## EMPOWERING EARLY CHILDHOOD WORKFORCE: UNDERSTANDING WELL-BEING AND JOB ATTITUDES IN HEAD START EDUCATORS

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In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

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#### Abstract

How to retain ECE professionals has been a critical topic, given the ongoing staff shortage crisis and the increasing need to provide high-quality care and education for young children. Within this context, Head Start educators face unique challenges when working with children and families who are primarily from marginalized communities and require more extensive support. Therefore, it is critical to understand the workplace experiences of these educators and how that might connect with their consideration of leaving in order to develop effective retention strategies and retain a high-quality Head Start workforce. Drawing upon the Ecological Holist Early Childhood Educators' Well-being Model (Jeon et al., 2024), the current dissertation examined the distinct dimensions of Head Start educators' well-being, work environment, and professional attitudes. The first study demonstrates the significant associations between educators' perceptions of psychological distress, physical safety, and their professional commitment and satisfaction. The second study indicates that educators' professional well-being plays a critical role in educators' turnover intentions. While workplace discrimination did not moderate the relationships between these two factors, it was significantly associated with educators' turnover intentions. The third study identified four distinct profiles of well-being and job attitudes among Head Start educators based on their experiences of professional well-being, psychological well-being, and turnover intentions. It also suggests the interplay between educators' demographics and health-related lifestyles, such as meals, sleep, as well as financial situations, in relation to their profile membership of well-being states and job attitudes.

*Keywords:* early childhood education, Head Start workforce, well-being, job attitudes, work environment

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"I love, I love my job. I love teaching. Um, but I feel like it's unrealistic, of the demands that you put on a teacher. [...] You physically don't get a chance to go to the bathroom. You physically don't get a lunch break."

-Head Start Educator 1

"If I don't feel good, there's no way I can work with children. [...] it is not because of money. I work because I'm passionate about what I'm doing. [...] if I have a headache or I have any problems [...], there's no way I can go to work because I cannot give what I don't have."

-Head Start Educator 2

These quotes are from interviews with two Head Start teachers and capture the essence of the experience for many educators within Head Start programs. They are passionate about their work and devoted to the care and education of children in poverty. In 2022, over 100,000 Head Start educators worked with more than 833,000 children and their families in Head Start programs (Office of Head Start, 2022). However, despite their dedication, research indicates a concerning disconnect between their passion and the reality of their challenging working conditions, such as heavy workloads, demanding administrative tasks, and limited resources (Bullough et al., 2012; Kwon et al., 2022; Schaack et al., 2021). As a result, Head Start educators experience higher levels of stress-related health problems (e.g., hypertension, migraines, obesity) and depressive symptoms compared to the general population in the United States (Whitaker, 2013), along with high turnover rates (Wells, 2015). Educators' well-being is not just a personal concern; it is directly associated with the quality of care and education for children, ultimately related to children's developmental outcomes (Jeon et al., 2014; Kwon et al., 2019).

Recent research on educator well-being emphasizes the importance of a holistic approach that considers multiple dimensions of well-being (Gallagher & Roberts, 2022; Hascher & Waber,

2021; Kwon et al., 2021). For instance, Kwon et al. (2021) specifically focuses on early care and education (ECE) educators, demonstrating the connections between educators' psychological (e.g., depression, personal stress), physical (e.g., general health, musculoskeletal pain, weight status), and professional well-being (e.g., self-efficacy, job commitment) as well as classroom quality (i.e., emotional-behavioral and instructional support). Building on these foundations and given the critical role of Head Start educators in children and families experiencing poverty, my dissertation aims to focus on Head Start educators' holistic well-being (i.e., psychological, physical, and professional well-being and health-related behaviors). It further investigates the associations between these well-being factors and educators' professional attitudes.

Understanding these multifaceted components of well-being is critical for building a healthy and effective Head Start workforce, which, in turn, plays a critical role in providing high-quality early childhood education for children.

#### **Psychological Well-being**

The World Health Organization defines psychological well-being, also known as mental well-being, as an individual's ability to cope with life stressors, realize their potential, learn and work effectively, and contribute to their community (World Health Organization, 2024).

Multiple factors are related to psychological well-being, including individual characteristics (e.g., emotional skills), social determinants (e.g., social inequality and environmental deprivation), and structural factors (e.g., access to resources; World Health Organization, 2024). Studies among ECE educators consistently identify stress, depressive symptoms, and emotional exhaustion as indicators of low psychological well-being among ECE educators (Jennings, 2019; Jeon et al., 2018; Kwon et al., 2019; Markowitz et al., 2024). Compared to the general population, where around 8% experience depressive symptoms (National Institute of Mental

Health, 2023), over 28% of Head Start staff experience depressive symptoms based on the standardized depression screener score (Ling, 2018). This is related to increased turnover intentions and reduced quality of interactions with children (Markowitz et al., 2024), which may hinder children's social and emotional development (Roberts et al., 2016). Similarly, teachers' stress is associated with their more frequent reports of children's challenging behaviors and high turnover intentions (Grant et al., 2019; Kwon et al., 2022). In addition, educators' emotional exhaustion also correlates with lower-quality instruction, emotional support for children, and classroom organization (Ansari et al., 2022). In essence, these studies suggest that low psychological well-being among ECE educators is related to their performance and professional attitudes and, ultimately, children's development.

#### **Professional Well-being**

Professional well-being is characterized by feeling satisfied and fulfilled in one's work, finding meaning in the job, and experiencing high-quality working conditions (Danna & Griffin, 1999; Doble & Santha, 2008). Research suggests a complex reality of ECE educators' professional well-being (Bullough et al., 2012; Clayback & Williford, 2022; Hall-Kenyon et al., 2014; Zhai et al., 2011). Many educators report high levels of job satisfaction and a strong sense of efficacy in their role (Bullough et al., 2012). They are passionate about nurturing young children and making a positive impact on children from disadvantaged backgrounds (Bullough et al., 2012). However, many of them also experience high levels of burnout because of heavy workloads, insufficient financial compensation, and children's challenging behaviors (Bullough et al., 2012; Zhai et al., 2011). Additionally, Head Start educators, who work with children from low-income families and marginalized communities, are particularly vulnerable to secondary traumatic stress (STS), due to their frequent exposure to children's traumatic experiences, such

as violence and crime (Rankin, 2021). These professional well-being factors have a direct association with both educator performance and attitudes. Work-related stress is associated with reduced self-efficacy for engagement, instruction, and classroom management (Clayback & Williford, 2022). Educators with low well-being (e.g., burnout) are more likely to leave Head Start programs, leading to staff turnover and a decline in educational quality for children (McCormick et al., 2022; McMullen et al., 2020). This cycle ultimately disrupts both child development and program stability.

#### **Physical Well-being and Health Behaviors**

The World Health Organization defines health as a state of complete physical, mental, and social well-being (World Health Organization, 2024). It emphasizes physical well-being and health behaviors as an essential component, encompassing not just the absence of illness but the ability to perform daily activities and live a fulfilling life. However, ECE educators experience concerning physical health and encounter barriers to maintain healthy lifestyles. Research indicates higher rates of obesity, diabetes, hypertension, and missed workdays due to health concerns within ECE educators (Whitaker, 2013). These physical health issues often coincide with unhealthy lifestyle habits. For instance, studies found that less than 8% of Head Start staff regularly consume healthy foods (Guerrero & Herman, 2023). Sleep deprivation is another concern, with studies reporting average sleep durations between 4.4 and 6.5 hours per night, lower than the recommended 7-8 hours (Jeon et al., 2020; Toussaint et al., 2021). These issues are likely to be related to the low wages, high job demands, and stressful work environments characteristic of the ECE profession (Guerrero & Herman, 2023; Randall et al., 2021). These unhealthy lifestyles and physical unwellness can have a negative association with educators' ability to care for children (Randall et al., 2023). Therefore, examining the indicators of

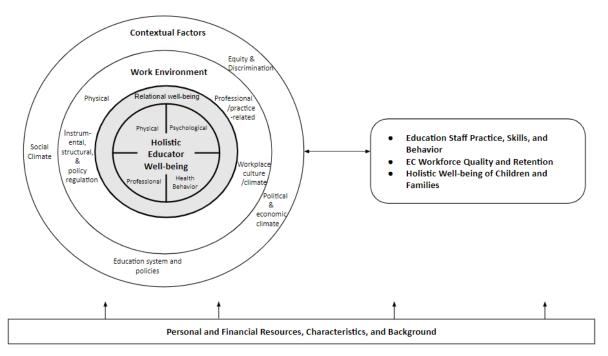
educators' physical well-being and potential outcomes is crucial for promoting a healthy Head Start workforce.

#### **Theoretical Framework**

The current dissertation applies the Ecological Model of Holistic Early Childhood Workforce Well-being (Jeon et al., 2022), which posits the multifaceted aspects of early childhood educators' well-being and their associations with ECE workforce practices and retention. In particular, the framework highlights that educators' psychological, physical, and professional well-being are the core aspects of ECE educators' well-being. These aspects are influenced by work environment (e.g., workplace culture and climate, physical safety, policy regulation) and contextual factors (e.g., equity and discrimination, education system and policies). These factors, in turn, impact educators' practices and retention. Building on this framework, the three papers in this dissertation aim to investigate the relationships between these various aspects of Head Start educators' well-being and their connections to professional attitudes and commitment. The first study examined the associations between psychological distress, physical safety perceptions, and distinct aspects of professional commitment. The second study investigated the positive and negative aspects of their professional well-being, along with perceived workplace discrimination, and how they are associated with turnover. The third paper used a person-centered approach to identify distinct profiles of educators based on their psychological well-being, professional well-being, and job attitudes, and examined the associations between these profiles and their healthy lifestyles and demographic characteristics.

Figure 1

Ecological Model of Holistic Early Childhood Workforce Well-being



*Note*. This is adapted from the Ecological Model of Holistic Early Childhood Workforce Wellbeing (Jeon et al., 2022).

Paper 1: Professional Commitment and Satisfaction of Teachers in Head Start within A
Historically Marginalized Community: Its Association with Perceived Psychological
Distress and Physical Safety

Previous research suggests that the quality of ECE is related to teachers' professional commitment, as committed educators provide effective support and instruction to children (Byun & Jeon, 2022). It suggests the importance of understanding the relationships between psychological and physical factors in relation to teachers' commitment. This study examines how professional commitment is associated with psychological distress and physical safety perceptions among educators in Head Start programs within historically marginalized communities. We investigated these relationships using hierarchical linear regression models on a sample of 166 Head Start teachers. Findings suggest that both psychological distress and physical safety perceptions were significantly associated with teachers' commitment.

Importantly, physical safety perceptions added unique explanatory power of understanding commitment, even after accounting for psychological distress. These results emphasize the need for comprehensive support systems that address both teachers' psychological well-being and workplace safety, particularly within underserved communities.

## Paper 2: Head Start Educators' Professional Well-being and Their Turnover Intentions: The Moderating Role of Perceived Workplace Discrimination

Head Start programs face a significant challenge with high educator turnover. To understand the factors related to this, this study investigates the relationships between professional well-being and turnover intentions among Head Start educators. We examined how positive aspects (compassion satisfaction) and negative aspects (secondary traumatic stress and emotional exhaustion) of their professional well-being, along with perceived workplace discrimination, are associated with turnover intentions (intention to leave the profession, program, or position). Utilizing hierarchical linear modeling with a sample of 304 Head Start educators, the study demonstrates significant associations between these factors and turnover intentions. The findings indicate that compassion satisfaction, emotional exhaustion, and workplace discrimination were significantly associated with turnover intentions. Beyond quantitative analysis, the study descriptively explored the reasons behind these intentions. These reasons include poor benefits and compensation, classroom management stress, and a lack of advancement opportunities. These findings can inform interventions and policies to reduce turnover, retain qualified educators, and ultimately improve the quality of ECE for all children.

Paper 3: A Person-centered Analysis of Head Start Educators' Well-being and Attitudes:
Associations with Health-related Lifestyles and Demographics

The first and the second studies provide insights into the overall trends of the relationships between psychological well-being, professional well-being, turnover intentions, and work environment. Building on this foundation, this study delves deeper into distinct individual experiences among 304 Head Start educators. I used a person-centered approach, specifically Latent Profile Analysis (LPA), to identify distinct profiles of educators based on their well-being and attitudes (e.g., depressive symptoms, perceived personal stress, anxiety, secondary traumatic stress, emotional exhaustion, compassion satisfaction, and turnover intentions). The findings revealed four distinct subgroups of Head Start educators: 1) low turnover intentions, low professional distress, low psychological distress; 2) low turnover intentions, medium professional distress, medium psychological distress; 3) high turnover intentions, high professional distress, high psychological distress. These variations can inform the development of targeted professional development and resources, contributing to a high-quality Head Start workforce.

In addition, research suggests that ECE educators often face suboptimal physical health, including sleep deprivation, higher obesity rates, and frequent musculoskeletal pain (e.g., Randall et al., 2021; Roberts et al., 2019). These health concerns potentially undermine their professional life and job commitment (Randall et al., 2021). A multinominal logistic regression revealed that educators' healthy-related lifestyles (i.e., regular and healthy eating practices and better sleep quality), as well as their demographic characteristics (i.e., age and financial situations), were associated with their profile memberships of well-being and attitudes. These findings suggest that health-related behaviors and financial support should be considered when

developing training for the Head Start workforce in order to promote their well-being and job attitudes.

#### **Positionality Statement**

Raised in a traditional Asian family in China, I was taught that respect and attentiveness towards teachers were important. This belief was rooted in Confucian culture and stemmed from my parents' experiences, who did not have an opportunity to finish high school themselves.

Therefore, I firmly believed in teachers' significant role in my life from my first day in preschool, which fostered my deep appreciation for early childhood educators, particularly those working with children from disadvantaged backgrounds.

As I grew up, I realized the significant influence of my teachers on my academic trajectory. Their support enabled me to pursue studies on early childhood educators working with children from marginalized communities. Through my interactions with educators across various cultures and countries, while I am convinced of their deep love for children and their profession, I also realized the tremendous stressors these compassionate teachers faced, such as poor compensation, heavy workload, and low professional esteem. This realization motivates me to advocate for improving their life. Their circumstances need more attention and improvement. Through the research on Head Start educators, I want to provide a more supportive environment for early childhood educators, ultimately benefiting young children and their families.

# Significance of Understanding Head Start Educators' Well-being and Professional Attitudes

Bronfenbrenner's Ecological Model posits that school is in the microsystem that closely influences children's development (Bronfenbrenner & Ceci, 1994). A supportive, consistent, and safe learning environment is especially important for children from marginalized backgrounds

(Burger, 2010). As the largest federal investment in early childhood education, Head Start aims to improve school readiness and family well-being for these children (Office of Head Start, 2022). Therefore, it is crucial to focus on Head Start programs to promote educational equity from the outset.

Within the Head Start settings, educators play the most important role in children's experiences. Unfortunately, despite their critical roles, Head Start educators face poor compensation and benefits, low professional esteem, and experience low well-being (Bullough et al., 2012; McCormick et al., 2022). This lack of well-being is a key factor in the high staff turnover among the Head Start workforce (Wells, 2015). According to the most recent studies, 90% of Head Start programs have closed classrooms permanently or temporarily due to a lack of staff, and approximately 30% of staff positions are currently unfilled (National Head Start Association, 2023). High staff turnover disrupts children's development and parents' relationship-building with programs (Bryant et al., 2023), which further widens the equity gap between vulnerable children and their peers. In order to provide better insights into the factors related to reduced turnover and enhanced commitment, this dissertation investigates the dynamics of Head Start educators' psychological, physical, and professional well-being in relation to their professional attitudes, particularly turnover intentions and commitment. These studies can extend the existing knowledge about Head Start educators and build the foundation for further investigation of these factors in the ECE workforce. Additionally, the findings can inform Head Start program leaders and policymakers to provide tailored support and resources for educators' well-being and create a safer and free of discriminatory work environment for the ECE workforce. These efforts can help reduce the turnover crisis and contribute to a more effective and healthy Head Start workforce.

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Physical Safety	
Marginalized Community: Its Association with Perceived Psycholog	ical Distress and
Professional Commitment and Satisfaction of Teachers in Head Start w	ithin A Systemically

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#### Abstract

The quality of early care and education (ECE) is related to early childhood teachers' positive work attitudes, as prior research suggests committed and satisfied educators provide effective support and instruction to children. It is important to understand the relationships between psychological and physical factors in relation to teachers' commitment and satisfaction, especially those working within systematically marginalized communities. Using a sample of 166 Head Start teachers, predominantly Black/African American with low salaries, the study examined how teacher-perceived psychological distress and physical safety relate to their professional commitment and satisfaction. These Head Start programs were in a systemically marginalized community in the United States. Additionally, the study examined the unique variance explained by teachers' perceptions of physical safety beyond psychological distress as a predictor of four distinct indicators of professional commitment and satisfaction. Three models using hierarchical linear regression were tested to explore the research questions. The results indicate that teachers' perceptions of psychological distress and physical safety were significantly associated with their job attitudes. Additionally, teachers' perceptions of physical safety demonstrated incremental validity above and beyond perceived psychological distress on professional commitment and satisfaction. The relationships between teachers' psychological distress and distinct indicators of professional commitment and satisfaction were transformed after adding physical safety. This study suggests the importance of ECE teachers' psychological well-being and physical safety in improving their job attitudes, especially for female African American teachers working in systemically marginalized communities.

