An Axiomatic Approach in the Development of the Theory of Early Childhood Teachers' Work Engagement

Jiyoung Lee

College of Arts and Social Sciences, Tarlac State University

Romulo Blvd, Tarlac City, Philippines

E-mail: jlee@tsu.edu.ph

Abstract

This study used the axiomatic approach to develop a comprehensive theoretical framework to understand the job engagement of early childhood education teachers. Following Padua's (2012) axiomatic methodology, the study was conducted in five stages. The first stage was the selection of phenomena of interest, which focused on resolving the issues of terminology and data utilization used by researchers. The second stage was a literature review to organize existing theories and secure basic data for developing new theories. The third stage, brainstorming, was to generate ideas using creative problem-solving techniques, and the fourth stage was to form axioms on the interaction of basic psychological needs, autonomy support, job demands, and resources. The final stage explained various factors affecting the job engagement of early childhood education teachers through theory building. The results of the study revealed that the socioeconomic status, satisfaction of basic psychological needs, intrinsic motivation, job demands, and resources of early childhood education teachers had a significant effect on job engagement. This provides a theoretical basis that can contribute to educational institutions and policy makers developing strategies to increase teachers' job engagement.

1. INTRODUCTION

The environment within which early childhood education unfolds significantly shapes the experiences and outcomes for childcare teachers and the children under their care. The quality of this work environment directly influences teachers' levels of engagement, satisfaction, and overall well-being, which are critical for their health and the developmental trajectories of the children they educate (Cumming, 2017). In South Korea, the work conditions of childcare teachers have increasingly become a point of concern, especially in terms of how negative aspects of these environments may diminish work engagement and precipitate burnout (Kim & Lee, 2020).

This study aims to delve into the complex relationships between the adverse work environments faced by childcare teachers, their engagement levels at work, and the incidence of burnout. It leverages the Job Demands-Resources (JD-R) theory (Bakker & Demerouti, 2007) as a theoretical framework to investigate how these factors interplay specifically within South Korea's childcare settings. By focusing on the potential mediating role of burnout, this research intends to illuminate how negative work conditions might influence childcare teachers' engagement with their work.

Understanding the elements that affect the job engagement and well-being of childcare teachers is crucial, given their instrumental role in the early developmental stages of children. Adverse work conditions, marked by high job demands, insufficient resources, and lack of support, are known to negatively impact work engagement and lead to higher levels of burnout (Schaufeli & Bakker, 2004). Such outcomes have detrimental effects on teachers' health and job satisfaction and compromise the quality of education and care provided to children (Jennings & Greenberg, 2009). Early childhood teachers' work engagement is very important because it has a significant impact on the quality of early childhood education and children's development. This study aims to design a theory that explains early childhood teachers' work engagement.

2.RESEARCH DESIGN AND FRAME WORK

1.1 The Deductive Approach to Grounded Theory Development

The deductive method of grounded theory development is used in this study. According to Boyatzis, Fereday and Muir-Cochrane, and Hyde, deductive qualitative research differs from other qualitative approaches in that it takes as its starting point theoretical propositions derived from a review of the literature and applies these to data collection and analysis (1998; 2006; 2000; as cited in Pearse, 2019). The procedure includes submerging oneself in the information, reading and trying to digest it in an effort to make sense of the entire entity and comprehend what is really progressing (Azungah, 2018).

1.2 The Role of Axioms in Theory Development

Bryman (2016) discusses additional strategies for improving the quality and rigor of qualitative research. A need for axiomatic devices in order to sensibly fully comprehend reality has existed since ancient times, and building axioms is indeed a general necessity that allows knowledge to be discovered, not just in the mathematical approach. As a result, in order to explore truth through the lens of such innovative axioms, we must undergo an axiomatic shift in our thinking (Crumpei, Gavrilut, & Mastorakis, 2017). According to Hintikka (2011), axiomatization is not usually epistemologically motivated, but it is related to the concept of explanation. The ability of a deductive framework to broaden the foundational laws pertaining to units and greater blends of these units determines its power. The postulates that allow this application of the vital axioms are known as composition rules or laws (Krupp, 1968). The more sophisticated may add that those proofs are based on true axioms and that our inference rules preserve truth (Maddy, 1988) in order for these general axioms to be conceptualized (Bond et al., 2004).

