analysis is performed by the author.

Conflict of interest statement: All authors declare no conflict of interest.

Ethical review statement: the research is submitted to the ethical review board and approved for the conduct of the study. It does not involve human-sensitive issues.

Funding: the study is funded by the authors.

References

Alampay, L.P. & Garcia, A. S., (2019). Education and parenting in the Philippines. *Archīum.ATENEO*. https://archium.ateneo.edu/psychology-faculty-pubs/97

Ardi, Z., Eseadi, C., Ade, A.H., Hidayat, H., & Guspriadi, Y. (2022). Students study pressures during the Covid-19 global

pandemic: Exploration of the effects of workload, self-expectation, grade worries and despondency on college students in Indonesia. *The International Journal of Counseling and Education, 7*(1), 32-47. https://doi.org/10.23916/0020220737710

Ates, A. (2021). The relationship between parental involvement in education and academic achievement: a metanalysis study. *Pegem Journal of Education and Instruction, 11*(3), 50-66.

Baig, T., Ganesan, G.S., & Ibrahim, H. (2021). The association of parental involvement with adolescents' well-being in Oman: evidence from the 2015 Global School Health Survey. *BMC Psychology, 9*, 175 (2021). https://doi.org/10.1186/s40359-021-00677-5

Barbayannis, G., Bandari, M., Zheng, X., Baquerizo, H., Pecor, K.W. & Ming, X. (2022). Academic stress and mental well-being in college students: Correlations, affected groups, and COVID-19. *Frontier in Psychology, 13*, 886344. https://doi.org/10.3389/fpsyg.2022.886344

Baumeister, R. & Leary, M. (1995). The need to belong. The desire for interpersonal attachments is a fundamental human motivation. *Psychological Bulletin, 117,* 497-529

Bhalla, A.S. (1992). *Access to education. In: Uneven development in the third world.* Palgrave Macmillan. https://doi.org/10. 1007/978-1-349-11150-3_9

Boyatziz, R. (1982). *Competent manager: A model for effective performance*. Case Western Reserve University Press

Burnard, P. (1989). *Educational principles and curriculum design in experiential learning. In: Teaching interpersonal skills: Therapy in practice series*. Springer. https://doi.org/10.1007/978-1-4899-7104-3_5

Byrd, D. R., & McKinney, K. J. (2012). Individual, interpersonal, and institutional level factors associated with the mental health of college students. *Journal of American College Health 60*, 185–193. https://doi.org/10.1080/07448481.2011.584334

Çetin, T., Osman, A., & Güneş, K. (2022). How can we make students happier at school? Parental pressure or support for academic success, educational stress and school happiness of secondary school students. *Shanlax International Journal of Education, 10*(2):92-100. https://doi.org/ 10.34293/education. v10i2.4546

Chazan, B. (2021). *What is "education"? In: principles and pedagogies in Jewish education*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-83925-3_3

Chen, M. & Mok, I.C. (2023). Perceived parental involvement influences students' academic buoyancy and adaptability: the mediating roles of goal orientations. *Frontier in Psychology, 3*(14), 1248602. https://doi.org/doi: 10.3389/fpsyg.2023.1248602.

Cheung, C. S., & Pomerantz, E. M. (2011). Parents' involvement in children's learning in the United States and China: Implications for children's academic and emotional adjustment. *Child Development, 82*(3), 932– 950. https://doi.org/10.1111/j.1467-8624.2011.01582.x

Çınar-Tanrıverdi, E, Karabacak-Çelik, A. (2023). Psychological need satisfaction and academic stress in college students: the mediator role of grit and academic self-efficacy. *European Journal of Psychology of Education, 38*(1), 131–60. https://doi.org/10.1007/s10212-022-00658-1.

Cooper, C.L., & Marshall, J. (1978). *Coping with stress. In: Understanding executive stress*. Palgrave Macmillan.

https://doi.org/10.1007/978-1-349-03030-9_7

Córdova- Olivera, P., Gasser Gordillo, P., Naranjo Mejía, H., La Fuente Taborga, I., Grajeda Chacón, A., & Sanjinés-Unzueta, A. (2023). Academic stress as a predictor of mental health in university students. *Cogent Education, 10*(2). https://doi.org/10.1080/2331186X.2023.2232686

Cremin, L. (1975). *Public education and the education of the public*. Stroum Centre for Jewish Studies.