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*Keywords*: Early care and education, Head Start, professional commitment and satisfaction, psychological distress, physical safety

#### Introduction

Children's experience in early care and education (ECE) programs is influenced by the teachers who guide them (Bakken et al., 2017). One of the foundations of this process is teachers' positive work attitudes, such as professional commitment and satisfaction, which are related to their ability to provide supportive interaction with children and make choices as professionals (Jeon & Wells, 2018; Thomason & La Paro, 2013). Committed and satisfied teachers are characterized by their active engagement in duties and an enduring passion to remain in the ECE field (Thomason & La Paro, 2013). Given the prevailing shortage of early childhood teachers across the United States (U.S.; Goldstein, 2022; Miksic et al., 2023), it becomes critical to understand the potential protective elements that can improve early childhood teachers' commitment and satisfaction while reducing their turnover.

The current study aims to better understand work attitudes, specifically professional commitment and satisfaction, among predominantly Black/African American Head Start teachers who have been facing systemic oppression and barriers (Barmore, 2021). We use the Job Demands-Resources Model (JD-R; Demerouti et al., 2001), which posits job demands and resources as multifaceted, as our framework. In particular, job demands consist of workloads, occupational stress, and/or workplace conditions of unfavorable environments that require the individual to sustain physical and psychological efforts in response to work. On the other hand, job resources include a physical and psychological safety climate that values continuous safety improvement (Falco et al., 2021). Overall, the JD-R model suggests that these job demands and resources impact an individual's job attitudes. This theory is also supported by empirical findings of research within the ECE field, implying that job demands, such as high levels of stress, depressive symptoms, and emotional fatigue among teachers, are related to reduced job

satisfaction and an increased inclination to leave their roles (Grant et al., 2019a). Additional research found that teachers' perceptions of job resources in their physical work environment (e.g., availability of teaching resources and classroom layout) are critical factors in their practices and professional commitment and satisfaction (Lama & Shrestha, 2020).

Despite the aforementioned evidence, the relationships between the two crucial components in the JD-R Model, teacher-perceived psychological demands (e.g., psychological distress) and job resources regarding their perceptions of the physical environment (e.g., physical safety) in relation to their professional attitudes, requires more attention (Demerouti et al., 2001). In particular, educators who perceive a lack of safety within their workplace may encounter high levels of psychological distress (Ford et al., 2011). This distress could potentially relate to the reduced commitment and satisfaction among teachers working in unsafe environments (Vettenburg, 2002), suggesting the role of physical safety in the relationships between psychological demands and professional attitudes. Despite its potential importance, there is a lack of understanding of Head Start educators' perceptions of physical safety.

Understanding the relationships among these factors is especially critical when considering that Head Start teachers, who mostly work in systemically marginalized communities, may experience unique challenges to their well-being and working conditions compared to other ECE teachers (Kwon et al., 2022; Wells, 2015). The administrative burdens of Head Start programs, such as extensive paperwork and supporting a large number of children with special needs, and frequent exposures to traumatic experiences (Ormiston et al., 2022) working with children living in poverty, are related to educators' high levels of psychological distress (McDonald et al., 2018; Wells, 2015). In addition, when Head Start programs are located within systemically marginalized communities with high poverty and crime rates, they may

experience higher risks of safety concerns (McMahon et al., 2022), which may potentially be related to their professional attitudes and performance. Moreover, while many ECE teachers reported working in an under-resourced environment (Grant et al., 2019a), Head Start teachers who are women of color with low salaries, can be more likely to experience unique challenges given the stressful circumstances they face both in and out of work (Edwards et al., 2021; McMahon et al., 2014). These circumstances may further challenge their engagement in building a positive learning environment for children and their satisfaction with their jobs (Galand et al., 2007). Given the important role Head Start teachers play in the development of children living in poverty and the unique challenges faced by them, it is critical to understand how psychological distress and physical safety relate to their professional commitment and satisfaction within this group of teachers.

The current study aims to understand how teacher-perceived job demands (psychological distress) and resources (physical safety) are associated with the discrete aspects of their professional commitment and satisfaction within Head Start programs, especially those located in systemically marginalized communities with high poverty and crime rates and with predominately female African American teachers with low salaries. Additionally, the study examines the incremental validity of the perception of safety, illustrating the unique contributions of this factor to their professional commitment and satisfaction beyond psychological distress.

#### 1.1 Teachers' Work Attitudes: Professional Commitment and Satisfaction

Teachers' professional commitment and satisfaction are critical indicators of their work attitudes (Bloom, 1988). Professional commitment is characterized by individuals' engagement in their work, acknowledgment of the value of their work, and a strong desire to stay in the

profession (Cooper-Hakim & Viswesvaran, 2005). Professional satisfaction reflects the positive emotional state and fulfillment teachers experience from their work (Demirtas, 2010). These interconnected concepts play a critical role in ECE teachers' performance. When teachers are satisfied and committed, they are willing to take on their responsibilities and embrace their duties with effort (Demirtas, 2010; Wells, 2017).

In this study, early childhood teachers' work attitudes (i.e., professional commitment and satisfaction) are operationalized by four components: 1) the willingness to become an early childhood teacher again, 2) the perception of ECE educator as a short-term career, 3) the satisfaction with being an early childhood teacher, and 4) the satisfaction with their current ECE program. We made distinctions between attitudes toward the ECE job overall and the current program due to the possibility that teachers may find satisfaction in their role as ECE teachers but experience low satisfaction with their specific ECE program. This may be due to factors such as an unsupportive program-level workplace climate (Wells, 2015; Zhao & Jeon, 2023) or challenging relationships with colleagues and administrators (Zinsser et al., 2016). In such cases, they demonstrate reduced commitment and potentially leave their positions in pursuit of employment in other ECE programs (Grant et al., 2019b). Conversely, there is also the possibility that teachers may perceive satisfaction with their current ECE program but are dissatisfied with the overall role of being an ECE teacher. This might be due to the overall challenges within the ECE field, such as inadequate compensation, limited social recognition, and high job demands (McLean et al., 2021). Consequently, these teachers may decide to leave the ECE field entirely, exacerbating the teacher shortage in the ECE field (Grant et al., 2019b). These distinctions in attitudes regarding their current program and the overall ECE can provide

implications for ECE program coordinators and policymakers to take more tailored and effective measures to enhance teachers' job commitment and satisfaction.

Teachers' commitment and satisfaction play an important role in their work performance and the quality of ECE (Buettner et al., 2016; Thomason & La Paro, 2013; Wells, 2015).

Research indicates that committed teachers are intrinsically motivated to engage in teaching activities and demonstrate sensitivity and positive responsiveness to children's needs (Thomason & La Paro, 2013). As a result of their job commitment, teachers are more capable of navigating challenges and creating a developmentally appropriate environment for children (Buettner et al., 2016). In contrast, teachers with a reduced commitment and satisfaction with their jobs are more likely to leave the profession (Wells, 2015), potentially interrupting the establishment of positive teacher-child relationships and high-quality childcare.

Educational research has examined numerous factors regarding their associations with teachers' work attitudes. These factors include teachers' qualifications (e.g., educational attainment and teaching experience; Lee et al., 2017), program characteristics (e.g., workplace environment and leadership support; Grant et al., 2019b), and individual characteristics (e.g., emotional well-being and career aspirations; Buettner et al., 2016; Schaack et al., 2020), all of which are related to teachers' commitment and satisfaction. Although these existing studies investigated the role of certain indicators related to work attitudes among general ECE teachers, there is limited knowledge on factors related to job attitudes of Head Start educators, especially those who work in a marginalized community and are predominately Black/African American with low salaries. This group of educators faces higher psychological demands, such as higher risks of experiencing discrimination, lacking financial resources, and living in communities with unsafe environments (Boyd-Swan & Herbst, 2019; Edwards et al., 2021; Liu et al., 2023).

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Therefore, they may experience reduced job satisfaction and struggle to engage in their roles. Working with children and families from disadvantaged backgrounds, educators' professional commitment and satisfaction can be directly related to the engagement and development of the children they teach (Butler-Barnes et al., 2022). Therefore, it is meaningful to investigate the psychological and physical factors related to job satisfaction and commitment within Head Start educators in systemically marginalized communities.

#### 1.2 Teachers' Perceived Psychological Distress as a Demand

Teachers' psychological distress is the degree of psychological burdens they experience, including depressive symptoms, stress, and emotional exhaustion (Buettner et al., 2016). Within this study, psychological distress refers to the general self-reported symptoms instead of the clinical diagnoses. According to the model of JD-R, psychological distress as a facet of psychological demands is related to an individual's professional attitudes (Bakker & Demerouti, 2007). Empirical studies reinforce the framework that indicators of teachers' psychological burdens are associated with their professional commitment and satisfaction, and thereby the quality of ECE teachers' practice (Jeon et al., 2021; Peele & Wolf, 2021). The study by Jeon et al. (2021) demonstrates that childcare providers who have lower levels of depressive symptoms report a higher level of commitment and provide more supportive resources for children. In addition, teachers' depressive symptoms were associated with their engagement in caring for children's needs (Hamre & Pianta, 2004) and improved global child-care quality (Jeon et al., 2014). In a more recent study, Peele and Wolf (2021) found that ECE teachers' higher-level depressive symptoms are associated with lower job satisfaction and more teacher absenteeism. When teachers lack satisfaction and are absent from teaching, it is difficult for them to commit to creating a healthy and positive classroom environment. Overall, studies in the ECE field indicate

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that teachers' depressive symptoms are related to their commitment to creating a supportive learning environment for young children.

In addition, evidence suggests that early childhood teachers' stress and emotional exhaustion are related to their professional capacity and commitment. For example, Byun & Jeon (2022) found that teachers with less stress were more likely to choose to stay in the ECE profession and their current program. Likewise, teachers' emotional exhaustion is adversely related to their teaching self-efficacy and engagement (Skaalvik & Skaalvik, 2010; Sorensen & McKim, 2014). When teachers experience more emotional exhaustion, they feel less capable of building positive teacher-child relationships, show reduced professional commitment (Sorensen & McKim, 2014), and have increased intention to leave the profession (Schaack et al., 2020).

Unfortunately, Head Start teachers who work in systemically marginalized communities are likely to experience high levels of psychological distress due to the various challenges in their work environment (Kwon et al., 2022; Wells, 2015). Research has shown that teachers working in Head Start settings encounter extra job demands since they work with children who are more likely to experience psychological trauma (Kwon et al., 2022). In addition, the two-generation intervention at Head Start aims to support both children and families from low-income backgrounds (Office of Head Start, 2022). Therefore, beyond attending to children's needs within the classroom, Head Start teachers also take additional responsibilities of fostering consistent and positive teacher-parent communication. As they work in federally funded programs, Head Start teachers also have to handle excessive administrative tasks, such as paperwork and assessments, alongside their teaching duties (Wells, 2015; Zhao & Jeon, 2023).

In addition to the overwhelming job responsibilities, Head Start teachers, who are predominately Black/African American females, tend to experience additional challenges (e.g.,

discrimination and financial insecurity) to their psychological well-being and hinder their professional commitment and satisfaction. These challenges include discrimination during recruitment, where Black and Hispanic applicants receive fewer interview requests compared to White teachers despite their similar qualifications (Boyd-Swan & Herbst, 2019). Additionally, although ECE educators are underpaid overall (McLean et al., 2021), wage disparities exist within the ECE workforce. A national study found that ECE teachers who are women of color, including Black/African American female teachers, earn the lowest average hourly wages compared to male teachers and teachers who are not people of color (Edwards et al., 2021; Liu et al., 2023). These experiences of discrimination and financial insecurity are potentially related to increased psychological burdens (Edwards et al., 2021) and further hinder their ability to commit to their jobs (Hall-Kenyon et al., 2014; Madera et al., 2016; Qu et al., 2019).

Despite their critical role in nurturing the development of socioeconomically disadvantaged children, as well as the potential associations between teachers' heightened psychological distress and their decreased professional commitment (Buettner et al., 2016), there are limited studies specifically focused on ECE teachers working in marginalized communities. The current study aims to provide a better understanding of teachers' emotional distress to retain dedicated and high-quality teachers in Head Start programs.

# 1.3 Teachers' Perceptions of Physical Safety as Resources

In addition to teachers' psychological demands, the physical environment can be an important job resource and relates to their professional commitment and satisfaction. A physically safe school environment is absent of bullying, harassment, social aggression, substance use, physical aggression, and other forms of threats to teachers and students (Charlton et al., 2021). Unfortunately, school safety issues have been a concern for decades. From 2018 to

2019, a total of 39 school-associated violent deaths occurred in the U.S. (Statistics on School Crime, 2023). In addition, according to a more recent national survey distributed during 2020-2021, nearly one-third of PreK-12 teachers reported at least one incident of verbal harassment or threatening behaviors in the workplace (McMahon et al., 2022).

Teachers' perceived safety is potentially a protective factor for their job attitudes and practices (McMahon et al., 2022; Vettenburg, 2002). For instance, Vettenburg (2002) examined teachers' fear of becoming the victims of certain types of pupils' (12- to 18-year-olds) offensive and disruptive behaviors and their personal assessment of the risk of being victimized at the workplace. Their study found that teachers who perceive less risk of victimization tend to be more satisfied with their jobs and more committed to their educational mission, thereby having a positive association with the overall quality of education (Vettenburg, 2002). By contrast, in a more recent study across different states in the U.S., teachers from pre-k to 9th grade were asked about their frequency of experiencing different types of verbal and threatening violence (e.g., obscene remarks or gestures, intimidated, publicly humiliated, verbally threatened, bullied) at school. One-third of the participants reported that they experienced at least one incident of verbal or threatening violence. Among these teachers, a significant portion of them reported having the desire to transfer to other schools or quit their profession (McMahon et al., 2022). Therefore, a lack of a safe environment may create barriers for teachers to provide effective instruction and increase their intention to leave their positions.

Studies indicate that community and demographic variables, such as community poverty, racial composition, socioeconomic status, urban location, and community crime), are significantly related to teachers' risk of victimization (Gottfredson et al., 2005; Hernandez et al., 2010; McMahon et al., 2014; 2022). In particular, the studies conducted by McMahon et al.

(2014; 2022) examined different types of victimization experienced by teachers and found that urban teachers had a greater probability of experiencing a violent incident (McMahon et al., 2014; 2022). In addition, Black/African American middle school teachers who work with students from low-income families face a higher risk of experiencing victimization (Gottfredson et al., 2005), leading to higher levels of safety concerns. These findings may also extend to Black/African American Head Start educators, especially those who receive poor salaries and work in under-resourced communities. In addition, compared to public pre-K-12 schools, they often have fewer resources (e.g., school guards) to maintain a safe environment, which can further impact their experience of safety concerns and professional commitment and satisfaction (Vettenburg, 2002). Although the violence and safety issues against teachers in schools have received research and policy attention (e.g., Hernandez et al., 2010; McMahon et al., 2014; 2022; Vettenburg, 2002), there is a lack of understanding of the perceived physical safety and threats to teachers working in Head Start settings located in marginalized communities. Additionally, how safety concerns are related to teachers' work attitudes remains unknown within these settings. This may be one of the challenges for maintaining high-quality and committed professionals to support children living in poverty and attend programs located in marginalized communities. Considering the potential school safety issues faced by this group of teachers, it is critical to have a better understanding of their perceptions of the physical environment in the workplace and the potential outcomes of these safety concerns, which will be the focus of the current study.

## 1.4 Incremental Validity of Physical Safety in Professional Commitment and Satisfaction

While teacher-perceived psychological distress and physical safety are hypothesized to be both associated with their professional commitment and satisfaction, these two factors may be associated with each other as well. The existing studies on teachers' perceived safety show that

teachers who are fearful of physical incidents in schools tend to experience higher levels of stress and emotional exhaustion (Vettenburg, 2002). In addition, school safety is one of the critical domains of school climate (Charlton et al., 2021) and can serve as a protective factor for teachers' positive job attitudes (Collie et al., 2012).

Meanwhile, the significance of teachers' physical safety may extend beyond their psychological distress, uniquely contributing to their professional commitment and satisfaction. In other words, it is possible that teachers' perceptions of safety threats have the potential to diminish their professional commitment and satisfaction, regardless of their levels of perceived stress, emotional exhaustion, and depressive symptoms. For example, it is probable that teachers working in environments where they feel unsafe may redirect their focus and efforts away from their teaching responsibilities (Jinnett et al., 2017), with safety concerns taking precedence, even in the absence of obvious psychological distress symptoms. Additionally, teachers struggling with safety concerns in their workplace might seek frequent leaves of absence and are reluctant to remain in the building (Jinnett et al., 2017). This can significantly impede their ability to build positive connections with their job, even though they may experience relatively low levels of psychological distress. This illustrates the significant and unique role that physical safety may play in shaping teachers' dedication and engagement in their profession. By contrast, physical safety can serve as a protective factor and critical resource for those who perceive a sense of safety within their work environment because they are likely to view their programs as more nurturing and supportive institutions (Roberts et al., 2007), thus upholding their commitment to their teaching responsibilities regardless of any underlying psychological distress.