1.3 Propositions and Theory Development

According to Cozby, propositions are statements that express the relationship of two or more concepts (2009; as cited in Udo-Akang, 2012). The propositions are put to the test using the appropriate methods. A proposition's truth must be determined not only by its entailment relationship with other propositions, but also by what those other propositions are like, whether or not they are independently acceptable (Woozley, 2020).

The propositions developed in this study are based on the deductive axiomatic methodology, following the stages in theory development suited from Padua (2012). The propositions are outcomes that satisfy various axioms (Aziz & Lee, 2019), and it can be concluded on the basis of the studio process and the improvements of the propositions (Roggema, 2017). Ukavwe (2018) describes explanation as a logically valid deductive argument, where the phenomenon to be explained follows logically from initial conditions and general laws.

1.4 Theory Generation

The deductive axiomatic method of grounded theory development presented by Padua (2012) consists of five stages. This is presented in Figure 1 below.
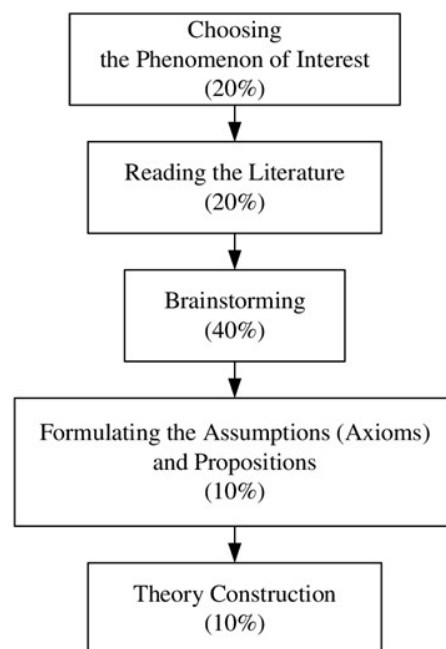
Figure 1. Deductive Axiomatic Method of Grounded Theory Development (Padua, 2012)

The first step is Choosing the Phenomenon of Interest. There is an ongoing problem for those already working inside the perceiving field in terms of the terminology researchers use to promote understanding of interest (Becker, 2019), as well as the use of whatever data is available (Ylikoski, 2019). As a result, a theory will be developed using the deductive axiomatic method.

The second step is Reading the Literature. Corbin and Strauss (2014) cited some methods for developing a theory which allow researchers to examine, interpret, and contribute to making sense of their data, and eventually build theory from it, as well as Garrard (2020) provides a system for organizing and conducting a literature review. As a result, it is necessary to consult other existing databases and resources in order to develop new theory.

The third step is Brainstorming. Brainstorming is the third step in this deductive axiomatic methodology to theory building and is probably the most well-known of creative problem-solving techniques (Rawlinson, 2017). Knowledge is still regarded as a source of power, and its outward manifestations allow others to wield it (Weichbroth, 2016). As a result, the brainstorming theory was born. Several brainstorming techniques are proposed to aid and encourage creativity through generating ideas (Maaravi et al., 2020), and Litchfield et al. (2011) demonstrated that when goal commitment is high, a particular, tough novelty goal, whether presented alone or in tandem with brainstorming regulations, enhances novelty and creative thinking in individuals' generating ideas compared to brainstorming guidelines alone; thus, Ruiter and Crutzen (2020) emphasized that emphasis is placed on the brainstormed ideas, which have been considered an effective method for creativity in the process of innovation (Kazakci et al., 2015).

The forth step isFormulation of Axioms and Propositions. When brainstorming was done, this theory development proceeds with the formulation of a number of axioms regarding the interaction between Mother Tongue Instruction (MTI) as an effective language of instruction "native language" towards the empowerment of learners and stakeholders, particularly home tutors, to increase their involvement in the teaching-learning process for the learners to maintain academic achievement amidst the pandemic.

Axiomatic truth theories, like other formal deductive systems, can be presented as frameworks requiring few resources, specifically a strong metalanguage and metatheory. Formal work on axiomatic truth theories has aided in the illumination of semantic truth theories (Halbach, 2014). Deductive reasoning is a type of reasoning in which the truth of the input propositions (the premises) is logically guaranteed in order to ensure the truth of the output proposition. The premises could be propositions in which the reasoner believes or assumptions in which the reasoner is interested (Schechter, 2013). Such axioms and propositions seem to be crucial in the development of a theory (Cabello et al., 2021; Torres, 2020).