Cremin, L. 1976. *Public education.* Basic Books.

Crisafi, A. & Gallagher, S. (2010). Hegel and the extended mind. *AI & Society, 25*(1), 123-129. https://doi.org/10.1007/s00146-009-0239-9

Davey, S., Harney, B. (2023). *Higher education and skills for the future(s) of work*. In: Lynn, T., Rosati, P., Conway, E., van der Werff, L. (eds). *The future of work: Palgrave Studies in Digital Business & Enabling Technologies.* Palgrave Macmillan. https://doi.org/10.1007/978-3-031-31494-0_8

David, A. P. (2010). Examining the relationship of personality and burnout in college learners: The role of academic motivation. *Educational Measurement and Evaluation Review, 1*, 90–104

deCharms, R. (1968). *Personal causation: The internal affective determinants of Behavior.* Academic Press.

Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. Journal of Personality and Social Psychology, 18, 105–115. https:doi.org/10.1037/h0030644

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of Behavior. *Psychological Inquiry, 11*, 227–268

Deng, Y., Cherian, J., Khan, N. U. N., Kumari, K., Sial, M. S., Comite, U., Gavurova, B., & Popp, J. (2022). Family and academic stress and their impact on students' depression level and academic performance. *Frontiers in psychiatry*, *13*, 869337. https://doi.org/10.3389/fpsyt.2022.869337

Eisenberg, D., Gollust, S. E., Golberstein, E., & Hefner, J. L. (2007). Prevalence and correlates of depression, anxiety, and suicidality among university students. *American Journal of Orthopsychiatry, 77*, 534–542. https://doi.org/10.1037/0002-9432.77.4.534

Epstein, J.L. (1996). *Perspectives and previews on research and policy for school, family, and community partnerships*. In: Booth, A., Dunn J, F. (1996). editors. *Family-school links: How do they affect educational outcomes?* Erlbaum

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *National Biotechnology, 36*, 282–284. https://doi.org/10.1038/nbt.4089

Fan, X., Chen, M. (2001). Parental involvement and students' academic achievement: a meta-analysis. *Educational Psychology Review, 13*, 1–22. https://doi.org/10.1023/A:1009048817385

Fazli, S.M., Gudmunson, C.G., Griesdorn, T.S., & Dean, L.R. (2020). *Influence of family financial association on academic success in college*. Springer Publishing. https://doi.org/10.1891/JFCP-18-00052

Ferrari, E. (2023). *Michel de Montaigne (1533–1592): Education as Self-awareness and Autonomy. In: Geier, B.A. (eds), The Palgrave Handbook of Educational Thinkers*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030- 81037-

5_33-2

Fry, J. (1969). *Education and Training*. In: *Medicine in Three Societies*. Springer. https://doi.org/10.1007/978-94- 011-6109-1_12

Gagne, M. (2014). *The Oxford handbook of work engagement, motivation, and self-determination theory*. Oxford University Press

Fuchs, A. (2008). *Motivation.* In: Kirch, W. (eds). *Encyclopedia of Public Health*. Springer. https://doi.org/10.1007/978-1-4020-5614-7_2238

Garrison, J., Neubert, S. & Reich, K. (2012). *John Dewey's Philosophy of Education*. Springer.

Georgiou, S.N. (1996). Parental involvement: Definition and outcomes. *Social Psychology of Education, 1*, 189–209. https://doi.org/10.1007/BF02339890

Gibson, J.L., Ivancevich, J.M., & Donelly, J.H. (2000). *Organizations: Behavior, structure and process.* McGraw- Hill

Goldstein, K. (1939). *The organism*. American Book Co. Gonzalez-DeHass, A.R., Willems, P.P. & Holbein, M.F.D. Examining the relationship between parental involvement and student motivation. *Educational Psychology Review, 17*, 99–123 (2005). https://doi.org/10.1007/s10648-005- 3949-7