## The Present Study

This study seeks to examine the unique variance accounted for by teacher-perceived physical safety on work attitudes (i.e., professional commitment and satisfaction) over and above their perceived psychological distress. We particularly focus on teachers working in Head Start programs located in a systemically marginalized community. We test the incremental validity of teachers' perceptions of physical safety as a predictor of work attitudes beyond their psychological distress in Head Start settings. Grounded in the JD-R Model and existing empirical evidence, it is hypothesized that Head Start teachers' psychological distress (i.e., depressive symptoms, stress, and emotional exhaustion), as their job demands, would be negatively associated with their professional commitment and satisfaction. Additionally, it is hypothesized that Head Start teacher-perceived physical safety, as their job resource, would serve as a protective factor and positively relate to their professional commitment and satisfaction. Finally, we hypothesize that teacher-perceived physical safety would uniquely explain the variance in professional commitment and satisfaction beyond psychological distress.

## Methods

## 3.1 Participants

The research was conducted by surveying 166 teachers from 22 Head Start centers located in an urban city within a Mid-Atlantic state in the U.S. The participants in this study predominantly work in a systemically marginalized community with high poverty and crime rates (Neighborhood Scout, 2023; U.S. Census Bureau, 2023). Specifically, the city where the study was conducted exhibited a poverty rate of 19.60%, which is significantly higher than the national average of 12.50% (U.S. Census Bureau, 2023). Additionally, the city was characterized by high crime rates, recording 17 violent crimes (national median is 4) and 30 property crimes

(national median is 19) per 1000 residents in the most recent year (Neighborhood Scout, 2023). The location of this study is historically marginalized, marked by a history of systemic racism and oppression. The composition of the population reflects this context, with around 71.58% identified as people of color (61.25% as Black/African American, non-Hispanic; U.S. Census Bureau, 2023).

Table 1 provides an overview of the key characteristics of the study participants. Specifically, the samples encompass 82 lead teachers and 75 assistant teachers (with nine teachers not specifying their roles). The majority of the participants were females (97.59%) and 89.02% of them were identified as Black/African American, non-Hispanic, which was higher than the city average representation of this demographic (61.25%). The teachers' average age was 46 years old, and they had worked in the ECE field for an average of 17 years. In terms of education, around 17.07% of educators in the study held an associate degree, and 43.91% held a bachelor's degree or higher. The average salary range fell between \$20,000 and \$30,000, and 29.52% of those involved reported receiving public support for living expenses, such as Medicaid, food stamps, Women, Infants, and Children benefits, and childcare subsidies.

## 3.2 Procedures

The University Institutional Review Board approved this study. The data were collected in the spring of 2020, prior to the onset of the COVID-19 pandemic. The research team obtained permission to conduct the study at four Head Start grantees in the studied city to represent the Head Start population in the city. Head Start Grantees receive federal funding from the Office of Head Start to operate and manage Head Start centers, such as staff hiring, curriculum development, and ensuring centers' compliance with Head Start regulations. The four Head Start grantees provided a list of 42 Head Start centers that they operate and manage. Then, the

research team randomly selected and visited 22 Head Start centers to introduce the study and distribute paper surveys. Teachers gave their consent to participate by completing and returning the survey, which included questions about their demographics, well-being, teaching practice, and classroom and program characteristics. One week after distributing the surveys, the team members returned to the Head Start centers to collect the completed surveys. However, the COVID-19 pandemic broke out after team members visited 22 Head Start centers from three Head Start grantees, and as a result, the team could not visit the fourth grantee due to site closures. A total of 176 teachers received the survey from the three grantees, and 166 teachers completed and returned the survey, representing a response rate of 94%. Each survey participant received a \$25 gift card as compensation.

#### 3.3 Measures

#### 3.3.1 Professional Commitment and Satisfaction

Teachers' professional commitment and satisfaction were measured by four distinct items. All the items were measured using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). Among these items, two were adapted from the Schools and Staffing Survey (National Center for Education Statistics, 2021), addressing teachers' intention to leave the position and their pursuit of being an ECE teacher as a long-term career. Specifically, these items ask, "Knowing what I do now, if I could decide all over again, I would become an early childhood educator again," and "Within the next 12 months, I will actively look for a different position in the early childhood education field." Additional two items were developed by Author (2016) measuring early childhood teachers' satisfaction with their job and current program: "I am satisfied with being an early childhood educator" and "I am satisfied with my current program." The four items were analyzed as distinct outcome variables in the models because

they represent discrete aspects of teachers' commitment to their job, including their willingness to become early childhood teachers again, the perspective on whether this position constitutes a short-term career choice, satisfaction with their job, and satisfaction with their current program.

# 3.3.2 Perceived Psychological Distress

Teachers' perception of psychological distress, representing their job demands, was estimated as a latent variable consisting of depressive symptoms, stress, and emotional exhaustion. First, depressive symptoms were measured using the short form of the Center for Epidemiologic Studies-Depression Scale (CES-D; Radloff, 1977), which consisted of nine items measured on a 4-point Likert scale. Participants rated the frequency of depressive symptoms they experienced in the past week (0 = Rarely or none of the time; 3 = Most or all of the time). The CES-D has been widely used to assess individuals' depressive symptoms over the past week and has demonstrated good psychometric properties with the general population (Vilagut et al., 2016) and the teacher population (e.g., Borrelli et al., 2014; Hindman & Bustamante, 2019; Kim & Kim, 2010). Example items included "I felt that everything I did was an effort" and "I had trouble keeping my mind on what I was doing." The internal reliability was good, with 0.82 Cronbach's alpha in the current sample. The sum of the items was obtained to represent teachers' depressive symptoms. A higher score means a higher level of depressive symptoms.

To assess teachers' stress, we utilized the Ten-Item Perceived Stress Scale (Cohen et al., 1983). Participants were asked to report their perceived stress during the past month using a 5-point Likert scale ranging from 0 (*Never*) to 4 (*Very often*). Sample items included "How often have you been upset because of something that happened unexpectedly?" and "How often have you been felt that you were unable to control the important things in your life?" Internal reliability for the scale was acceptable in our sample of Head Start teachers (Cronbach's alpha =

0.79). We summed up participants' scores across all ten items to represent teachers' stress. A higher score represents higher levels of stress.

Teachers' emotional exhaustion was measured by two items that asked participants to rate their level of emotional exhaustion at work and in response to children's behaviors on a 7-point Likert scale (1 = Strongly disagree, 7 = Strongly agree; Buettner et al., 2016). An example item includes "I am emotionally exhausted by my work." The two items showed acceptable internal consistency in our sample of teachers, with Cronbach's alpha value of 0.72. We calculated the mean score of the two items to represent each teacher's level of emotional exhaustion. A higher score represents higher levels of emotional exhaustion.

## 3.3.3 Perception of Physical Safety

Teachers' perception of physical safety, reflecting their job resources, was measured by four items from the Georgia Brief School Climate Inventory (La Salle et al., 2016). Participants were asked to rate on a 5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree). The statements of the items are "I have been concerned about my physical safety at my program," "I feel safe at my program," "If I report unsafe or dangerous behaviors, I can be sure the problem will be taken care of," and "I feel safe when entering and leaving my Head Start building." The scale demonstrates adequate internal reliability in the current sample (Cronbach's alpha = 0.75). The higher mean score on the scale represents that teacher-perceived higher levels of safety in their program.

## 3.3.4 Covariates

The present study controlled for teachers' demographics and other characteristics that may be related to their professional commitment. Specifically, we included teachers' years of working experience in the ECE, years of working in the current Head Start program, current

teaching position (1 = Lead teacher, 0 = Assistant teacher), annual salary (1 = \$10,000 or less, 6 = \$50,001 to \$60,000), race/ethnicity (1 = African American/Black, 0 = Others), and educational attainment (1 = Bachelor's degree or higher, 0 = Others). We dummy coded the race/ethnicity variable because 89% of the teachers were African American/Black.

## 3.4 Analytic Plan

First, we examined the descriptive statistics and bivariate correlations between the key independent and dependent variables using Stata 16.1. We then constructed a latent variable, teachers' psychological distress, including stress, depressive symptoms, and emotional exhaustion. Next, we employed structural equation modeling with discrete indicators of professional commitment and satisfaction to test the incremental validity of perceived physical safety (Hunsley & Meyer, 2003). The structural equation modeling was conducted in a sequential manner to test hierarchical regression models with a latent variable. Initially, we added the control variables to examine the variance only explained by the covariates (Model 1). Following this, we added the latent variable, teachers' psychological distress, as a key independent variable (Model 2). Finally, we added teachers perceived physical safety to Model 2 to examine the variance in teachers' professional commitment and satisfaction explained by their perception of physical safety beyond psychological well-being and covariates (Model 3).

We utilized multiple fit indices to determine the model fit (Browne & Cudeck, 1992), such as a root mean square error of approximation (RMSEA) less than .06, a comparative fit index (CFI) greater than .90, and a p-value of the chi-square statistic greater than .05. It is noteworthy that the acceptance of a significant chi-square was informed by considering other fit indices, as proposed by (Bollen, 1989). We constrained non-significant covariances to 0 to attain

the most parsimonious model. In addition, we improved the model fit by incorporating theoretically justifiable and significant covariances identified by the *mindices* into the models.

Missing data for each variable were handled using Full Information Maximum

Likelihood (FIML) estimation, which retains all available data and capitalizes on all existing information to estimate the relationships between variables (Marcoulides & Heck, 2013). No statistically significant distinctions were observed between participants with incomplete data and those with full data regarding their perceived psychological distress, perception of physical safety, and professional commitment and satisfaction. As a result, we inferred that the missing data occurred at random and proceeded to utilize FIML estimation. There were 1.20% to 1.81% of missing data among the four indicators of teachers' professional commitment and satisfaction, 0.60% of missing data in depressive symptoms, emotional exhaustion, and perception of physical safety, 2.40% of missing data in teacher year of working experience in the ECE field, 4.21% of missing data in teacher year of working in the current program, 9.64% of missing data in salary, 5.42% of missing data in teacher current teaching position, and 1.81% of missing data in race/ethnicity and educational attainment.

#### Results

## 4.1 Descriptive Statistics and Bivariate Correlations

Table 2 describes descriptive statistics and the Pearson correlation coefficients between the key variables. Teachers' stress was significantly correlated with all four indicators of professional commitment. Teachers' depressive symptoms were significantly correlated with teachers' willingness to become an ECE educator again, perspective on whether this position is a short-term career, and satisfaction with the current program. However, depressive symptoms did not display any significant correlation with teachers' satisfaction with being an ECE educator.

Meanwhile, teachers' emotional exhaustion showed a significant correlation with teachers' willingness to become an ECE educator again, satisfaction with being an ECE educator, and satisfaction with the program. However, it did not demonstrate any significant correlation with viewing the position as a short-term career. Moreover, teachers-perceived physical safety was significantly correlated with all four indicators of professional commitment.

## 4.2 Hierarchical Regression in Structural Equation Modeling

## 4.2.1 Model 1: Covariates and Professional Commitment and Satisfaction

Model 1 with only covariates is presented in Table 3, which explained 23.00% of the variance in teachers' professional commitment. Among the covariates, teachers' years of working experience was significantly associated with their perspective on whether this position is a short-term career choice ( $\beta = -0.20$ , SE = 0.06, p < .001), their satisfaction with being an early childhood educator ( $\beta = 0.26$ , SE = 0.08, p < .001), and content with their current program ( $\beta = 0.19$ , SE = 0.08, p = .02). Additionally, teachers' educational attainment was associated with their perception of viewing the position as a short-term career ( $\beta = 0.19$ , SE = 0.09, p = .05) and satisfaction with being an early childhood educator ( $\beta = -0.15$ , SE = 0.08, p = .05). Furthermore, whether the teacher is a lead teacher was significantly associated with their satisfaction with their current program ( $\beta = -0.19$ , SE = 0.08, p = .03). Overall, Model 1 demonstrated a good model fit,  $X^2(7) = 5.37$ , p = .61, RMSEA = 0.00, 90% CI = [0.00,0.08], CFI = 1.00.

# 4.2.2 Model 2: Psychological Distress and Professional Commitment and Satisfaction

By adding the psychological distress latent variable to all control variables in Model 1, Model 2 explained a total of 84.57% variance of teachers' professional commitment and satisfaction. Teachers' psychological distress was significantly associated with teacher willingness to reembrace the profession of early childhood education ( $\beta = -0.62$ , SE = 0.32, p

< .001), perspective on being an ECE educator is a short-term career choice ( $\beta = 0.22$ , SE = 0.11, p = .05), satisfaction with being an ECE educator ( $\beta = -0.46$ , SE = 0.11, p < .001), and content with their current program ( $\beta = -0.48$ , SE = 0.10, p < .001). Model 2 demonstrated a good model fit,  $X^2$  (27) = 29.19, p = .35, RMSEA = 0.03, 90% CI = [0.00,0.08], CFI = 0.99.

## 4.2.3 Model 3: Incremental Validity of Teacher-Perceived Physical Safety

Upon integrating teachers' perception of physical safety into Model 2, Model 3 explained an improved capacity of accounting for 90.88% variance in teachers' professional commitment and satisfaction in total. Notably, teachers' perception of physical safety demonstrates a positive and significant association with their satisfaction with being an ECE educator ( $\beta = 0.26$ , SE = 0.11, p = .02). After adding teachers' perception of physical safety, teachers' psychological distress was still a significant predictor of teacher willingness to reembrace the profession of early childhood education ( $\beta = -0.73$ , SE = 0.11, p < .001), satisfaction with being an ECE educator ( $\beta = -0.32$ , SE = 0.13, p = .02), and content with their current program ( $\beta = -0.54$ , SE = 0.12, p < .001). However, the inclusion of perceived physical safety introduced a shift in the relationship between teachers' psychological distress and their perspective on viewing this position as a short-term career choice. In the present model, this association was no longer significant ( $\beta = 0.15$ , SE = 0.11, p = .15). Model 3 demonstrated a good model fit,  $X^2$  (34) = 30.42, p = .64, RMSEA = 0.00, 90% CI = [0.00,0.05], CFI = 1.00.

## **Discussion**

The existing literature suggests an interplay between teachers' perceived job demands and resources in relation to their professional attitudes and practices (e.g., Byun & Jeon, 2022; Schaack et al., 2020). Nevertheless, the majority of relevant research and policy initiatives predominantly focused on the specific facets of job demands and resources, such as teachers'

emotional health, and their potential associations with teaching practices (Ansari et al., 2022). To this point, there are limited studies that comprehensively examined the combined role of teachers perceived psychological well-being and physical safety on their professional attitudes. In addition, the unique role that teachers' perception of physical safety might play in shaping their professional attitudes remains largely unknown. Within the context of Head Start educators working in systemically marginalized communities, who may carry distinct responsibilities working in neighborhoods with high crime and violence rates, the investigation of their psychological demands and physical safety concerns is critical to provide them with appropriate understanding and support. The current study aims to address these gaps by investigating the incremental validity of Head Start teachers' perception of physical safety as a predictor of their professional commitment and satisfaction beyond perceived psychological well-being. The findings demonstrated that teacher-perceived psychological distress and physical safety are generally associated with their professional commitment and satisfaction. Notably, teachers' perceptions of physical safety contribute to additional explanations in understanding the variance in teachers' professional commitment and satisfaction beyond their perceived psychological distress.

## 5.1 Perceived Psychological Distress and Professional Attitudes

Consistent with our initial hypotheses, the findings suggest significant associations between teachers' psychological distress, which indicates their job demands, and various dimensions of professional attitudes. These components include their willingness to become an early childhood educator again, their perspective on whether this job is a short-term career, their satisfaction with being an ECE educator, and their satisfaction with the current Head Start program. In particular, we found that teachers who reported lower levels of psychological well-

being tend to view their role of an ECE educator as a short-term career option. Additionally, these individuals expressed reduced satisfaction with their position in the ECE field. These findings are concerning as teachers' dissatisfaction with their profession is related to their diminished capacity to build high-quality interactions with children and meet their diverse needs (Penttinen et al., 2020; Seo & Yuh, 2022). Also, perceiving being an early childhood educator as a short-term career may imply an increased likelihood of turnover (Grant et al., 2019b). This, in turn, exacerbates the prevailing challenge of high turnover among teachers of color (Carver-Thomas & Darling-Hammond, 2017) and the overall teacher shortages within the ECE field (McLean et al., 2021).