The last step is theory construction. According to Gabriel, Meyer, and Germano, a theory refers to a set of concepts, ideas, philosophies, or strategies used to clarify a broad range of observable reality, and it is a general statement of abstract concepts or ideas which affirms, helps explain, or predicts connections or relations among both between many phenomena, within the limits of critical bounding assumptions that perhaps the theory explicitly makes (2008; as cited in Torres, 2020). Theory development is essential because it offers an analytical framework, enables the field's efficient development, and is required for the field's practical application to pragmatic actual problems. To really be good theory, a theory should adhere to the qualities (criteria) for 'good' theory, which include distinctiveness, parsimony, preservation, generalization, fecundity, internal reliability, evidence-based volatility, and abstraction (Gay & Weaver, 2011).

3. RESULTS

3.1 Derivation of Axioms

Role theory operates under the core assumption that individuals perform a variety of roles in their daily lives (Biddle, 1986). These roles influence ⊣ individual's behavior, self-perception, and perception of the behavior of others. Therefore, an individual's behavior can be understood and predicted by knowing the role he or she plays and the resulting behavioral expectations. Based on these assumptions, early role theorists sought to understand how role expectations influence the formation of adolescents' prejudices (Bank, Biddle, Keats, & Keats, 1977). Additionally, it was revealed that expectations and behaviors regarding students' socioeconomic status may vary depending on the teacher's age, experience, and race (Beezer, 1974).

Axiom 1. The role of a teacher varies depending on socioeconomic status.

Self-determination theory is recognized as an approach to explain the functional mechanisms between human psychological needs and intrinsic motivation (Ryan & Deci, 2017). This theory views humans as active organisms with an inherent potential for psychological growth and development (Ryan & Deci, 2000). According to self-determination theory, autonomy support can satisfy an individual's three basic psychological needs (autonomy, competence, and relatedness), activating intrinsic motivational resources, and thereby promoting high levels of commitment (Gagné & Deci, 2005; Reeve & Halusic, 2009). This relationship has been observed across cultures (Deci et al., 2001; Kaplan & Madjar, 2017). Management research has found that employees' perceptions of autonomy and autonomy support can predict performance and psychological adjustment, as well as satisfaction of three internal psychological needs (Baard et al., 2004). It has also been argued that teachers' autonomy support for students can influence learning engagement by satisfying students' autonomy needs and providing intrinsic motivation (Garon-Carrier et al., 2016; Sparks et al., 2016; Yu et al., 2016). al., 2016; Orsini et al., 2018).

Axiom 2. Autonomy support is a key factor in meeting basic psychological needs.

Teacher autonomy refers to the extent to which teachers can make decisions related to their work (Pearson & Hall, 1993). It consists of two dimensions: general educational autonomy and curriculum autonomy. General autonomy refers to the teacher's discretion within the school, and curriculum autonomy refers to autonomy in lesson planning and implementation, selection of teaching materials, and student evaluation (Pearson & Hall, 1993; Pearson & Moomaw, 2006). When schools support teachers' autonomy, teachers' positive attitudes and job satisfaction increase, and it also helps them apply innovative teaching methods (Evertson & Weinstein, 2006; Lam et al., 2010). However, most teachers are often controlled by school administrators (Pelletier et al., 2002).

AXIOM 3. Teacher autonomy is related to teachers' positive attitude toward their work.

According to self-determination theory (SDT), intrinsic motivation is supported through satisfying an individual's basic psychological needs (competence, autonomy, and relatedness) (Ryan & Deci, 2000; Lam et al., 2010; Wagner & French, 2010; Klaeijsen et al., 2018). When the external environment satisfies these basic psychological needs, an individual's intrinsic motivation and self-regulation improve. On the other hand, when basic psychological needs are not met, intrinsic motivation decreases and negative outcomes occur (Chirkov et al., 2003; Baard et al., 2004). Teachers' intrinsic motivation influences their professional development, innovative behavior, and teaching methods (Wagner & French, 2010; Klaeijsen et al., 2018; Robertson & Jones, 2013). Additionally, teachers' intrinsic motivation has a positive effect on students' learning participation (Deci et al., 1996; Demir, 2011). In particular, the higher the school's autonomy support, the higher the intrinsic motivation of teachers, which leads to better teaching methods (Robertson & Jones, 2013).