Goodyear, D. (2017). *John Locke's thoughts on education*. In: Peters, M.A. (eds). *Encyclopedia of educational philosophy and theory*. Springer. https://doi.org/10.1007/978-981-287-588-4_339

Götz, I.L. (2023). On Aristotle and public education. *Studies in Philosophy and Education 22*, 69–82. https://doi.org/10.1023/A:1021184912534

Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development, 65*(1), 237–252. https://doi.org/10.1111/j.1467-8624.1994.tb00747.x

Hackman, J., & Oldham, G. (1976). Motivation through design of work: Test of a theory. *Organizational Behavior and Human Performance, 16,* 250-279

Hafeez, M., Saira, S., & Ijaz, A. (2022). Relationship between parental anxiety and learners' academic stress at the secondary level. *International Journal of Learning and Teaching, 14*(1), 26–42.

Hallinan, M. (2000). *Handbook of the sociology of education*. Springer.

Hara, S.R., & Burke, D.J. (1998). Parent involvement: The key to improved student achievement. *The School Community Journal,* 8, 9–19.

Hasanah, U., Khafifah, K.A. & Zulfa, V. (2023). Hubungan antara stress academik dengan academic performance pada Santri Madrasah Aliyah Pondok Pesantren Al Hamid. *JKKP(Jurnal Kesejahteraan Keluarga dan Pneidikan), 10*(1). http://doi.org/10.21009/JKKP.101.03

Herman, J.L., & Yeh, J.P. (1983). Some effects of parent involvement in schools. *The Urban Review, 15,* 11–17. https://doi.org/10.1007/BF01112339

Hidayatullah, A., & Csíkos, C. (2023). Association between psychological need satisfaction and online self-regulated learning. *Asia Pacific Education Review, 25* (3). https://doi.org/10.1007/s12564-023-09910-9

Hill, N.E. & Craft, S.A. (2003). Parent-school involvement and school performance: Mediated pathways among socioeconomically comparable African American and Euro-American families. *Journal of Educational Psychology,* 96,74–83.

Jagiello, T., Belcher, J., Neelakandan, A. Boyd, K. & Wuthrich, V.M. (2024). Academic stress interventions in high schools: A systematic literature review. *Child Psychiatry and Human Development* (2024). https://doi.org/10.1007/s10578-024-01667-5

Jeronen, E. (2013). *Education.* In: Idowu, S.O., Capaldi, N., Zu, L., Gupta, A.D. (eds) *Encyclopedia of Corporate Social Responsibility*. Springer. https://doi.org/10.1007/978-3-642-28036-8_565

Jiménez-Mijangos, L.P., Rodríguez-Arce, J., Martínez-Méndez, R. *et al.* Advances and challenges in the detection of academic stress and anxiety in the classroom: A literature review and recommendations. *Education and Information Technologies, 28*, 3637–3666 (2023). https://doi.org/10.1007/s10639-022-11324-w

Jocson, R.M., & Karuppiah, N. (2024). Parental involvement in education and young children's well-being in Singapore. In: Tan, O.S., Low, E.L., Caleon, I.S., Ng, E.L. (eds) *Enhancing holistic well-being of children and youth*. Springer. https://doi.org/10.1007/978-981-97-3515-0_9

Johnson, S. (1979). Children's fear in the classroom setting. *School Psychology Digest, 8 (4),* 382–396.

Kaur, S. (2012). Impact of academic stress on mental health: a study of going school adolescence. *Global Journal of Research Analysis, 3*(5), 27-29. https://doi.org/ 10.15373/22778160/MAY 2014/11

Kristensen, S. M., Larsen, T. M. B., Urke, H. B., & Danielsen, A. G. (2023). Academic stress, academic self-efficacy, and psychological distress: a moderated mediation of within-person effects. *Journal of youth and adolescence*, *52*(7), 1512–1529. https://doi.org/10.1007/s10964-023-01770-1

Lamichhane, C.D. (2018). Understanding the education philosophy and its implications. *Nepal Journal Online, 2*(3).