Furthermore, the findings illustrate that teachers reporting higher levels of depressive symptoms, perceptions of stress and emotional exhaustion exhibited less interest in becoming early childhood teachers again. Essentially, these teachers had few positive opinions about their profession while they were working as early childhood educators. These suboptimal perceptions of their profession relate to their reluctance to fully commit to their teaching duties, particularly when they were struggling with overwhelming emotional stress (Ahmad et al., 2010). This may ultimately hamper the quality of early childhood education they provide for young children (Thomason & La Paro, 2013).

Moreover, the present study underscores that teachers who perceived psychological distress were inclined to experience low levels of satisfaction with their current programs. This finding is aligned with prior research indicating the association between teachers' well-being and their perceptions of the work environment (Grant et al., 2019b). This concern is particularly pressing for teachers of color, especially Black/African American teachers, who reported experiencing higher levels of psychological burdens than their counterparts (Carver-Thomas &

Darling-Hammond, 2017). As a result, psychological states like stress and emotional exhaustion are likely to pose challenges for this group of teachers, potentially related to the negative evaluation of their workplace environment and, ultimately, reduced professional commitment and satisfaction.

## 5.2 Incremental Validity of Physical Safety Beyond Psychological Distress

The findings of the study are in line with the hypothesis, demonstrating the associations between teacher-perceived physical safety and professional commitment and satisfaction.

Specifically, as educators' perceptions of the safety within their program environment increased, so did their commitment to their roles as early childhood educators. This association underscores the importance of a sense of physical security within the workplace in nurturing teachers' professional commitment and satisfaction. Beyond this singular association, teacher-perceived physical safety altered the relationships between their psychological burden and distinct dimensions of professional attitudes. Remarkably, the significant association between teachers perceived psychological distress and their inclination to view the role of an early childhood educator as a short-term career choice disappeared when accounting for their perception of physical safety. This finding suggests that a physically safe environment possesses the potential to mitigate the link between teachers' adverse psychological states and their professional commitment.

Further, the study also revealed the incremental validity of teacher-perceived physical safety on their professional commitment and satisfaction after accounting for their psychological stress, emotional exhaustion, and depressive symptoms. While previous research has examined the associations between the work environment (e.g., classroom layout and leadership support) and various aspects of teachers' educational practices, including their professional attitudes

(Lama & Shrestha, 2020), this study further highlights the distinct significance of physical safety in relation to teachers' job commitment. It underscores the significance of considering both the physical and psychological dimensions to holistically foster teachers' positive work attitudes towards their professional roles.

#### 5.3 Limitations

While this study provides values in predicting professional commitment and satisfaction using both psychological distress and physical safety, it is critical to acknowledge several limitations. First, the demographic characteristics of participants were not diverse and consisted of predominantly female (98%) and Black/African American (89%) teachers. While our sample is not racially diverse, this study contributes to the literature by examining the unique needs of Black/African-American teachers within urban Head Start programs, a group that has been underrepresented in research within this field. Furthermore, it is worth recognizing that safety concerns may be more prominent in urban areas characterized by high crime rates. In this context, our study provides insights into the physical safety challenges faced by teachers working in systemically marginalized communities. Future studies could explore these relationships within a more diverse ECE workforce context. Second, although the statistical method we used in the current study provides insights into the associations between key variables, the inherent nature of cross-sectional data could not offer causal conclusions. Future research can involve longitudinal data to explore teachers' professional attitudes, perceptions of physical safety, and psychological well-being over time.

Moreover, it is worth noting that our study primarily relied on survey-based and teachers' self-reported data, which reflects teachers' subjective perceptions. Teachers' perceptions of their psychological state and physical safety likely reflect their actual experiences to a significant

degree, and understanding these subjective experiences is important for gaining insights into the professional lives of the teacher population in marginalized communities. However, future research can benefit from developing even more comprehensive measures than the four-item physical safety measure used in the current study to capture the specific safety challenges faced by this group of teachers. Similarly, the CES-D measure we used in the current study captures only short-term depressive symptoms (over the past week). Incorporating observational and administrative data (e.g., teachers' professional attitudes and behaviors) and neighborhood safety data could provide a more comprehensive understanding of the complex interplay between these factors and provide further practical insights for ECE programs.

## **Implications**

While there are limitations, the study provides valuable implications for researchers, practitioners, administrators, and policymakers in the ECE field. From a research perspective, the evidence from the current study can serve as the foundation for further investigations into ECE educators working in systemically marginalized communities. Future studies can provide a more in-depth understanding of this group of teachers' work attitudes by including teachers' turnover intentions and their actual turnover behaviors. Additionally, future studies can employ additional research methods, such as interviews, to better understand the intricate decisions underlying teachers of color's professional attitudes. Moreover, the current study is one of the few studies to examine teachers' perceptions of physical safety in Head Start settings. The lack of prior research regarding teachers who are people of color and working in systemically marginalized areas suggests the need for additional research to explore perceived physical safety as a critical facet of ECE educators' professional lives.

The study also provides implications for ECE program administrators who play a key role in promoting teachers' commitment and well-being. As suggested by the current study, it is important to establish a positive workplace climate that relieves teachers' stress and anxiety and fosters positive well-being in order to improve teachers' commitment and satisfaction. In particular, efforts to foster greater social support and collaborative learning opportunities at the organizational level are related to teachers' decreased emotional exhaustion (Schaack et al., 2020). These efforts resonate with the findings of the present study that advocating for a safe space where educators can share experiences, resources, and mutual support can be beneficial to mitigating the detrimental impact of psychological distress. On the other hand, program administrators can contribute to teachers' coping mechanisms for emotional distress by providing targeted professional development opportunities. Research has demonstrated the efficacy of training in mindfulness and social-emotional competence to enhance teachers' resilience and reduce psychological distress (Jennings, 2015; Lang et al., 2020). These strategies may empower educators with the skills and strategies to manage their emotional challenges and foster a sense of well-being that promotes their professional commitment and satisfaction.

Moreover, the study provides insights for policymakers and administrators about the importance of creating a physically secure environment for ECE teachers. Early childhood programs, especially those located in marginalized communities with high poverty and crime rates, can take steps to prepare for potential targeted violence by implementing various violence prevention strategies in ECE settings and involving trained program personnel who can effectively respond to threats of violence (School Safety, 2023). In addition, previous studies indicate that providing teachers with comprehensive training in emergency planning, covering aspects such as crime prevention and accident management, can equip them with the skills and

knowledge to handle safety concerns and effectively respond to various situations (School Safety, 2023). These efforts are critical for promoting positive work attitudes among teachers, particularly in low-income communities facing high levels of safety concerns, which can ultimately benefit both the educators and the children they work with.

Furthermore, this study makes a meaningful contribution to understanding underrepresented populations within ECE, including Black/African American educators or educators working in socioeconomically marginalized communities. It specifically focuses on Head Start teachers who work with children and families from underprivileged backgrounds and communities with high crime rates. Given that disparities in academic and socioemotional development emerge when children are in ECE (Latham et al., 2021), sustaining high-quality and committed Head Start teachers is critical to advancing educational equity on a national level. This study suggests that creating a safe physical work environment in Head Start programs and promoting teachers' well-being deserve more attention. Additionally, the study focuses on predominantly Black/African American ECE educators, which provides insight to improve educators of color's professional attitudes by reducing their psychological distress and building a physically safe work environment. These findings are especially important considering the persistent workforce shortages in Head Start settings (Wells, 2015) and the high turnover rates of educators of color (Carver-Thomas, 2018).

Overall, the present study emphasizes the importance of a comprehensive approach to improving early childhood educators' commitment and satisfaction within systemically marginalized communities. Stakeholders across all levels can make efforts to reduce psychological distress and create a physically safe environment in order to contribute to a more committed and sustainable Head Start workforce.

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**Table 1** *Teachers' Characteristics* 

Variables	Frequency <sup>a</sup>	Mean/%	SD	Range
Demographics				
Race/ethnicity	164			
American Indian/Alaskan Native		0.61%		0-1
White/European-American		5.49%		0-1
Asian-American/Pacific Islander		1.22%		0-1
Bi-racial/Multi-racial		1.22%		0-1
Black/African-American		89.02%		0-1
Other		2.44%		0-1
Teacher type	157			
Lead teacher		52.23%		0-1
Assistant teacher		47.77%		0-1
Average age	159	45.87	11.28	23-68
Years of working experience in the ECE	157	17.20	9.78	1-41
Years of working in the current program	159	7.21	7.43	0-41
Having at least an associate degree	164	60.98%		0-1
Having at least a bachelor's degree	164	43.91%		0-1
Hold a CDA or other teaching license	158	55.06%		0-1
Annual salary	150			
\$10,000 or less		8.00%		0-1
\$10,001 to \$20,000		17.33%		0-1
\$20,001 to \$30,000		34.00%		0-1
\$30,001 to \$40,000		20.67%		0-1
\$40,001 to \$50,000		15.33%		0-1
\$50,001 to \$60,000		4.67%		0-1
Married	160	24.38%		0-1
Have children under 18 in household	164	51.22%		0-4
Receive public support <sup>b</sup>	166	29.52%		0-1

*Note.* ECE = early care and education. CDA = Child Development Associate.

<sup>&</sup>lt;sup>a</sup>The frequency here represents the number of people who answered the question.

<sup>&</sup>lt;sup>b</sup>Medicaid, food stamps, Nutrition Programs for Women, Infants, and Children, or childcare subsidies.

**Table 2** *Bivariate Correlations among Key Variables* 

Variables	1	2	3	4	5	6	7	8
1. Become an ECE educator again	-							
2. Short-term career	.05	-						
3. Satisfied with being an ECE educator	.36***	24***	-					
4. Satisfied with the current program	.53***	13	.34***	-				
5. Depressive symptoms	16*	.17*	14	20**	-			
6. Stress	36***	.21**	31***	32***	.50***	-		
7. Emotional exhaustion	47***	.09	18*	41***	.43***	.53***	-	
8. Perception of physical safety	.20**	20**	.44***	.17*	32***	43***	36***	-
N	164	164	163	163	165	166	165	165
Mean	3.99	2.67	3.00	4.06	7.73	15.47	2.97	3.45
Standard Deviation	1.21	1.45	1.17	1.01	5.56	5.75	1.45	0.93
Sample Min.	1	1	1	1	0	0	1	1
Sample Max	5	5	5	5	25	29	15	5
Cronbach's alpha	-	-	-	-	0.82	0.79	0.72	0.75

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .001

**Table 3**Hierarchical Multiple Regression Implemented in Structural Equation Modeling

	Becom	ne an ECE Educa	tor Again	Short-Term Career			
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
Covariates							
Years of ECE Experience	.15 (.08)***	.16 (.07)***	.16 (.07)*	20 (.06)***	20 (.06)***	.20 (.06)***	
Years at the current program	17 (.06)**	19 (.06)**	22 (.08)**	07 (.07)	06 (.06)	08 (.07)	
<b>Current Teaching Position</b>	18 (.10)	06 (.10)	05 (.10)	.08 (.12)	.04 (.13)	.03 (.13)	
Salary	.08 (.12)	01 (.12)	01 (.12)	21(.11)	17 (.10)	18 (.12)	
Race/Ethnicity	03 (.60)	03 (.05)	.03 (.10)	07 (.08)	07 (.07)	06 (.08)	
Educational Attainment	.02 (.11)	.003 (.10)	.003 (.10)	.19 (.09)*	.19 (.09)*	.19 (.10)*	
Key Predictors							
Psychological Distress		62 (.07)***	73 (.11)***		.22 (.11)*	.15 (.11)	
Perception of Physical Safety			.19 (.12)			12 (.10)	

	Satisfied	with Being an E	CE Educator	Satisfi	Satisfied with the Current Program			
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3		
Covariates								
Years of ECE Experience	.06 (.08)***	.26 (.09)**	.26 (.09)*	.19 (.08)*	.18 (.08)*	.18 (.08)*		
Years at the current program	14 (.07)*	14 (.07)*	11(.09)***	14 (.07)*	16 (.05)**	18 (.06)**		
<b>Current Teaching Position</b>	18 (.10)	10 (.09)	05 (.09)	19 (.08)*	11 (.08)	11 (.08)*		
Salary	.11 (.14)	.06 (.13)	.08 (.13)	.14 (.09)	.07 (.09)	.07 (.10)		
Race/Ethnicity	.004 (.10)	004 (.08)	04 (.07)	009 (.07)	.008 (.06)	.01 (.06)		
Educational Attainment	15 (.08)*	18 (.06)*	19 (.06)*	02 (.09)	03 (.08)	03 (.08)		
Key Predictors								
Psychological Distress		18 (.06)*	32 (.13)*		48 (.10)***	54 (.37)***		
Perception of Physical Safety			.26 (.11)*			.11 (.12)		

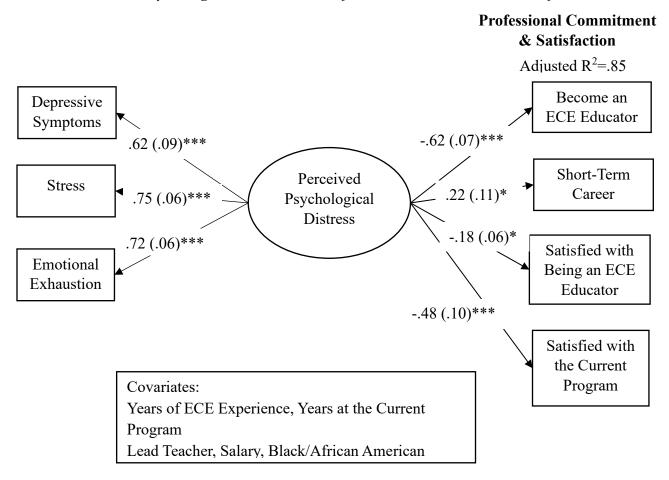
Note. Standardized coefficients, along with their corresponding standard errors in parentheses, are provided in the table. Model 1

includes covariates and discrete indicators of professional commitment and satisfaction. Model 2 includes psychological distress and

discrete indicators of professional commitment and satisfaction. Model 3 includes physical safety, psychological distress, and discrete indicators of professional commitment and satisfaction.

# Figure 1

Model 2: Perceived Psychological Distress and Professional Commitment and Satisfaction



*Note*. Standardized coefficients, along with their corresponding standard errors in parentheses, are provided in the diagram. For clarity in the diagram, the figure excludes paths stemming from the covariates.

Figure 2

Model 3: Incremental Validity of Perceived Physical Safety in Professional Commitment and Satisfaction

# Satisfaction Adjusted R<sup>2</sup>=.91 Depressive Become an **Symptoms ECE Educator** .62 (0.09)\*\*\* -.73 (0.11)\*\*\* Perceived Stress .75 (0.06)\*\*\* Psychological Short-Term Distress Career .72 (0.06)\*\*\* **Emotional** -.32 (0.13)\* Exhaustion Satisfied with -.54 (0.37)\*\*\* Being an ECE Educator .26 (0.11)\* Perceived Satisfied with Physical Safety the Current Program Covariates: Years of ECE experience, Years at the Current Program Lead Teacher, Salary, Black/African American At Least a Bachelor's Degree

*Note*. Standardized coefficients, along with their corresponding standard errors in parentheses, are provided in the diagram. The figure excludes paths stemming from the covariates. For clarity in the diagram, significant associations are represented by solid black lines, while non-significant associations are depicted with gray dashed lines.

**Professional Commitment &** 

Head Start Educators' Professional Well-being and Their Turnover Intentions: The

Moderating Role of Perceived Workplace Discrimination

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#### **Abstract**

High turnover is a critical challenge for Head Start programs. This study aims to understand how professional well-being and workplace factors are related to turnover intentions within Head Start educators. Utilizing hierarchical linear modeling with a sample of 304 educators, the study examined how positive aspects (i.e., compassion satisfaction) and negative aspects (i.e., secondary traumatic stress and emotional exhaustion) of professional well-being, along with perceived workplace discrimination, are associated with their turnover intentions (i.e., intention to leave the profession, program, or position). The findings demonstrated that compassion satisfaction, emotional exhaustion, and workplace discrimination were significantly associated with turnover intentions. The study also descriptively examined the specific reasons behind these intentions, which included poor benefits and compensation, classroom management stress, and a lack of advancement opportunities. These findings suggest the need for interventions and policies to enhance educators' professional well-being, address workplace discrimination, and improve working conditions to retain qualified Head Start educators.

*Keywords*: Early care and education, Head Start, compassion satisfaction, secondary traumatic stress, emotional exhaustion, workplace discrimination

### Introduction

High-quality early care and education (ECE) relies on the availability of dedicated and professional educators (Jeon et al., 2014). However, due to a combination of factors, including demanding workloads, low compensation, stressful work environment, and low social recognition, ECE educators face significant challenges that are associated with high turnover rates (Jeon & Wells, 2018; Kwon et al., 2022; Wells, 2015). This turnover may be negatively associated with the development of both children and ECE programs. For example, ECE turnover can disrupt the academic, social, and emotional development of children and make it difficult for families to adjust to new caregivers (Bryant et al., 2023; Kwon et al., 2022). For ECE programs, turnover creates additional effort and financial costs associated with constantly recruiting, hiring, training, and mentoring high-quality teachers (Bryant et al., 2023). Thus, it is important to understand the factors that may explain teachers' turnover intentions.