AXIOM 4. Satisfaction of an individual's basic psychological needs is a necessary condition for improving intrinsic motivation.

Job engagement refers to a positive emotional and cognitive work state consisting of three dimensions: vitality, dedication, and absorption (Schaufeli et al., 2002). Vitality is characterized by high energy levels, mental resilience, willingness to put in effort, and persistence in the face of difficulties. Commitment represents a sense of meaning, passion, inspiration, pride, and challenge. Immersion refers to the state of being completely focused and happily absorbed in work, where time passes quickly and it is difficult to escape from work. According to self-determination theory (SDT), job engagement reflects self-regulation of motivation. High motivation leads to higher levels of performance, sustainability, and creativity (Ryan & Deci, 2000). In the educational field, teachers' intrinsic motivation plays an important role in innovative educational practices (Lam et al., 2010). Especially for young teachers, intrinsic motivation such as personal development, responsibility, and colleague support increases job engagement (Guglielmi et al., 2016). Looking at a study on early childhood teachers, their job involvement was average (Kim, NamKoong, & Kim, 2014). In addition, it is reported to be closely related to the internal motivation of early childhood teachers, such as positive psychological capital and grit (Kwoen, & Cho, 2023; Lee & Moon, 2024).

AXIOM 5. Teacher's internal motivation plays an important role in educational practice and immersion.

The JD-R model is a model that explains the effects of job demands and job resources on workers' burnout and job engagement (Hakanen et al., 2006; Roslan et al., 2015). High job demands can lead to poor health and burnout of workers, but sufficient job resources promote workers' growth, learning, and development, thereby increasing job engagement (Bakker & Demerouti, 2007; Hu et al., 2013). Job demands refer to work characteristics that require cognitive and emotional effort (Hakanen et al., 2006). High job demands can lead to burnout. Especially in the field of early childhood education, personal problem behavior, heavy workload, and poor working environment are reported as the main causes of teachers' psychological pressure (Hakanen et al., 2006). In addition, various factors such as teacher qualifications, working environment, and wages affect the quality of education (Foong et al., 2018). Accordingly, the teacher turnover rate in private early childhood education institutions in Malaysia was found to be high (Foong et al., 2014).

AXIOM 6. Job demands reduce job engagement through teacher burnout.

On the other hand, job resources refer to a positive and satisfying work state characterized by vitality, dedication, and absorption (Prieto et al., 2008). Job resources help meet job demands and satisfy individuals' psychological needs (Jansen et al., 2018). When teachers lack job resources, they have difficulty coping with job demands, which increases levels of burnout (Nurul Aimi Roslan et al., 2015; Lee & Wolf, 2018). Therefore, job resources play an important role in creating a positive educational environment and improving job engagement.

AXIOM 7. Job resources are important for teachers' job engagement.

3.2 Development of propositions

Emergent from the identified axioms are the different proposition developed by merging two or more axioms. Hence the propositions are presented as follows.

Proposition 1: The role performance of early childhood teachers may vary depending on their socioeconomic status.

The social status and economic status of early childhood teachers have a significant impact on the performance of their roles. According to previous research, the social status of teachers remains at a medium level, and social respect for teachers is low (Vujičić, 2015). Additionally, awareness of the economic status of early childhood teachers was found to be low (CSCCE, 2020). In this way, when the socioeconomic status of early childhood teachers is perceived to be low, the roles, authority, and responsibilities expected of teachers may change. In other words, the lower the socioeconomic status of an early childhood teacher is perceived, the more limited the teacher's role performance may be. Therefore, Proposition 1, which states that the role performance of early childhood teachers may vary depending on their socioeconomic status, can be derived based on the results of previous research (Axiom 1).

Proposition 2: Supporting autonomy for early childhood teachers is key to meeting their basic psychological needs.