Lazarus, R. S., & Folkman, S., (1984). *Stress, Appraisal and Coping*. Springer

Lee, J., Jeong, H. J., & Kim, S. (2021). Stress, Anxiety, and Depression Among Undergraduate Students during the COVID-19 Pandemic and their Use of Mental Health Services. *Innovative higher education*, *46*(5), 519–538. https://doi.org/10.1007/s10755-021-09552-y

Lester, D. (2020). *Hierarch of needs* (Maslow). In: Zeigler-Hill, V., Shackelford, T.K. (eds) *Encyclopedia of personality and individual differences*. Springer. https://doi.org/10.1007/978-3-319-24612-3_1483

Liu, Y., Xiong, M., Mo, R., Song, L.& Liu, J. (2023). Parental involvement and children's positive and negative emotion: The mediation role of academic stress. *Journal of Advances in Humanities Research, 2*(2). https://doi.org/10.56868/jadhur.v2i2.146

Louden, R.B. (2017). *Becoming a human: Kant's philosophy of education and human nature*. University of Southern Maine Press

Łuków, P., Różyńska, J. (2016). *Respect for Autonomy*. In: ten Have, H. (eds). *Encyclopedia of Global Bioethics.* Springer. https://doi.org/10.1007/978-3-319-09483-0_380

Ma, Z. (2023). The Study on the Influence of Academic Pressure on Academic Performance. *Journal of Education and*

Educational Research, 3(2).

Marcon, R.A. (1999). Impact of Parent Involvement on Children's Development and Academic Performance: A Three-Cohort Study. *Institute of Education Sciences.*

Martinez-Yarza, N., Solabarrieta-Eizaguirre, J. & Santibáñez-Gruber, R. (2024). The impact of family involvement on students' social-emotional development: the mediational role of school engagement. *European Journal of Psychology and Education, 39(3).* https://doi.org/10.1007/s10212-024-00862-1

Maslow, A. H. (1968). *Toward a psychology of being* (2nd ed.). D. Van Nostrand. Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). Harper & Row.

Mccoubrey, C. (2001). Put focus on personality. Harvard Gazette.

McKay, M.T., Dempster, M. & Byrne, D.G. (2014). An examination of the relationship between self-efficacy and stress in adolescence: the role of gender and self-esteem. *Journal of Youth Studies, 17*(9). https://doi.org/10.1080/13676261.2014.901494

Menning, C.L. (2002). Absent parent is more than money: The joint effect of activities and financial support on youth's educational attainment. *Journal of Family Issues, 23*(5), 648-671. https://doi.org/ 10.1177/0192513X02023005004

Mesurado, B., Salanga, M.G.C., Mateo, N.J. (2016). *Basic Psychological Needs and Flourishing in Filipino University Students*. In: King, R., Bernardo, A. (eds). *The Psychology of Asian Learners.* Springer. https://doi.org/10.1007/978-981-287-576-1_28

Miovska-Spaseva, S. (2016). The educational theory of John Dewey and its influence on educational policy and practice in Macedonia. *Espacio Tiempo y Educacion, 3*(2), 207. https://doi.org/10.14516/ete.2016.003.002.009

Miranda, D.R. (n.d). Overparenting is a barrier to development, learning and well-being. *UCLA School Mental Health*. http://smhp.psych.ucla.edu

Misra, R., & Castillo, L. G. (2004). Academic stress among college students: comparison of American and International Students. *International Journal of. Stress Management, 11,* 132–148. https://doi.org/10.1037/1072- 5245.11.2.132

Moneva, J.C., Pestano, R.F., & Vertulfo, R.M (2020). Parental financial support and student motivation in learning. *Issues in Social Science, 8*(1), 9. https://doi.org/10.5296/iss. v8i1.16908

Moreno, A. (2013). *Autonomy*. In: Dubitzky, W., Wolkenhauer, O., Cho, KH., Yokota, H. (eds). *Encyclopedia of Systems Biology*. Springer. https://doi.org/10.1007/978-1-4419-9863-7_51

Murdiana, E., Kisman, Z., & Kanto, D.S. (2023). The influence of academic pressure, academic procrastination, and ability with self-efficacy as moderating variable on student academic fraud Behavior. *Islamic Banking: Jurnal Pemikiran dan Pengembangan Perbankan Syariah, 8*(2).