The high turnover issue is particularly pronounced among Head Start educators working with children and families who benefit most from high-quality ECE (Wells, 2015). This group of educators faces demanding work environments with unique challenges, including managing higher levels of children's challenging behaviors and heavy administrative burdens, which can reduce their professional commitment and decision to stay (Kwon et al., 2022; Wells, 2015). Moreover, there is limited knowledge regarding specific turnover intentions of Head Start educators, including leaving the ECE field, leaving their current program, or leaving their present position. These turnover intentions may relate to their distinct motivations and performances (Bassok et al., 2021; Grant et al., 2019). The current study aims to provide a better understanding of factors related to Head Start educators' turnover intentions.

According to the Ecological Model of Holistic Early Childhood Workforce Well-being, educators' professional well-being is an important aspect of ECE educators' well-being and can impact their practice, behaviors, and retention (Jeon et al., 2022). As for Head Start educators, secondary traumatic stress (STS), emotional exhaustion, and compassion satisfaction are critical components of their professional well-being that may be related to their reduced commitment. Due to their care for children in poverty who are often exposed to trauma (Brown, 2016), Head Start educators are particularly susceptible to STS, which are the natural, consequent behaviors and emotions resulting from exposure to details of another person's trauma (Bride et al., 2004; Figley & Kleber, 1995). Additionally, because of the heavy administrative burdens and the challenges of managing children's behavioral issues, Head Start educators are more likely to experience emotional exhaustion than other educators (Kwon, et al., 2022). The heightened levels of STS and emotional exhaustion may be related to their reduced professional commitment and increased intent to leave (Brown, 2016; Kwon, et al., 2022). However, the picture is not entirely negative. Despite the challenges, many ECE educators find the work rewarding as they support young children's growth and development (McDonald et al., 2018). This suggests that their compassion satisfaction, a sense of fulfillment derived from helping children and families in need (Stamm, 2009), can potentially strengthen Head Start educators' commitment, and thereby foster their intention to stay in their jobs.

In addition, the study investigates the role of teacher-perceived working environment, specifically workplace discrimination, in the associations between professional well-being and turnover intentions. The Early Childhood Professional Well-Being Framework suggests that organizational culture, including experiences of discrimination, can negatively impact an educator's well-being (Gallagher & Roberts, 2022), potentially leading to decreased job

commitment and a higher likelihood of leaving. While research in other fields has established a link between perceived discrimination, well-being, and turnover intentions (Dhanani et al., 2018; Özer & Günlük, 2010; Sert Ozen et al., 2021), the impact of workplace discrimination on ECE professionals is largely unknown. Given the historical marginalization and low social recognition of the ECE workforce, which is disproportionately comprised of women of color (Amadon et al., 2023; Bacon, 2019; Boyd, 2015), it is critical to examine this specific environmental factor within their professional lives.

This study, guided by the Early Childhood Educator's Holistic Well-being Framework (Jeon et al., 2022) and the Early Childhood Professional Well-Being Framework (Gallagher & Roberts, 2022), examines the relationships between Head Start educators' professional well-being (i.e., STS, emotional exhaustion, compassion satisfaction) and perceived workplace discrimination, and their intention to leave the profession, program, or position. In addition to the exploration of the three primary turnover intentions, the study also descriptively examined the specific reasons underlying these intentions. This comprehensive approach can inform more targeted interventions and policies to reduce turnover, retain qualified ECE professionals, and ultimately benefit the learning experiences of young children.

### **Early Childhood Educators' Turnover Intentions**

The ECE workforce turnover rate is alarmingly high, with 25% to 50% of teachers annually leaving their jobs (Bassok et al., 2021; Jeon & Wells, 2018; Wells, 2015). Even within highly-resourced networks of schools, teacher turnover rates exceeded 30% per year (Bassok et al., 2021). Studies specifically focused on Head Start teachers have found that nearly 34% to 36% leave their programs each year (Bassok et al., 2021; Wells, 2015). These alarming turnover rates are negatively related to children's social and emotional development and disrupt family-

provider relationships (Bryant et al., 2023; Horm et al., 2018). In particular, the loss of highly skilled and experienced teachers can interrupt children's attachment and relationship-building processes with educators, negatively relating to the development of their social, emotional, and executive functioning skills (Graziano et al., 2016; Horm et al., 2018). Additionally, the turnover of teachers requires the remaining staff to cover additional duties, adjust routines, and invest time and energy in building connections with new staff. This can create a stressful work environment for the remaining staff and is potentially associated with their own reduced professional engagement (Bryant et al., 2023). Moreover, research has shown that high teacher turnover is more prevalent in schools with limited resources and those located in marginalized communities (Darling-Hammond, 2010; Ingersoll & Smith, 2003). These schools often work with a high proportion of students from disadvantaged backgrounds, and as a result, teachers' turnover can exacerbate educational inequities.

Given the potential negative impacts of high turnover among ECE educators, it is crucial to investigate the factors related to the proximal precursor of turnover-turnover intentions (McInerney et al., 2015). Empirical research also suggests that employees' turnover intentions are correlated with their turnover behaviors, although the correlation may vary by demographic characteristics (Cho & Lewis, 2012). Exploring turnover intentions may provide insights into how to better support educators in order to reduce their actual turnover rates. In this study, we distinguish between three types of teacher turnover intentions: intention to leave the profession, intention to leave a current program, and intention to leave a current position. This distinction is important because the experiences and motivations behind these intentions may differ. For instance, teachers who plan to leave the ECE field entirely may be dissatisfied with the low social recognition and poor compensation across the overall ECE profession (Bassok et al.,

2021). Alternatively, teachers who intend to leave their current program may be motivated by a lack of sense of community and program-level support (Grant et al., 2019), seeking opportunities in programs with better resources and a more positive work environment. Additionally, teachers who consider leaving their current position may seek advancement to a leadership role within the same program (Crawford et al., 2010). Distinguishing between these turnover intentions can provide valuable insights for program leaders and policymakers, allowing them to tailor support strategies for educators based on their specific motivations.

While poor salaries and benefits are recognized as significant factors related to high teacher turnover rates (McLean et al., 2021), they are not the only determining factors. Teachers' personal characteristics, states of well-being, and their perception of their work environments are also critical factors in their attitudes towards their jobs (Jeon & Wells, 2018; Thorpe et al., 2020). Given the high standards and the specialized knowledge and skills required to work with children in poverty (Head Start Services, 2022), the professional experiences and well-being of Head Start educators may differ from those of people working in other ECE settings. Additionally, Head Start educators are disproportionately female and of color, both groups that face discrimination based on their professional and personal identities during their work (Sparks, 2019). These discriminatory experiences may also be associated with teachers' intentions to leave their jobs. The current study examines these factors in relation to teachers' intent to leave. Furthermore, to provide more personalized support, this study also investigates the underlying specific reasons that drive Head Start educators to consider leaving their positions using an openended question.

Secondary Traumatic Stress and Its Associations with Turnover Intentions

STS is defined as the natural, consequent behaviors and emotions resulting from exposure to details of another person's trauma (Bride et al., 2004; Figley & Kleber, 1995). The Substance Abuse and Mental Health Services Administration (2023) reported that over twothirds of children in the U.S. went through at least one traumatic experience by age 16. Educators who work with these children may experience high levels of STS and related symptoms (Berger & Nott, 2023). In fact, studies have shown that approximately 38% to 43% of teachers report experiencing high levels of STS (Berger & Nott, 2024; Koenig et al., 2018; Ormiston et al., 2022). STS is more prevalent among teachers working in underserved schools and schools with high populations of marginalized and racially and ethnically diverse students (Christian-Brandt et al., 2020; Denham, 2018; Ormiston et al., 2022). Likewise, Head Start educators, who work with children from low-income families and marginalized communities, are particularly vulnerable to STS, due to their frequent exposure to children's traumatic experiences, such as violence and crime (Rankin, 2021). These untreated STS experiences can be adversely related to educators' personal functioning and professional practices. Studies have linked STS to increased symptoms of depression, increased conflicts with children, and reduced job satisfaction (Berger & Gelkopf, 2011; Caringi et al., 2015).

Although STS is understudied within the ECE field, relevant research in other fields suggests that STS is potentially associated with educators' turnover intention. A study involving K-12 educators revealed that 75% of those working with trauma-affected youth considered leaving the teaching profession through career changes, retirement, or transitioning to other schools (Caringi et al., 2015). Additionally, studies have demonstrated that teachers working in resource-limited schools with higher minority populations face increased risks of STS and teacher attrition (Abraham-Cook, 2012; Denham, 2018). These findings are particularly relevant

to Head Start educators, who often work in similar settings and experience high levels of STS. Beyond psychological symptoms, STS can also relate to individuals' physical symptoms, such as respiratory problems, muscular discomfort, nightmares, and insomnia (Meyers & Cornille, 2002). These physical symptoms may be associated with educators' absenteeism and turnover intention (Rankin, 2022).

### **Emotional Exhaustion and Its Associations with Turnover Intentions**

In addition to STS, emotional exhaustion is another prevalent occupational hazard among educators (Brown, 2016; Klusmann et al., 2016). Emotional exhaustion, a state of the depletion of both emotional and physical dimensions from job demands (Cropanzano et al., 2003; Wright & Cropanzano, 1998), can reduce individuals' psychological engagement in their job (Maslach & Jackson, 1981). The experience of emotional exhaustion among ECE professionals is concerning, as teacher emotional exhaustion has been linked to both job attitudes (Han et al., 2021; Lizano & Mor Barak, 2015) and educational practices (Han et al., 2021). Research has demonstrated that early childhood educators experiencing higher levels of emotional exhaustion exhibit reduced commitment and comfort in providing sensitive support for children's social-emotional learning (Ansari & Gottfried, 2020; Hoglund et al., 2015). Moreover, children with emotionally exhausted teachers are more likely to display lower academic achievement and school engagement compared to their peers (Hoglund et al., 2015).

Emotional exhaustion is one of the critical aspects of teachers' professional well-being that is associated with teachers' turnover intentions (Schaack et al., 2020). A study of 273 early childhood educators in Colorado found that those who were emotionally exhausted were more likely to leave their jobs (Schaack et al., 2020). Similarly, another study reported that teachers with higher emotional exhaustion tend to want to leave the profession (Grant et al., 2019). While

the connection between teachers' emotional exhaustion and their intent to leave has received increasing attention, only a few studies specifically examined it among Head Start educators. Head Start educators face unique challenges at workplace, such as managing children's challenging behaviors, handling excessive paperwork, and fulfilling the dual responsibility of providing support for children and building relationships with families to achieve the two-generation mission of Head Start programs (Kwon et al., 2022; Wells, 2015). Despite the challenges, the relationships between Head Start educators' emotional exhaustion and their specific turnover intentions, whether it be leaving the ECE profession entirely, leaving their current program, or leaving their current position, remain unclear. This study aims to address this gap by examining these distinct turnover intentions in relation to emotional exhaustion among Head Start educators.

### Compassion Satisfaction and Its Association with Educators' Turnover Intentions

While the stress and demands of ECE are related to burnout and STS, many educators also find the work deeply rewarding (McDonald et al., 2018). This sense of fulfillment can be termed as compassion satisfaction, which arises from the pleasure and gratification derived from helping others and contributing to a larger purpose (Stamm, 2009). Individuals experiencing compassion satisfaction often report enhanced self-efficacy, a sense of invigoration, and the belief that their actions can make a positive impact on the world (Stamm, 2009). A qualitative study by Fleckman et al., (2022) explored the experiences of compassion satisfaction among teachers. They found that teachers experienced compassion satisfaction through positive feelings associated with helping students, witnessing their academic and social-emotional growth, experiencing a strong sense of professional self-efficacy, feeling connected to a supportive

community, and cherishing the relationships they share with students and families (Fleckman et al., 2022).

While research specifically examining compassion satisfaction among ECE educators is limited, evidence from other fields suggests potential associations between compassion satisfaction and turnover intentions. For instance, in the medical sector, studies revealed that compassion satisfaction, compassion fatigue, and burnout collectively accounted for 20% of turnover intention among medical care workers (Ariapooran et al., 2021). Similarly, research among clinical social workers found that individuals who report low compassion satisfaction tend to perceive heightened personal distress, which is potentially related to the decision to leave the profession (Thomas, 2013). A study among elementary school teachers also suggests that low compassion satisfaction in conjunction with high burnout is associated with teachers' increased intent to leave the profession (Christian-Brandt et al., 2020).

Many ECE educators report staying in their jobs due to the intrinsic motivation derived from making a positive difference in children, families, and society (McDonald et al., 2018). Interestingly, research suggests that teachers working in high-poverty schools perceived higher levels of compassion satisfaction compared to those in more affluent settings (Abraham-Cook, 2012). This could be particularly true for Head Start educators working with children in poverty, since compassion satisfaction may be a factor motivating them to stay in their job (Brown, 2016). Head Start educators experience a combination of fulfillment from supporting vulnerable children and stress due to the increased likelihood of these children experiencing trauma and demonstrating challenging behaviors (Denham, 2018; Kwon, et al., 2022). Therefore, this study aims to simultaneously examine these three professional well-being factors (i.e., compassion

satisfaction, emotional exhaustion, and STS) in order to better understand Head Start educators' professional experiences.

# **Moderating Role of Workplace Discrimination**

In addition to professional well-being, the working environment also plays a critical role in educators' turnover intention (Grant et al., 2019). Workplace discrimination is an understudied topic in early childhood educators' work environments, which is characterized as the unjust and negative treatment of employees or prospective job candidates, based on personal attributes that are not relevant to their job performance (Chung, 2001). Early childhood educators often experience societal bias and discrimination regarding their profession (Amadon et al., 2023; Bacon, 2019; Boyd, 2015). This is evidenced by stereotypes that dismiss early childhood educators as only "babysitters" rather than skilled professionals (Bacon, 2019). Consequently, educators struggle for social recognition and perceive themselves as undervalued by society as a whole (Quinones et al., 2021). This societal bias and discrimination are also related to the ECE workforce being some of the lowest-paid workers in the United States, even though their work enables parents to participate in the workforce and promote the healthy development of young children (McLean et al., 2021).

Unfortunately, discrimination also exists within the ECE profession itself. Although the workforce is predominantly female and racially diverse (Park et al., 2015), this diversity does not reflect equal opportunities. Research conducted within 14 U.S. cities found that, among ECE teachers with identical model resumes, Black and Hispanic applicants received significantly fewer interview requests than White applicants with similar qualifications and backgrounds (Boyd-Swan & Herbst, 2019). Additionally, Black ECE teachers are more likely to work with infants and toddlers, which are positions that pay lower wages than those who teach preschool-

age children. In contrast, White teachers are more likely to work in school-sponsored ECE programs, which provide higher pay and benefits (Schilder & Curenton, 2021). Furthermore, wage disparities exist even within the diverse female ECE workforce. A national study found that women of color, including Black, Hispanic/Latina, and Asian, earn the lowest average hourly wages (Liu et al., 2023). Additionally, while Black and Hispanic/Latino men in ECE have higher average wages than women of color, they still earn less than White women (Liu et al., 2023).

The combined effects of societal bias and internal discrimination within the ECE profession raise concerns about its potential adverse associations with educators' well-being and retention. While no research has directly examined the relationships between perceived discrimination and turnover intentions among ECE educators, evidence from other fields suggests a connection between these factors. Studies in the business field have found that employees who experience discrimination are more likely to report lower job satisfaction and express a desire to leave their jobs (Elçi et al., 2018; Qu et al., 2019). Research among staff in higher education institutions also demonstrates that when individuals suppress group identity and perceive high levels of workplace discrimination, they tend to think about quitting their jobs (Madera et al., 2012). This evidence suggests that perceived discrimination may play a significant role in turnover intentions among ECE educators as well. Recognizing and understanding this relationship is crucial for fostering a more equitable and inclusive ECE profession.

The Early Childhood Professional Well-Being Framework posits that organizational culture, including the experience of discrimination at work, can be harmful to one's professional well-being (Gallagher & Roberts, 2022), which ultimately may impact the associations with job commitment and engagement. Similarly, self-determination theory suggests that individuals'

perceived working environment is related to motivation for their practices at work (Ryan & Deci, 2000). Therefore, it is possible that workplace discrimination interacts with the associations between educators' well-being and their turnover intentions. For instance, when educators face frequent workplace discrimination, the role of STS and emotional exhaustion in their job commitment may be stronger. This may be because the pressure from a hostile work environment compounds upon existing feelings of low well-being, ultimately pushing them towards wanting to leave. Conversely, educators who perceive a more inclusive and just work environment where discrimination is low, may experience a buffering effect. In such cases, even if they experience emotional exhaustion, STS, and low compassion satisfaction, their desire to leave might be buffered by their overall satisfaction with the workplace culture.