According to previous research, among teachers' basic psychological needs, autonomy is closely related to life satisfaction (Mulyana & Izzati, 2022). In other words, the more the early childhood teacher feels that she can decide and control her own behavior, the higher her psychological satisfaction. In addition, parents' emotional support plays an important role in meeting early childhood teachers' basic psychological needs (Choi & Min, 2020), and principal's social support also appears to be an important factor in meeting teachers' needs for autonomy (Maas et al., 2022)). This suggests that supporting autonomy for early childhood teachers is key to meeting basic psychological needs. Therefore, Proposition 2, which states that supporting autonomy for early childhood teachers is key to satisfying their basic psychological needs, can be derived based on the results of previous research (Axiom 2, Axiom 3).

Proposition 3: If the basic psychological needs of early childhood teachers are met, the internal motivation of early childhood teachers can be improved and their job involvement can be increased.

According to previous research, when a teacher's basic psychological needs are met, intrinsic motivation improves and this leads to job involvement (van der Schoor, 2015). Specifically, when the early childhood teacher's sense of autonomy, in which she feels that she can decide and control her own behavior, is satisfied, her intrinsic motivation increases, and the early childhood teacher exercises her abilities to successfully perform her tasks (Jeong & Oh, 2023). In addition, when early childhood teachers have positive relationships with others and feel a sense of belonging, their internal motivation increases and they become immersed in their work (Gould et al., 2023). Therefore, the proposition that if the basic psychological needs of early childhood teachers are met can improve their internal motivation and increase their job involvement, the proposition can be derived based on the results of previous research (Axiom 4, Axiom 5).

Proposition 4: High job demands cause burnout of early childhood teachers and reduce their job commitment.

According to previous research, excessive job demands on early childhood teachers were found to reduce job engagement (Byeon & Cho, 2022). Early childhood teachers experience high levels of burnout due to excessive administrative workload, long working hours, and low compensation, which leads to lower engagement in educational activities (Ng et al., 2023). Therefore, it can be seen that as the job demands of early childhood teachers increase, burnout increases, which in turn has a negative effect of lowering job commitment. Considering this relationship, it seems important to manage early childhood teachers' job demands at an appropriate level and prevent burnout (Axiom 6).

Proposition 5: Job resources are important for early childhood teachers' job engagement.

Job resources, along with job demands, are known to be a major factor affecting job engagement. According to previous research, the higher the job resources perceived by early childhood teachers, the higher their job engagement (Bae & Seo, 2023). For example, it has been shown that the more early childhood teachers perceive autonomy, feedback, and support from superiors and colleagues, the more their immersion in educational activities increases (Kwon & Son, 2023; Ham & Kim, 2024). Therefore, it is believed that providing sufficient

job resources to early childhood teachers and making them highly aware of them will be important in increasing job immersion (Axiom 7).

3.3 Final theory of early childhood teacher's work engagement

Early childhood teachers' work engagement is a very important factor in improving the quality of early childhood education. This study proposes a theoretical model that explains the influence of early childhood teachers' socioeconomic status, satisfaction of basic psychological needs, intrinsic motivation, job demands and resources, etc. on early childhood teachers' job engagement.

Research on the relationship between the professional role performance and job immersion of early childhood teachers with high socioeconomic status is one of the important topics in the field of education. This study explores how teachers' socioeconomic status affects their professionalism and commitment to their jobs. Early childhood teachers with higher socioeconomic status generally have access to more educational opportunities and resources, which allows them to perform their role more professionally. Performing professional roles allows teachers to be more deeply immersed in their jobs and thus experience higher job satisfaction and efficiency. Therefore, this theory assumes that "Early childhood teachers' role performance may vary depending on their socioeconomic status. (assumption 1)"

Supporting autonomy for early childhood teachers plays a key role in meeting their basic psychological needs. Autonomy refers to the ability of early childhood teachers to make independent decisions about their own teaching methods and classroom management, which serves as an important factor in increasing teachers' internal motivation and job satisfaction. In an environment where autonomy is guaranteed, early childhood teachers can demonstrate their expertise and try creative teaching methods, which ultimately leads to improving the quality of education. Furthermore, autonomy support has a positive effect on reducing job stress and preventing professional burnout by giving teachers a sense of ownership over their roles. Therefore, this theory assumes that "Supporting autonomy for early childhood teachers is key to meeting their basic psychological needs. (assumption 2)"