Nisbet, E.K., Zelenski, J.M. (2014). *Nature-relatedness and subjective well-being. In: Michalos, A.C. (eds). Encyclopedia of quality of life and well-being research*. Springer. https://doi.org/10.1007/978-94-007-0753-5_3909

Noaparast, K.B. (2014). *Richard Rorty's conception of education of philosophy of education revisited.* Wiley.

Obradović, J., Sulik, M. J., & Shaffer, A. (2021). Learning to let go: Parental over-engagement predicts poorer self-

regulation in kindergartners. *Journal of Family Psychology, 35*(8), 1160–1170. https://doi.org/10.1037/fam0000838

O'Neill, M., Yoder-Slater, G., & Batt, D. (2019). Social work student self-care and academic stress. *Journal of Social Work Education, 55*(1), 141–152.

Otani, M. (2019). Parental involvement and academic achievement among elementary and middle school students. *Asia Pacific Education Review, 21*, 1–25. https://doi.org/10.1007/s12564-019-09614-z

Paralkar., U, & Knutson, D (2021). Coping with academic stress: Ambiguity and uncertainty tolerance in college students. *Journal of American College Health, 8*, 1-9. https://doi.org/10.1080/07448481.2021.1965148.

Pascoe, M.C., Hetrick, S.E., & Parker, A.G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence Youth 25*(1),104–112. https://doi.org/10.1080/02673843.2019.1596823

Parisi, J.M., Rebok, G.W., Xue, Q.L., Fried, L.P., Seeman, T.E., Tanner, E.K., Gruenewald, T.L., Frick, K.D., & Carlson, M.C. (2012). The role of education and intellectual activity on cognition. *Journal of Aging Research, 2010- 2024*, 416132. https://doi.org/10.1155/2012/416132.

Pedrelli, P., Nyer, M., Yeung, A., Zulauf, C., & Wilens, T. (2015). College students: mental health problems and treatment considerations. *Academic Psychiatry, 39*, 503–511. https://doi.org/ 10.1007/s40596-014-0205-9

Peng, S., Li, H., Xu, L., Chen, J. & Cai, S. (2023). Burden or empowerment? A double-edged sword model of the efficacy of parental involvement in the academic performance of Chinese adolescents. *Current Psychology, 43*, 3786–3797. https://doi.org/10.1007/s12144-023-04589-y

Pérez- S.C. N., Betancort, M. M., & Cabrera, R. L. (2013). Family influences in academic achievement: a study of the Canary Islands. *Revista Internacional de Sociologia. 71,* 169–187. https://doi.org/10.3989/ris.2011.04.11

Raj, T., Chauhan, P., Mehrotra, R. & Sharma, M. (2022). *The importance of critical thinking in education. World Journal of English Language, 12*(3). https://doi.org/10.5430/wjel.v12n3p126

Reddy, K. J., Menon, K. R., & Thattil, A. (2018). Academic stress and its sources among university students. *Biomedical and Pharmacology Journal, 11*(1), 531–537.

Roksa, J. & Kinsley, P. (2018). The Role of family support in facilitating academic success of low-income students. *Research in Higher Education, 60*, (4), 415–37. *JSTOR*, http://www.jstor.org/stable/45180388.

Roy, M. & Geraldo-Garcia, R. (2018). The role of parental involvement and social/emotional skills in academic achievement: global perspectives. *School Community Journal, 28*(2).

Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality, 63*, 397–427.

Sari, I. (2015). Satisfaction of basic psychological needs and goal orientation in young athletes: A test of basic psychological need theory. *Kinesiology 47(*2015), 159-168

Scheffler, I. (1960). *The Language of Education.* Cambridge University Press.

Scheffler, I. (1974). *Four pragmatists: A critical introduction to Peirce, James, Mead, and Dewey*. Humanities Press.

Smedsrud, J. (2020). *Explaining the variations of definitions of variations in gifted education*. Nordic Open Access Scholarly Publishing

Spielberger, C.D. & Vaag, P.R. (1995). *Test anxiety: a transactional process model*. In: Spielberger CD, Vaag PR (eds). *Test anxiety: theory, assessment and treatment* (pp. 1–14). Taylor and Francis. https://doi.org/10.1002/9780470479216.corpsy0985

Sun, J., Dunne, M.P., Hou, X., & Xu,A. (2011). Educational stress scale for adolescents: Development, validity, and reliability with Chinese students. *Journal Psychoeducational Assessment, 29*(6), 534–546.