In addition to examining the potential associations between well-being and organizational factors and educators' professional attitudes, it is also critical to understand the specific reasons why educators considered leaving their jobs from their perspective. The high turnover rates of Head Start educators and their potential negative impacts on children's and program's development are well documented (Wells, 2015). However, the literature mainly discussed financial hardships and demanding workloads as the main reasons for ECE educators' turnover intentions without comprehensively investigating other potential reasons from Head Start educators' perspectives (McLean et al., 2021; Zhao & Jeon, 2024;). Therefore, we attempt to understand the specific and nuanced reasons why Head Start educators consider quitting their jobs, which can better inform the improvement of the Head Start environment.

### **The Present Study**

Head Start educators' alarming turnover rate is related to the development of children in most need (Wells, 2015). According to evidence from existing literature and the theories,

professional well-being and perceived workplace discrimination potentially play critical roles in Head Start turnover intentions (Jeon et al., 2022; Özer & Günlük, 2010; Ryan & Deci, 2000; Schaack et al., 2020; Sprang et al., 2011). However, the relationships among these factors have not been comprehensively examined within Head Start educators. The current study aims to bridge the gap by answering the following questions.

- 1) What are the associations between Head Start educators' professional well-being (e.g., STS, emotional exhaustion, compassion satisfaction), their perceived discrimination at the workplace, and their intent to leave their current position, program, and profession?

  Hypothesis: When Head Start educators experience a higher level of STS and emotional exhaustion, perceive lower compassion satisfaction, and more frequent workplace discrimination, they are more likely to leave their profession, program, and position.
- 2) To what extent does workplace discrimination moderate the associations between professional well-being and intent to leave?
  Hypothesis: When workplace discrimination is higher, the associations between professional well-being and educators' turnover intentions will be stronger.
- 3) What are the specific underlying reasons why Head Start educators consider leaving their jobs?

### Methods

# **Participants**

This study involved a survey of 304 educators across 54 Head Start sites located in two Mid-Atlantic states in the United States. These educators were recruited as part of a professional development (PD) training, specifically designed for enhancing the holistic well-being of Head Start educators. We only used pre-test data in the current study. Table 1 presents the demographic characteristics of the participants. Among those educators who completed the pretest survey, 36% were lead teachers, 31% were assistant teachers, and 19% were in various administrative roles (e.g., program directors, family service coordinators, education coordinators), and 14% were in other ECE educator roles (e.g., substitute teacher, teacher aid, and home visitors). Around 96% of survey respondents were female. The ethnic composition of the participants was primarily Black/African American, non-Hispanic (56%), followed by Hispanic (21%), and White, non-Hispanic (18%). The average age of participants was approximately 41 years, with an average of 11 years of experience in ECE. Regarding the educational attainment among the participants, 62% of them held an associate degree or higher, and 41% had a bachelor's degree or above. In terms of salary, the majority (65%) reported annual earnings ranging from \$20,000 to \$50,000.

### **Procedures**

The study received ethical approval from the University Institutional Review Board. Data were collected in 2023 and 2024 for a larger project, designed to provide a PD program, Well-Being First, for Head Start educators. Head Start grantees and leaders interested in participating in the PD program were contacted by the research team. After the programs were assigned to either a treatment group or a control group, the research team received a roster of all staff

members in each program, including lead teachers, assistant teachers, and administrators. Then, the research team sent a pre-test survey link along with the informed consent form to each individual. All pre-test data used in this study were collected prior to the first training session. The survey asked participants' demographic characteristics, well-being, perceptions of their work environments, and professional commitment and attitudes. Out of 530 participants who received the survey links, 309 completed the survey, resulting in a response rate of 58%. Given that the current study aims to focus on educators, we excluded the data from 5 participants whose job titles were related to kitchen and data analysis, which might lack direct relevance to classroom teaching. Each participant who completed the survey was compensated with \$25 as appreciation.

#### Measures

#### **Turnover Intentions**

This study assessed three types of turnover intentions among Head Start educators: leaving the ECE profession, leaving their current program, and leaving their current position. To measure their intention to leave the ECE profession, participants rated their agreement with the statement "Within the next 12 months, I intend to continue as an early childhood educator" on a scale from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*; Buettner et al., 2016). We reverse-coded this item, and higher scores indicated a stronger intention to leave the profession. The intention to leave the current program was measured by the statement "Within the next 12 months, I plan to remain at my current program," using the same 5-point scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*; Buettner et al., 2016). We reverse-coded this item, and higher scores suggested a higher likelihood of leaving the program. To assess intentions to leave their current position, participants answered "How many more years do you plan to be in your present position within

your program?" with options from "1 = 2 years or less" to "4 = 10 or more years." We reverse-coded this item, and higher scores indicated a stronger desire to leave their position sooner.

## Secondary Traumatic Stress

We adopted the Secondary Traumatic Stress Scale developed by Stamm (2009) to measure educators' STS. The scale consists of nine items, with a high internal reliability (Cronbach's  $\alpha = 0.91$ ) in our sample. Educators rated items reflecting their exposure to proximal traumatic experiences on a 5-point Likert scale (1 = Never, 5 = Very Often). Example items include "I think I am affected by the traumatic stress of the children and families I educate and care for" and "I avoid certain activities that remind me of the traumatic experiences of the children and families I work with." The sum of the scores was calculated to represent the educators' level of STS. A higher score indicates a higher level of STS.

### **Emotional Exhaustion**

We adopted Maslach's Burnout Inventory to measure Head Start educators' emotional exhaustion (Maslach & Jackson, 1981). Participants rated eight items to report the frequency of experiencing emotional exhaustion, using a 7-point Likert scale (1 = Never, 7 = Everyday). Example items include "I feel like I'm at the end of my rope" and "I feel emotionally drained from my work." The scale demonstrated good internal reliability in the current sample (Cronbach's alpha = 0.90). The total score indicates participants' emotional exhaustion level, with higher scores representing more frequent emotional exhaustion.

## **Compassion Satisfaction**

Educators' compassion satisfaction was measured using the Professional Quality of Life Scale (ProQOL) subscale (Stamm, 2009). This subscale, with an internal reliability of 0.90 in the current sample, consists of 10 items assessing job satisfaction and fulfillment from serving in a

helping role. Ratings were on a 5-point Likert scale (1 = Never, 5 = Very Often). Example items include "I get satisfaction from working with children and families" and "I feel invigorated after working with the children and families I care for." The higher average score of these items reflects higher levels of compassion satisfaction.

## Workplace Discrimination

Perceived workplace discrimination was measured using the Workplace Discrimination Scale (Kwon et al., Under Review). This scale includes six items rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree), with an acceptable internal reliability of 0.72 in the current sample. Participants reported the characteristics of their work environment. Examples include "There is discrimination at my workplace" and "I am treated unfairly at work based on my identity or appearance." The average scores indicate the educators' perception of workplace discrimination, and higher average scores suggest more perceived discrimination.

# Reasons for Turnover Intentions

To understand the specific reasons behind educators' intentions to leave their jobs, participants who indicated a desire to leave within the next two years were asked to specify their reasons in the survey. The participants were given 13 options in an open-ended question in the online survey. This approach ensured the collection of relevant data from those considering turnover.

### **Covariates**

The present study controlled for educators' demographics and other characteristics that may be related to their turnover intentions. Specifically, we controlled for educators' years of working experience, salary, current teaching position ("Lead teacher" as the reference category; "Assistant teacher"; "Administrative roles"; "Other roles"), race/ethnicity ("White, non-

Hispanic" as the reference category; "Black, non-Hispanic", "Hispanic", and "Other"), educational attainment (1 = Bachelor's degree or higher, 0 = Others).

# **Analytic Strategy**

## Missing Data

Regarding the missing data in the outcome variables, there were 9.21% of missing data in educators' intention to leave their profession, 10.20% of missing in intention to leave their current program, and 6.25% of missing in intention to leave their current position. In terms of the independent variables, there was no missing in STS, 6.91% of missing in emotional exhaustion, and 9.87% of missing in compassion satisfaction, 6.25% of missing in workplace discrimination. Among the covariates, 5.59% of missing in race/ethnicity, 1.64% of missing in years of working experiences, 0.33% missing in educator's title, 6.91% missing in salary, and no missing in education attainment. We did not find statistically significant differences between participants with complete data and those with incomplete data regarding their professional well-being, perceived workplace discrimination, and turnover intentions. To address the issue of missing data, we employed the method of multivariate imputation by chained equations and generated 10 imputed datasets to capture the statistical uncertainty in cross-sectional data (Azur et al., 2011; Molenberghs & Kenward, 2017).

# Data Analysis

The data in the current study had a two-level nested structure, with educators (Level 1) nested in Head Start centers (Level 2). Given this nested structure, we built a two-level hierarchical linear modeling in Stata 16.0 to answer the first and second research questions. First of all, we analyzed unconditional baseline models without predictor variables. We analyzed the intraclass correlation coefficients (ICCs), which describe the ratio of the between-cluster

variance to the total variance. In particular, we analyzed ICCs for three types of educators' turnover intentions, including their intention to leave the ECE profession, their current Head Start program, or their current position.

In the multi-level analyses, we first included only control variables in the models to estimate the model fit and the explained variances of the baseline models. The model fit indices that were used include Deviance (Gelman & Hill, 2006), Akaike's information criterion (AIC; Akaike, 1987), and Bayesian information criterion (BIC; Schwarz, 1978). Second, in the main effects models, we added STS, emotional exhaustion, compassion satisfaction, and workplace discrimination variables. We compared the main effects models with the baseline models that did not include control variables to calculate the total variances explained in each outcome variable. Then, we compared the main effects models with the baseline models only with control variables, to calculate the unique variance explained by STS, emotional exhaustion, and compassion satisfaction after accounting for the control variables. Next, we added the interaction terms between key independent variables (i.e., STS, emotional exhaustion, and compassion satisfaction) and perceived workplace discrimination to the main effects models. Additionally, during the model building process, we compared the models with and without random slopes across centers between the independent and dependent variables. However, models allowing both random slopes and intercepts did not demonstrate better model fits compared to models with only the random intercepts. Therefore, we chose models that allowed intercepts to vary and fixed the slopes in each model. The final main effect models are:

Level-1 Model: 
$$Y_{ij} = \beta_{0j} + \beta_{1j} STS_{ij} + \beta_{2j} Emo_{ij} + \beta_{3j} Com_{ij} + \beta_{4j} Dis_{ij} + \beta_{5j} STS_{ij} * Dis_{ij} + \beta_{6j} Emo_{ij} * Dis_{ij} + \beta_{7j} Com_{ij} * Dis_{ij} + \beta_{8j} Cov_{ij} + e_{ij}$$
Level-2 Model:

$$\beta_{0j} = \gamma_{00} + \mu_{0j}$$

$$\beta_{1j} = \gamma_{10} + \mu_{1j}$$

$$\beta_{2j} = \gamma_{20} + \mu_{2j}$$

$$\beta_{3j} = \gamma_{30} + \mu_{3j}$$

$$\beta_{4j} = \gamma_{40} + \mu_{4j}$$

$$\beta_{5j} = \gamma_{50} + \mu_{5j}$$

$$\beta_{6j} = \gamma_{60} + \mu_{6j}$$

$$\beta_{7j} = \gamma_{70} + \mu_{7j}$$

$$\beta_{8j} = \gamma_{80} + \mu_{8j}$$
Combined Model:  $Y_{ij} = \gamma_{00} + \gamma_{10} STS_{ij} + \gamma_{20} Emo_{ij} + \gamma_{30} Com_{ij} + \gamma_{40} Dis_{ij} + \gamma_{50} STS_{ij} * Dis_{ij} + \gamma_{60} Emo_{ij} * Dis_{ij} + \gamma_{70} Com_{ij} * Dis_{ij} + \gamma_{80} Cov_{ij} + \mu_{0j} + \gamma_{10} STS_{ij} * Dis_{ij} + \gamma_{20} Emo_{ij} * Dis_{ij} * Di$ 

where  $Y_{ij}$  represents educators' turnover intentions (i.e., intention to leave the ECE profession, current Head Start program, or current position) for educator i in center j; Cov in Level 1 represents educators' race/ethnicity, educational attainment, title, salary, and years of working experience. STS represents secondary traumatic stress, Emo represents emotional exhaustion, Com represents compassion satisfaction, and Dis represents workplace discrimination. The term  $e_{ij}$  represents a normally distributed error term  $(e_{ij} \sim N \ (0, \sigma^2))$ . The terms  $\mu_{0j}$  represent normally distributed variances at the center level  $(\mu_{0j} \sim N \ (0, \tau_{\beta}))$ , respectively. We allowed intercepts to vary randomly at the teacher level  $(T = [\tau_{00}])$ .

Finally, to examine the underlying reasons behind Head Start Educators' turnover intentions, we counted the frequency of turnover intention reasons educators selected among the 13 options. Additionally, we coded participants' answers to the "Other" option in the question and included the frequency of common answers (n > 2) regarding their potential turnover intention reasons.

### **Results**

Table 2 presents the descriptive statistics and bivariate correlations between key variables. Educators' STS was significantly correlated with their intention to leave the profession, program, and position. Similarly, emotional exhaustion was positively significantly correlated with educators' intention to leave the ECE profession, program, and current position. Educators' compassion satisfaction was negatively correlated with their intentions to leave the profession, program, and position. Perceived workplace discrimination was significantly correlated with educators' turnover intentions regarding profession, program, and position. Additionally, educators' perceived workplace discrimination demonstrated significantly positive correlations with their STS, emotional exhaustion, and negative correlation with compassion satisfaction.

The ICCs indicate that 0.08%, 2.70%, and 4.90% of the variance existed between educators within centers in educators' intentions to leave the profession, program, and position, respectively. Table 3 shows the results from the primary effects models. First, workplace discrimination ( $\beta = 0.17$ , SE = 0.09, p < .05, 95% CI = [.01, .35])and compassion satisfaction ( $\beta = -0.47$ , SE = 0.10, p < .001, 95% CI = [-.67, -.27]) was associated with educators' intention to leave the ECE profession. In addition, emotional exhaustion ( $\beta = 0.18$ , SE = 0.05, p < .001, 95% CI = [.08, .28]) and compassion satisfaction ( $\beta = -0.33$ , SE = 0.11, p < .01, 95% CI = [-.54,

-.12]), and workplace discrimination ( $\beta$  = 0.30, SE = 0.09, p < .001, 95% CI = [.12, .48]) were significantly related to educators' intention to leave their current program. Furthermore, emotional exhaustion ( $\beta$  = 0.28, SE = 0.06, p < .001, 95% CI = [0.17, 0.40]) was significantly associated with educators' increased intention to leave their current position. In comparison to the baseline (intercepts only) model, the primary models explained: (a) 2.20 % of the teacher-level variance and no center-level variance in intention to leave the profession, (b) 22.701% of the teacher-level variance and 1.60% of the center-level variance in intention to leave the program, and (c) 15.85% of the teacher-level variance and 0.03% of the center-level variance in intention to leave the program<sup>1</sup>. Workplace discrimination did not moderate the relationships between the three key independent variables (i.e., STS, emotional exhaustion, and compassion satisfaction) and their turnover intentions.

Table 4 presents the reasons for educators to consider turnover. Among Head Start educators who planned to leave within the next two years, a significant majority identified the desire for improved benefits and compensation as a key factor. Additionally, many educators expressed interest in exploring job opportunities outside the ECE field or transitioning to different roles within ECE. Stress related to classroom management and lack of flexibility were also common reasons for considering turnover. The pursuit of career advancement opportunities and promotions was another commonly mentioned factor. A smaller proportion of educators reported personal reasons, such as relocation or retirement, as their reasons for leaving their jobs.

### **Discussion**

<sup>1</sup> In addition to our primary analyses, we conducted a sensitivity analysis to assess the impact of including a dummy variable for the grantee in each model. However, including the grantee variable had no significant effect on the relationships observed among the variables. Given these findings and the principle of parsimony, we excluded the grantee variable from the final models.

Given the significant turnover rates among Head Start educators (Jeon & Wells, 2018; Wells, 2015) and their crucial roles in supporting children and families in need (Jeon et al., 2014; Roberts et al., 2016), the current study examined the factors related to their turnover intentions. Our findings suggest significant associations between professional well-being and intentions to leave. Additionally, more frequent perceived workplace discrimination was found to be associated with a higher likelihood of leaving the profession or program.

## **Secondary Traumatic Stress and Turnover Intentions**

Contrary to our hypothesis, we found no significant associations between STS and educators' intentions to leave the profession, program, or position. Head Start educators, on average, reported relatively low levels of STS in our study. Although STS is a concern among general school teachers, it remains understudied in the ECE field (Sprang et al., 2011; Zhao et al., 2024). One possible explanation is that educators entering Head Start programs are often aware of the potential for exposure to STS due to the nature of working with vulnerable children. These teachers are likely motivated to care for young children who are at higher risk of experiencing traumatic experiences (Bullough et al., 2012). As they become more aware of the complexities of these children's lives and their families' situations, they may feel still motivated to continue their job regardless of the potential risks of experiencing STS. Because STS has been found to impact individuals' general well-being and health (Hydon et al., 2015), despite the findings on the insignificant role of STS, future research with larger and more diverse samples of ECE professionals could further examine the relationship between STS and turnover intentions.