Satisfaction of early childhood teachers' basic psychological needs has a significant impact on their job commitment and intrinsic motivation. Based on Deci and Ryan's (2000) self-determination theory, this study explores how early childhood teachers' three basic psychological needs of autonomy, competence, and relatedness promote intrinsic motivation and lead to job engagement. Autonomy refers to a teacher's ability to make independent decisions about his or her own teaching style and classroom management; competence refers to a teacher's positive perception of his/her own ability to do his or her job; relatedness refers to a teacher's ability to make independent decisions about his/her own teaching style and classroom management; , refers to forming positive relationships with parents. When these needs are met, early childhood teachers feel positive value and efficacy for their work, which increases their internal motivation and makes them more deeply absorbed in their work. Therefore, this theory assumes that "high job demands cause burnout of early childhood teachers and reduce their job commitment. (assumption 3)"

As job burnout worsens, teachers lose passion and dedication to their work, which reduces job engagement. Job engagement is the degree to which an individual is emotionally invested, passionate, and absorbed in his or her work. Therefore, to prevent early childhood teachers' job burnout and improve their job engagement, educational institutions and policy makers must find ways to manage job demands and provide sufficient support to teachers. For example, this may include rationalizing workload, increasing job resources, and strengthening social support systems. These measures provide a way for early childhood teachers to effectively respond to job demands, prevent job burnout, and improve job engagement. Therefore, this theory assumes that "If the basic psychological needs of early childhood teachers are met, the internal motivation of early childhood teachers can be improved and their job involvement can be increased. . (assumption 4)"

High job demands can cause psychological and physical stress to early childhood teachers, leading to burnout. Burnout includes symptoms such as energy depletion, increased cynicism, and decreased self-efficacy, which

reduces teachers' job engagement. However, if sufficient job resources are provided, early childhood teachers can effectively manage high job demands. Job resources include physical, psychological, and social resources that help teachers solve challenging tasks, which promotes teachers' job engagement. For example, job resources include support from colleagues and supervisors, personal development opportunities, and appropriate training materials. These resources help the teacher better cope with the demands of her job, which results in the teacher becoming more deeply immersed in her role. Therefore, this theory assumes that "Job resources are important for early childhood teachers' job engagement. (assumption 4)"

4. CONCLUSION

This study presents a comprehensive theoretical model that elucidates the multifaceted factors influencing early childhood teachers' work engagement. The findings underscore the crucial role of socioeconomic status in shaping teachers' professional role performance, indicating that those with higher socioeconomic backgrounds tend to experience greater job satisfaction and efficiency. This aligns with previous research that highlights the correlation between access to resources and enhanced professional commitment (Baker, 2018; Hart, 2020).

Moreover, supporting teachers' autonomy emerges as a pivotal component in fulfilling their basic psychological needs, which in turn fosters intrinsic motivation and job engagement. This supports Deci & Ryan's (2000) self-determination theory, emphasizing the importance of autonomy, competence, and relatedness in enhancing educators' job satisfaction. By creating environments that prioritize autonomy, educational institutions can mitigate job stress and prevent burnout, leading to higher engagement levels.

The implication of job demands and resources further illustrate the delicate balance that teachers must navigate. High job demands can lead to burnout, characterized by energy depletion and cynicism, ultimately diminishing teachers' emotional investment in their work (Maslach & Leiter, 2016). However, the provision of adequate job resources—such as support systems and professional development opportunities—can empower teachers to manage these demands effectively, thereby enhancing their engagement (Schaufeli et al., 2002).

It emphasizes that addressing socioeconomic factors, fostering autonomy, and managing job demands and resources are essential strategies for improving early childhood teachers' work engagement. Future research should aim to explore these dynamics further and develop practical interventions that educational leaders and policymakers can implement to support early childhood educators effectively.

References

Bae, H., & Seo, H.(2023). Structural Relationships among Early Childhood Education Institutes' Organizational Creativity or Professionality Support, Early Childhood Teachers' Organizational Commitment and their Professional Identity. The Korean Journal Child Education, 32(4), 45-68.

Baker, J. A. (2018). The impact of socioeconomic status on teachers' job satisfaction. Journal of Educational Psychology, 110(2), 112-125.

Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. https://doi.org/10.1108/02683940710733115

Byeon, M., & Cho, A.(2022). Effects of Negative Job Environment on the Role Performance of Teachers in Early Childhood Educational Institutions: Mediating Effects of Teaching Commitment. The Journal of Humanities and Social science, 13(6), 627-642.