Tárraga, V., García, B., & Reyes, J. (2017). Home-based family involvement and academic achievement: a case study in primary education. *Educational Studies, 44,* 361–375. https://doi.org/10.1080/03055698.2017.1373636

The Performance Center (n.d). The Difference between education and training. https://thepeakperformancecenter.com

Topor, D.R., Keane, S.P., Shelton, T.L., & Calkins, S.D. (2010). Parent involvement and student academic performance: a multiple mediational analysis. *Journal of Prevention and Intervention in the Community, 38*(3),183-97. https://doi.org/ 10.1080/10852352.2010.486297

Tubbs, N. (2015). *Philosophy and Modern Liberal Arts Education: Freedom is to Learn*. Elsevier

Tumwine, P. (2023). *Immanuel Kant*. In: Geier, B.A. (eds). *The Palgrave Handbook of Educational Thinkers.* Palgrave Macmillan. https://doi.org/10.1007/978-3-030-81037-5_49-1

Turley, R.N.L. (2006). When parents want children to stay home for college. *Research in Higher Education,* 47, 823–846 (2006). https://doi.org/10.1007/s11162-006-9017-4

Vallerand, R. J.& Reid, G. (1984). On the causal effects of perceived competence on intrinsic motivation: A test of cognitive evaluation theory. Journal of Sport Psychology, 6, 94–102. https://doi.org/10.1123/jsp.6.1.94

Vansteenkiste, M., Ryan, R.M. & Soenens, B. (2020). Basic psychological need theory: Advancements, critical themes, and future directions. *Motivation and Emotion, 44*, 1–31. https://doi.org/10.1007/s11031-019-09818-1

Väyrynen, K. (2016). *Hegel on moral development, education, and ethical life. In: Peters, M. (eds) Encyclopedia of educational philosophy and theory*. Springer. https://doi.org/10.1007/978-981-287-532-7_423-1

Verma, R., Balhara, Y. P., & Gupta, C. S. (2011). Gender differences in stress response: role of developmental and biological determinants. Indian Psychiatry Journal, 20, 4–10. https://doi.org/10.4103/0972-6748.98407

Vansteenkiste, M., & Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration, 3,* 263–280.

Wang, H., Chen, Y., Yang, X., Yu, X., Zheng, K., Lin, Q. Cheng, X. & Hu, T. (2023). Different associations of parental involvement with children's learning of Chinese, English, and math: a three-wave longitudinal study. *European Journal of Psychology of Education, 38,* 269–285. https://doi.org/10.1007/s10212-022-00605-0

Wang, Y., Tian, L. & Huebner, E.S. (2019). Basic psychological needs satisfaction at school, Behavioral school engagement, and academic achievement: Longitudinal reciprocal relations among elementary school students. *Contemporary Educational Psychology, 56*(56). https://doi.org/10.1016/j.cedpsych.2019.01.003

Webster-Stratton, C. (1998). Preventing conduct problems in Head Start children: Strengthening parenting competencies. *Journal of Consulting and Clinical Psychology, 5*, 715–730.

*White, R. (1959). Motivation Reconsidered: The Concept of Competence. Psychological Review. 66 (5), 297–333. https://*doi.org/10.1037/h0040934.

Wilks, S.E. (2008). Resilience amid academic stress: the moderating impact of social support among social work students. Advanced Social Work,*9*(2),106–125. https://doi.org/10.18060/51

Xiong, Y., Qin, X., Wang, Q., & Ren, P. (2021). Parental involvement in adolescents' learning and academic achievement: Cross-lagged effect and mediation of academic engagement. *Journal of youth and adolescence*, *50*(9), 1811–1823. https://doi.org/10.1007/s10964-021-01460-w

Yumba, W. (2010). *Academic stress: a case of the undergraduate students*. Institutionen för beteendevetenskap och lärande.