#### **Emotional Exhaustion and Turnover Intentions**

As expected, our study demonstrates a positive association between Head Start educators' emotional exhaustion and their intentions to leave their current program and position. This

suggests that educators experiencing higher levels of emotional exhaustion were more likely to consider leaving their current role and potentially transitioning to a different program. This finding aligns with existing research highlighting the prevalence of emotional exhaustion among ECE educators, often related to factors such as workload pressure, low income, and lack of resources (Al-Adwan & Al-Khayat, 2017).

However, unlike previous research suggesting a significant association between emotional exhaustion and quitting the ECE field altogether (Grant et al., 2019), we did not find this association in the current study. This may be related to the unique sample of Head Start educators. These educators are often driven by strong intrinsic motivations to support vulnerable children and families (Bullough et al., 2012). While emotional exhaustion may be negatively associated with their current position in the program, it may not lead them to abandon the field entirely. Instead, they might seek a change within the Head Start system, such as transitioning to a different program or altering their role within the current program, allowing them to continue working with young children in a less demanding environment.

# **Compassion Satisfaction and Turnover Intentions**

Partially consistent with our hypothesis, the study demonstrated the negative association between educators' compassion satisfaction and their intentions to leave the ECE profession and the current Head Start program within a year. This result is aligned with the prior study indicating that educators who experience lower levels of compassion satisfaction are more likely to consider quitting the education field (Christian-Brandt et al., 2020). By contrast, individuals with higher levels of compassion satisfaction are more likely to be committed to their organization (Vagharseyyedin et al., 2018), which is related to a lower likelihood of leaving their organizations (Grant et al., 2019). Interestingly, our study found that Head Start educators in our

sample reported relatively high levels of compassion satisfaction, with a mean of 4.23 in the range of 1-5. This suggests strong intrinsic motivation among these educators, and those experiencing a greater sense of fulfillment from helping children in need were more likely to be committed to both their program and the broader ECE field.

However, compassion satisfaction was not significantly associated with educators' intentions to leave their current positions. One potential explanation is that compassion satisfaction might primarily reflect an individual's sense of fulfillment derived from helping others within a specific profession (Stamm, 2009) or organization (Vagharseyyedin et al., 2018). It might not directly translate to satisfaction with the specific features of their current position. This finding suggests a distinction between the role of compassion satisfaction in educators' broader professional identity and organizational commitment, versus their satisfaction with the immediate job details. Future research could examine this possibility by examining the relationship between compassion satisfaction and turnover intentions across different contexts and timeframes.

# Workplace Discrimination, Professional Well-being, and Turnover Intentions

We found a significant association between perceptions of workplace discrimination and an increased likelihood of educators leaving the ECE profession and their current program. This aligns with existing research which indicates a direct relationship between educators' satisfaction in the workplace environment and turnover (Jeon & Wells, 2018). However, it is important to note that the assessment of workplace discrimination in this study focused on the broader workplace environment rather than on specific job positions. Thus, it is reasonable that educators' perceived discrimination was predominantly associated with their intentions to leave their current program and the ECE profession rather than their particular position. In addition,

this aligns with the fact that ECE educators often face similar challenges related to their professional recognition and societal respect regardless of their position (Boyd, 2015; Boyd-Swan & Herbst, 2019; Liu et al., 2023). In particular, the perception of discrimination can be prevalent in the ECE field because their work is often stereotyped as babysitting (Boyd, 2015). This systemic issue may lead to a discriminatory perception regardless of an individual's specific role within the program. This finding suggests the importance of systematic and program-level efforts to foster an inclusive and equitable work environment, free from prejudice and discrimination, to enhance educators' motivation to remain in their program and the profession.

However, the finding did not support our hypothesis that educators' perceived workplace discrimination moderates the associations between the indicators of their professional well-being and their turnover intentions. One of the explanations is that professional well-being might be a more fundamental factor related to turnover intentions compared to the specific discrimination educators experience within the program. Therefore, educators with high emotional exhaustion or low compassion satisfaction were likely to consider leaving regardless of the discrimination they faced. Second, the relatively low reported levels of discrimination with high variance in our sample might have limited the statistical power to detect a significant moderating effect. Future research with larger and more diverse samples of Head Start educators could provide a clearer picture of how workplace discrimination interacts with the associations between professional well-being and turnover intentions.

#### **Reasons for Turnover Intentions**

In our exploration of the reasons behind Head Start educators' turnover considerations, compensation and benefits were identified as the primary factors influencing their decision to leave their positions. The desire for higher pay and improved benefits was frequently chosen

within Head Start educators as key motivators of turnover. This finding is consistent with prior research indicating widespread dissatisfaction among educators regarding their compensation (Bullough et al., 2012b; Zhao & Jeon, 2024). Existing studies also suggest the necessity of adequate rewards for the long-term sustainability of the ECE profession (Thorpe et al., 2020).

It is well known that ECE educators receive low compensation which is often cited as a common stressor (McLean et al., 2021). However, poor salaries and compensation were not the only reasons behind turnover decisions; limited opportunities for career advancement and promotion were also identified as significant contributors to educators' intentions to leave. This aspect has often been neglected in professional development within the ECE field (Schachter et al., 2019). Research on early childhood educators indicates that those with advanced qualifications, such as higher education degrees, tended to show a greater intention to either leave their present ECE positions or seek advancement into managerial roles (Thorpe et al., 2020). This preference is driven by the enhanced salary, autonomy, and career status that management positions offer compared to non-managerial roles (Thorpe et al., 2020). Therefore, early childhood programs should provide more advancement opportunities to help retain educators by recognizing their qualifications and offering them a path for professional growth.

Furthermore, we found that the challenges associated with classroom management and inflexible working schedules were also the reasons influencing educators' decisions to potentially quit their roles. Head Start educators face more challenges and want to receive additional resources to manage children's challenging behaviors (Kwon, et al., 2022; Zhao & Jeon, 2024). Previous research indicates that some Head Start educators reported that they do not even have enough bathroom breaks and have a hard time balancing their lives and work due to the inflexible working schedule (Wang et al., Under Review). The focus of the improvement of the

ECE workforce quality has predominantly been on enhancing professionalism via training and accountability measures. However, this has not been adequately matched with social recognition and support for educators (Phillips et al., 2016; Schachter et al., 2019).

### Limitations

While this study provides insights into Head Start educators' well-being and turnover intentions, there are several limitations within this study. First, we used cross-sectional data and correlational modeling, which limited our ability to establish causality and/or directionality for the relationships among key variables. It is possible that the observed associations may exist in the reverse direction to what we proposed. For example, it could be that educators with a higher intention to leave the profession perceive less compassion satisfaction in their work. This research, therefore, lays the foundation for future investigations to examine the directional nature of these relationships.

Second, we collected teachers' self-reported data to gather information on teachers' perceptions of their well-being and workplace environment. While this approach offers insight into the educators' perspectives, which is crucial for informing prevention and intervention strategies, future research could incorporate additional data types. These could include observational data on workplace climate and administrative data on turnover rates, providing a more comprehensive understanding beneficial for ECE policymakers and administrators.

Third, while the used measures demonstrated acceptable to high internal reliability, with Cronbach's alphas range from 0.72-0.91, the majority of participants in the current study were women of color, and there is limited validity evidence in this particular population in the existing literature. Future studies could investigate the validity of these measures, especially professional

well-being and workplace discrimination, within racial/ethnic minority groups to ensure the meaningful interpretations of these measures within diverse populations.

Moreover, the generalizability of the findings of this study is limited. Our focus was specifically on educators within center-based Head Start programs, aiming to contribute to the development of the Head Start workforce. However, these findings may not fully represent the experiences of ECE educators in other contexts, such as private or family childcare settings. Future research should consider examining the associations between professional well-being and turnover intentions across a broader range of ECE environments to enhance the applicability and impact of the findings in the field.

## **Implications**

Despite the limitations, the study provides implications for researchers, policymakers, and practitioners in the ECE field. First, while there is existing research on the well-being of ECE educators, such as stress and depressive symptoms, and their associations with turnover intentions (e.g., Bryant et al., 2023; Grant et al., 2019), our study extended the literature by examining the relationships between STS, emotional exhaustion, compassion satisfaction, workplace discrimination, and various types of turnover intentions among Head Start educators. These factors (e.g., STS and compassion satisfaction), although widely investigated in other settings (e.g., the healthcare field) have received less attention in the context of Head Start programs. Due to the distinct work environment of Head Start educators who are working with children with a higher risk of experiencing traumatic events (Rankin, 2022), their compassion satisfaction can become a protective factor and motivate them to provide more support for children and families in most need (Fleckman et al., 2022). Our findings suggest the importance of these factors in the ECE field, especially in Head Start settings (Craig & Sprang, 2010; Ray et

al., 2013). Future studies can expand upon this by investigating these factors in larger and more representative samples to better understand their impact on actual turnover behaviors.

Second, the study provides actionable insights for Head Start administrators. It suggests that enhancing educators' compassion satisfaction may be key to reducing turnover intentions at both the program level and across the profession. Although research on compassion satisfaction among early childhood teachers is limited, insights can be gleaned from studies in the healthcare sector. Strategies like reflective supervision and robust managerial support have been shown to increase compassion satisfaction in healthcare professionals (Hunsaker et al., 2015). In addition, when healthcare workers feel more equipped to deal with the challenges at work, they are more likely to have higher levels of compassion satisfaction (Craig & Sprang, 2010). Similarly, providing Head Start educators with adequate support and guidance in managing challenges such as children's difficult behaviors, classroom management, and emergency situations could be potentially related to their increased compassion satisfaction. Furthermore, Craig and Sprang (2010) suggest that meaningful recognition of efforts is crucial for increasing compassion satisfaction. This is particularly crucial in the ECE, where educators often experience low societal recognition evidenced by low salaries and lack of social recognition, for their work (Sparks, 2019). Therefore, systematic changes are needed regarding increasing compensation and demonstrating societal values for Head Start educators' work in order to increase their compassion satisfaction and, ultimately, reduce their intent to leave.

Third, our study suggests the importance of reducing emotional exhaustion among Head Start educators to sustain their engagement in their roles. For example, mindfulness-based interventions have been found to be effective in reducing overall stress and emotional exhaustion in ECE teachers, particularly for those working with children experiencing trauma and adversity

(Agyapong et al., 2023; Jennings, 2015; Klingbeil & Renshaw, 2018; Taylor et al., 2021). Thus, Head Start programs may consider incorporating mindfulness training in their professional development and routines (e.g., breathing activities). Emotional exhaustion is often related to overwhelming workloads and is frequently viewed as an occupational hazard in the teaching profession (Al-Adwan & Al-Khayat, 2017; Jeon et al., 2021). Encouragingly, research indicates that increased social support, especially supportive colleague relationships, is associated with reduced emotional exhaustion levels in Head Start educators (Agyapong et al., 2023; Song et al., 2020). Furthermore, reducing educator emotional exhaustion also involves empowerment and support from leadership. These can include strategies such as providing more autonomy, offering well-being resources, and enhancing teachers' involvement in decision-making processes (Sandilos et al., 2023). These measures not only address immediate stressors but also contribute to a more supportive and fulfilling work environment, which can benefit both educators and the children in their classroom.

Fourth, this study demonstrates the associations between workplace discrimination and turnover intentions of Head Start educators. Particularly for those working with children and families from disadvantaged backgrounds, perceptions of prejudice and discrimination within their work environment can have direct consequences on the engagement and development of the children they teach (Butler-Barnes et al., 2022). It is critical for policymakers and program leaders to identify and address the root causes of workplace discrimination at both systematic and institutional levels. Systematically, ensuring equitable compensation for Head Start educators in line with their counterparts in other ECE settings is a crucial step (McLean et al., 2021). In addition, a critical review and revision of hiring practices are necessary to promote equity and reduce discrimination, including measures to increase staff diversity and achieve

racial/ethnic congruence between teachers and students (Dhanani et al., 2018; Gonzalez & DeNisi, 2009). At the program level, the recruitment of experts and leaders committed to equity and diversity is essential for establishing a long-term strategy to minimize discrimination within these programs (Joseph, 2021).

Fifth, in terms of the specific reasons behind educators' turnover, our study demonstrated that inadequate salary and benefits are the primary factors driving Head Start educators to consider leaving their jobs, aligning with findings from previous research in the field of ECE (Schaack et al., 2022). However, these are not the only concerns. There was also a clear need for more comprehensive support and training in career advancement, including opportunities for promotion. Current professional development programs tend to focus on enhancing teaching skills for children's learning and development, rather than addressing the career aspirations of the educators themselves (Schachter et al., 2019). Therefore, it is crucial for Head Start program leaders to provide resources and support for educators' career development, actively involving them in decision-making processes, and preparing them for potential leadership roles (Kirby et al., 2021). Additionally, stress related to classroom management and a desire for different roles within the educational sector were also reasons for turnover intentions. Some educators expressed interest in transitioning to roles like home visiting in early childhood programs or teaching in K-12 settings. These may be due to the challenges faced by Head Start educators, including the need for additional support and resources to manage children's challenging behaviors (Kwon, Jeon, et al., 2022; Zhao & Jeon, 2024). To reduce actual turnover, it is critical for policymakers and Head Start administrators to understand these underlying reasons and provide additional resources that address these stressors and challenges, thereby retaining highquality educators in these crucial roles.

### **Conclusion**

Head Start workforce is the foundation of high-quality education for young children who experience poverty and more adversities than their peers (Jeon & Wells, 2018). Therefore, it is important to support the Head Start workforce and improve their professional attitudes in order to help children in need. The current study suggests that supporting these educators through fostering compassion satisfaction, reducing emotional exhaustion, and cultivating an environment that prioritizes equity can contribute to retaining a high-quality Head Start workforce. In addition, addressing financial burdens and providing career advancement opportunities are essential to address the ongoing teacher shortage crisis and ensure Head Start program sustainability.

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**Table 1**Participants Characteristics

Variable	N	Mean/%	SD	Range
Age	237	40.67	12.54	19-73
Female	278	96.19%	-	0-1
Race/ethnicity				
White, non-Hispanic	52	18.12%	-	0-1
Black, non-Hispanic	161	56.10%	-	0-1
Hispanic	61	21.25%	-	0-1
Others	13	4.53%	-	0-1
Married or Cohabitating	104	36.49%	-	0-1
Educational attainment				
Less than high school, no GED	2	0.66%	-	0-1
High school diploma or GED	113	37.17%	-	0-1
Associate's degree	64	21.05%	-	0-1
Bachelor's degree	92	30.26%	-	0-1
Master's degree or above	33	10.85%	-	0-1
Educator role				
Lead teacher	108	35.64%	-	0-1
Assistant teacher	93	30.69%	-	0-1
Administrative roles	59	19.47%	-	0-1
Other ECE educator roles <sup>a</sup>	43	14.14%	-	0-1
Annual salary				
\$10,000 or less	11	3.89%	-	0-1
\$10,001 to \$20,000	19	6.71%	-	0-1
\$20,001 to \$30,000	69	24.38%	-	0-1
\$30,001 to \$40,000	72	25.44%	-	0-1
\$40,001 to \$50,000	42	14.84%	-	0-1
\$50,001 to \$60,000	24	8.48%	-	0-1
\$60,001 to \$70,000	16	5.65%	_	0-1
\$70,001 or more	7	2.47%	_	0-1
Years of experience in ECE	299	11.06	9.47	0-44
Years of experience in current Head Start	285	5.34	6.31	0-37
Note N = 204 GED = Graduata Equivalency				

*Note. N* = 304. GED= Graduate Equivalency Degree, ECE= Early Care and Education.

<sup>&</sup>lt;sup>a</sup>Other ECE educator roles included substitute teacher, teacher aid, family resource worker, home visitor office assistant, etc.