Choi, Y., & Min, H.(2020). Effects of Child Center Care Teachers' Perceived Emotional Support on Burnout Mediated by Basic Psychological Needs. Korean Journal of Child Studies, 41(6), 25-35.

CSCCE(2020). The early childhood educator workforce. Early childhood workforce index 2020, 1-22.

Cumming, T. (2017). Early childhood educators' well-being: An updated review of the literature. *Early Childhood Education Journal*, 45(5), 583-593. https://doi.org/10.1007/s10643-016-0818-9

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(4), 227-268. https://doi.org/10.1207/S15327965PLI1104_01

Gould, K., Boyd, J. & Tesar, M.(2023). Equity, inclusion and belonging for teachres in early childhood education in Aotearoa New Zealand. Contemporary Issues in Early childhood, 24(2), 176-188.

Ham, E., & Kim, W.(2024), Effects of Early Childhood Teachers'Self-Leadership and Teaching Flow on Job Satisfaction: Focused on Mediating Effects of Social Support. The Journal of Yeolin Education, 32(1), 149-170.

Hart, A. W. (2020). Understanding the relationship between socioeconomic status and teacher effectiveness. Educational Research Review, 15, 45-59.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491-525. https://doi.org/10.3102/0034654308325693

Jeong, J., & Oh, J.(2023). The Relationship Between Early Childhood Teachers' Autonomy and Role Performance in the 2019 Revised Nuri Curriculum: Sequential Dual Mediating Effects of Intrinsic Motivation and Professionalism. 43(5), 129-154.

Kim, H., & Lee, S. Y. (2020). Impact of the work environment on burnout among Korean early childhood teachers: A moderated mediation model of self-efficacy and job satisfaction. *Early Education and Development*, 31(2), 275-290. https://doi.org/10.1080/10409289.2019.1669125

Kim, Y., Namkoong, S., & Kang, Y.(2014). Analysis of The Main Causes of The Effect of The Job Satisfaction to The System Absorption of The Childcare Teachers Asia-Pacific Journal of Business Venturing and Entrepreneurship, 9(4), 135-144.

Kwoen, M., & Cho, S.(2023). Effect of Childcare Teachers' Grit on Organizational Commitment -Focusing on a survey of 322 childcare teachers in U city. Journal of Korea Academia-Industrial cooperation Society, 24(5), 607-614.

Kwon, E., Son, W.(2023). Structural relationship analysis of young children's play flow and early childhood teachers' play sensitivity, autonomy implementing early childhood curriculum, and reflective thinking. The Journal of Korea Open Association for Early Childhood Education, 28(2), 239-261.

Lee, J., & Moon, H.(2024). The impact of childcare teachers' positive psychological capital, organizational commitment, and organizational health on childcare practices that respect infants' rights. The Journal of Learner-Centered Curriculum and Instruction, 24(1), 469-483.

Lidija Vujičić, Željko Boneta and Željka Ivković(2015). Social status and professional development of early childhood and preschool teacher profession: Sociological and pedagogical theoretical frame. Croatian Journal of Education, 17(1), 49-60.

Maas, J., Schoch, S., Scholz, U., Rakow, P., Schuler, J., Wegner, M., & Keller, R.(2022). School principals' social support and teachers' basic need satisfaction: The mediating role of job demands and job resources. Social Psychology of Education, 25, 1545-1562.

Maslach, C., & Leiter, M. P. (2016). Burnout: A guide to identifying burnout and pathways to recovery. Harvard Business Review Press.

Mulyana O. P., & Izzati, U. A.(2022). Job autonomy and teacher career commitment in educational. International Journal of Recent Educational Research, 3(6), 737-749.

Ng, J., Rogers, M., & McNamara, C.(2023). Early childhood educator's burnout: A systematic review of the determinants and effectiveness of interventions. Issues in Educational Research, 33(1), 173-206.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. https://doi.org/10.1002/job.248

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2002). The measurement of work engagement with a short questionnaire: A cross-national study. Educational and Psychological Measurement, 62(4), 701-716.

van der Schoor, S. C. M.(2015). TEACHER ENGAGEMENT AND PSYCHOLOGICAL CAPITAL. master thesis, Vrije Universiteit, Amsterdam.