**Table 2**Descriptive Statistics and Bivariate Correlations

	1	2	3	4	5	6	7
1. Intention to leave the profession	-						
2. Intention to leave the program	.54***	-					
3. Intention to leave the position	.30***	.38***	-				
4. Secondary traumatic stress	.14*	.20***	.14*	-			
5. Emotional exhaustion	.23***	.35***	.34***	.50***	-		
6. Compassion satisfaction	35***	32***	19**	35***	37***	-	
7. Perceived workplace discrimination	.22***	.33***	.16**	.33***	.27***	35***	-
Λ	I 276	273	285	304	283	274	285
Mear	ı 1.71	1.82	2.68	7.43	2.12	4.23	2.01
Standard Deviation	ı 1.09	1.07	1.18	7.18	1.38	.70	0.76
Range	e 1-5	1-5	1-4	0-36	0-5.3	1-5	1-5

<sup>\*</sup> *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

 Table 3

 Multilevel Multiple Regression Examining the Main Effects with Imputed Data

	Intention to Leave the Profession		Intention to Leave the Program		Intention to Leave the Position	
Main effects model fixed effects	В	SE	В	SE	В	SE
Secondary traumatic stress	01	.01	02	.01	01	.01
Emotional exhaustion	.08	.05	.18***	.05	.28***	.06
Compassion satisfaction	47***	.10	33**	.10	07	.11
Workplace discrimination	.17*	.09	.30***	.09	.09	.10
Covariates						
Race/Ethnicity						
Black, non-Hispanic	19	.17	30	.17	.35	.19
Hispanic	.10	.20	00	.20	.22	.23
Other races	21	.31	35	.31	.02	.38
Salary	.02	.03	.01	.03	06	.04
Years of working experience	03	.01	.01	.01	.00	.01
Education attainment	03	.16	00	.15	.10	.17
Title						
Assistant teacher	14	.15	10	.15	36	.17
Administrative roles	.59***	.18	02	.18	.14	.20
Other ECE educator roles	.39*	.19	.16	.18	24	.19
Random effects						
Center (Level 2, $\tau_{\pi}$ )	.00 (.00)		.17 (.11)		.01 (.04)	
Teacher (Level 1, $\sigma^2$ )	.96 (.04)		.92 (.04)		1.08 (.05)	
Explained variance						
Level 2	0.00%		1.60%		0.03%	
Level 1	22.20%		22.70%		15.85%	

*Note*. B = unstandardized coefficients; SE = standard errors; explained % is a comparison to the baseline model.

<sup>\*</sup> *p* < .05; \*\* *p* < .01.; \*\*\* *p* < .001

**Table 5** *Reasons for Educators' Turnover Intentions* 

Turnover Intentions Reasons			
I want a higher paying job.	45		
I want better benefits.	24		
I am looking for a different job opportunity outside of early care and education.	21		
There are no career advancement opportunities for me in my current program.	21		
I would like to teach in a school-based program, including K-12.	16		
I would like to transition to a different position in the early childhood field (e.g.,			
home visiting, early intervention, etc.)	15		
I want a job that has more flexibility (e.g., working different or fewer hours).	13		
I plan to receive a promotion in my current program.	12		
Retirement	9		
I plan to move.	8		
I would like to teach in a different early childhood program.	8		
Classroom management is stressful.	7		

*Note.* The question was only presented to participants who indicated that they would leave their present position within their program in two years or less (n = 94). This table presents only the frequent answers from participants (n > 2).

A Person-centered Analysis of Head Start Educators' Well-being and Attitudes:

Associations with Health-related Lifestyles and Demographics

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#### Abstract

Early childhood educators' well-being and attitudes play a critical role in their professional practices and interactions with children. Using a sample of 304 Head Start educators, the current study employed a person-centered approach to explore the diverse patterns of Head Start educators' professional well-being (i.e., secondary traumatic stress, emotional exhaustion, and compassion satisfaction), psychological well-being (i.e., depressive symptoms, perceived personal stress, and anxiety), and job attitudes (intentions to leave the profession, program, and position). A latent profile analysis identified a four-profile solution: 1) low turnover intentions, low professional distress, low psychological distress; 2) low turnover intentions, medium professional distress, high psychological distress; 3) high turnover intentions, medium professional distress, medium psychological distress; 4) high turnover intentions, high professional distress, high psychological distress. A multinominal logistic regression revealed that educators' healthy-related lifestyles (i.e., regular eating practices and sleep quality), as well as their demographic and background (i.e., age and financial situations), were associated with their profile memberships of well-being and attitudes. The findings provide implications for tailored support and professional development programs that target different subgroups of Head Start educators based on their well-being states and job attitudes. This study also suggests that health-related behaviors and demographic characteristics should be considered when developing training for the Head Start workforce in order to promote their well-being and job attitudes.

*Keywords*: Early childhood education, Head Start, well-being, job attitudes, health-related behaviors

#### Introduction

Early childhood educators are the foundation of the early care and education (ECE) field, playing a crucial role in young children's social, emotional, and cognitive development (Jeon et al., 2019; Kwon et al., 2019). These educators commit to creating nurturing environments that foster the growth of children (McDonald et al., 2018). Despite their critical contributions, ECE educators encounter challenges with their well-being and professional sustainability. Among these challenges are inadequate compensation (McLean et al., 2021), demanding work conditions that are both physically and psychologically taxing (Grant et al., 2019; Jeon & Ardeleanu, 2020; Kwon et al., 2019), and a lack of social recognition and professional esteem (Ng et al., 2023). These obstacles, particularly pronounced in the absence of adequate support and resources, are linked to reduced well-being and increased turnover intentions (McDonald et al., 2018; Rojas & Abenavoli, 2023; Zhao & Jeon, 2024), which, in turn, are related to the compromised quality of classroom management and the level of social and emotional support provided to children (Jeon et al., 2016).

Among ECE educators, those working in Head Start programs may experience unique challenges related to their psychological and professional well-being. For instance, the administrative burdens of Head Start programs, such as extensive paperwork and supporting children with special needs, may be related to educators' reduced psychological well-being (Kwon et al., 2022). The psychological distress, including depressive symptoms, stress, and anxiety, is prevalent among these educators (Hindman & Bustamante, 2019; Kwon et al., 2022; Wilson et al., 2023). Additionally, these heavy workloads are related to poor professional well-being, including higher levels of emotional exhaustion (Jeon et al., 2024; Wells, 2015). Head Start educators are also more susceptible to secondary traumatic stress (STS) compared to other

early childhood educators, because they are likely to work with the population of children and families who have been historically marginalized and more frequently exposed to traumatic experiences (Ormiston et al., 2022). Despite these challenges, many educators find satisfaction in helping children and families, a sense of fulfillment known as compassion satisfaction (Stamm, 2009), which motivates them to stay at their jobs (McDonald et al., 2018). Both the negative and positive factors reflect the complexities of Head Start educators' well-being, which are also intertwined with and bidirectionally related to their reactions towards professional attitudes, especially turnover intentions (Schaack et al., 2020; Wells, 2015). These factors are further related to educators' ability to build positive relationships and interactions with children (Kwon et al., 2022; McDonald et al., 2018). Therefore, to increase the quality of Head Start, it is crucial to comprehensively understand these factors reflecting educators' well-being and attitudes.

While existing research provides valuable insights into these factors related to well-being and attitudes and their potential associations, it primarily relies on variable-centered approaches (Grant et al., 2019b; Jeon & Wells, 2018; Zhao & Jeon, 2024). These approaches assume homogeneity among educators' experiences and reactions to workplace stressors, potentially overlooking the diversity within the workforce and the existence of distinct subgroups with varying well-being statuses and job attitudes. For instance, high job demands and lack of support can lead to educators experiencing low compassion satisfaction and high emotional exhaustion (low professional well-being), ultimately experiencing anxiety (low psychological well-being), and a desire to leave (high turnover intentions; Ryan & Deci, 2000). However, relationships may not always be this straightforward. For example, educators can experience high levels of professional well-being due to a supportive work environment, yet still face personal stressors leading to anxiety and depressive symptoms (low psychological well-being). Despite these

personal stressors, their work satisfaction could keep them from leaving their jobs (low turnover intentions).

Given these potentially diverse patterns of educators' experiences, it is critical to use a personal-centered approach to examine these variations in each educator and sort groups of educators who share similar professional and psychological well-being and turnover intentions. Therefore, the current study will use a person-centered approach, latent profile analysis (LPA), to investigate the profiles of educators' well-being and attitudes. In particular, this study will explore the psychological and professional well-being factors, including depressive symptoms, perceived personal stress, anxiety, STS, emotional exhaustion, and compassion satisfaction, along with their turnover intentions (i.e., intentions to leave the profession, program, and position) within Head Start educators. By examining variations in each educator and sorting groups of educators who share similar well-being and attitudes, we can gain a better understanding of educators' work experiences and professional decisions, which can further inform the development of individualized professional development and resources to maintain a high-quality ECE workforce.

Furthermore, it is critical to understand the factors that are related to educators' profile memberships of well-being and attitudes. One of the factors may be educators' *healthy lifestyles*. Early Childhood Professional Well-being framework suggests that individual characteristics and experiences, including self-care practices and health behaviors, interact with workplace factors to shape ECE educators' well-being (Gallagher & Roberts, 2022). Research suggests that ECE educators often face suboptimal physical health, including sleep deprivation, higher obesity rates, and frequent musculoskeletal pain (Randall et al., 2021; Roberts et al., 2019). These health

concerns potentially challenge educators' professional lives and job commitments (Randall et al., 2021).

Another factor that may relate to educators' profiles could be their *demographic* characteristics, such as their educational attainment, job title, race/ethnicity, age, and salary (Roberts et al., 2023). For instance, assistant teachers, who are often women of color, might face more challenges due to lower salaries and power compared to lead teachers (Roberts et al., 2023). This could be potentially associated with lower well-being and higher turnover intentions. Conversely, educators in leadership roles often have more salary and decision-making power, but they may also experience increased workload and job-related stress (Douglass et al., 2022). Therefore, given the important role of health-related behaviors in educators' professional life (Randall et al., 2021) and their professional experiences may vary by their demographics, this study aims to investigate the relationships between Head Start educators' healthy lifestyles (e.g., sleep, eating, and self-care), their demographic characteristics, and their profiles of well-being and attitudes. These understandings can inform the targeted interventions and support mechanisms for a healthier and more effective Head Start workforce.

#### Literature Review

## **Well-being and Attitudes Profile Indicators**

Professional Well-being: STS, Emotional Exhaustion, and Compassion Satisfaction

Professional well-being is defined as an individual's perception of the levels of possessing the qualities needed for professional tasks (Yildirim, 2015). It reflects not only individuals' confidence to accept challenges in professional development but also their willingness to commit and continue to improve (Retallick & Butt, 2004). It is well-documented that ECE educators' professional well-being is associated with their job commitment (Jeon &

Wells, 2018), educational practices (Cassidy et al., 2017), and outcomes for children (Roberts et al., 2016). This study focuses on three critical indicators of professional well-being in ECE, particularly relevant to Head Start educators: STS, emotional exhaustion, and compassion satisfaction. These well-being indicators provide a comprehensive view by capturing both the challenges and rewards in the profession, which is crucial for understanding individuals working in helping professions, particularly in settings like Head Start (Stamm, 2009).

Secondary Traumatic Stress. STS refers to the emotional and behavioral consequences of exposure to the trauma of others (Bride, 2007). STS is often an occupational hazard to individuals working with communities facing significant adversity (Ormiston et al., 2022; Rzeszutek et al., 2015). ECE educators, especially those working in Head Start programs, might be vulnerable to STS, given their work with children living in poverty and having a high risk of exposure to abuse, violence, or other traumatic experiences (Denham, 2018; Rankin, 2021). Studies on child welfare professionals indicate that STS is related to feelings of helplessness, fear, or shock after encountering children's traumatic experiences (Steinlin et al., 2017). Unfortunately, educators often report feeling unprepared and unsupported in addressing children's trauma histories (Abraham-Cook, 2012; Brown, 2016; Ormiston et al., 2022), which is potentially related to educators' reduced ability to foster quality interactions with children. STS among Head Start educators has not received the same attention as teachers in traditional school settings and social workers in other helping professions (Bride, 2007; Denham, 2018; Rankin, 2021). Given the high risk of STS among Head Start educators and their crucial role in providing social and emotional support to young children in need (Denham, 2018), it is important to understand STS in these educators' professional lives.

Emotional Exhaustion. Emotional exhaustion is derived from chronic work-related stress that stems from a demanding job (Maslach & Jackson, 1981) and is another significant concern within the ECE workforce. Studies report that over half of childcare workers experience burnout (Koch et al., 2015), which is a syndrome of emotional exhaustion and cynicism (Maslach & Jackson, 1981). Head Start educators face numerous stressors beyond those of traditional ECE settings, including the system-level administrative burdens (e.g., extensive paperwork and changing educational mandates) and their responsibilities of supporting children with special needs amidst limited resources (Kwon et al., 2022). These factors are potentially related to an increased risk of emotional exhaustion among these educators (Skaalvik & Skaalvik, 2011). Similar to STS, emotional exhaustion is found to be related to educators' job commitment (Schaack et al., 2020), interactions with children (Ansari et al., 2022), and consequently, children's social-emotional and academic outcomes (Curby et al., 2009).

Therefore, it is important to understand Head Start educators' experiences with emotional exhaustion in order to improve the quality of the learning environment for young children.

Compassion Satisfaction. In contrast to the challenges presented by STS and emotional exhaustion, compassion satisfaction is a potential protective factor for Head Start educators' well-being (Abraham-Cook, 2012; Brown, 2016). This positive emotional state derives from the act of helping others in need (Stamm, 2009) and is related to several positive outcomes for educators, including increased professional commitment and resilience (Burnett, 2015; Fleckman et al., 2022). Educators experiencing compassion satisfaction demonstrate a stronger commitment to their professions (Fleckman et al., 2022), ultimately benefiting the children they work with (Grant et al., 2019b). Additionally, research suggests the connections between compassion satisfaction and resilience (Burnett, 2015). Resilient educators are better equipped

with strategies to navigate the challenges in their work, allowing them to learn and grow from difficult experiences (Taylor, 2015). This, in turn, would foster a more stable and adaptable learning environment for children (Abu Hasan et al., 2022). Importantly, despite the challenges of working with young children, many ECE educators find their jobs deeply rewarding (Jacoby & Corwin-Renner, 2022; McDonald et al., 2018). Driven by a strong service ethos and a desire to support children and families in need (Bullough et al., 2012), compassion satisfaction likely plays a crucial role in fostering work engagement and positive attitudes among Head Start educators. Therefore, it is important to understand compassion satisfaction to cultivate this positive aspect of professional well-being among Head Start educators.

Stamm (2012) proposes that individuals working in helping professions can experience a complex interplay of positive and negative feelings. Specifically, the study identified a pattern among clinicians in high-pressure settings, where individuals score high on both compassion satisfaction and STS, yet low on emotional exhaustion (Stamm, 2012). This may reflect that they find their work meaningful, even though they experience stress due to their engagement in working with patients who experience trauma, which could be a protective factor for experiencing emotional exhaustion (Stamm, 2012). Similarly, Head Start educators may experience a combination of fulfillment from supporting vulnerable children and stress due to the increased likelihood of these children experiencing trauma (Denham, 2018). Therefore, this study aims to simultaneously examine these three professional well-being factors (i.e., compassion satisfaction, emotional exhaustion, and STS) to better understand Head Start educators' professional experiences.

Psychological Well-being: Depressive Symptoms, Perceived Personal Stress, and Anxiety

According to Goldberg et al. (1997), individuals' psychological well-being is their own evaluations of their experiences across various dimensions, including emotional distress (e.g., depression, anxiety) and social and coping skills. Along with professional well-being, educators' psychological well-being status is also critical to their experiences and performance, especially under circumstances where many Head Start educators are undergoing poor psychological well-being (Wilson et al., 2023). The current study mainly focuses on three critical indicators of educators' psychological well-being: depressive symptoms, perceived personal stress, and anxiety.

Depressive Symptoms. Depressive symptoms can be characterized by feelings of depressed mood, poor concentration, guilt, fatigue, loss of interest, insomnia, and weight loss (American Psychiatric Association, 2013; Rush et al., 2003). Studies found that depression can be related to impairment that can reduce an individual's psychological functioning (Fried & Nesse, 2014). These symptoms can arise when individuals are exposed to adverse situations (Keller & Nesse, 2006). This applies to Head Start teachers, who often experience a lack of resources, heavy workloads, and poor compensation and benefits (Zhao & Jeon, 2024). In a study among Head Start teachers, researchers found that one in three Head Start teachers experience some levels of depression (Hindman & Bustamante, 2019). Similarly, another study among Pennsylvania Head Start teachers showed that 25% of them reported clinically significant levels of depression (Whitaker et al., 2015). Head Start educators' depressive symptoms were found to be linked to their practices and children's outcomes, such as the levels of emotional and behavioral support in the classroom (Kwon et al. 2019) and children's prosocial and behavioral developments (Hindman & Bustamante, 2019).

Perceived Personal Stress. Being an ECE educator has been recognized as one of the most stressful professions (Cumming, 2017). While the majority of the previous studies focused on job-related stress (Friedman-Krauss, Raver, Neuspiel, et al., 2014; Whitaker et al., 2015; Wilson et al., 2023), it is also critical to examine educators' personal stress to understand a more comprehensive picture of teachers' well-being. Jeon and colleagues (2019) found that teachers' personal stress is associated with their evaluation of children's social, emotional, and behavioral functioning. In particular, when teachers perceive higher levels of personal stress, they report children demonstrating more anger and aggression behaviors (Jeon et al., 2019). Another study among Head Start teachers demonstrates that when teachers face increased personal stress, the behavioral management and social interaction in their classrooms are rated lower (Li Grining et al., 2010). Given the critical role of educators' personal stress in their professional lives, the current study includes teachers' perceived personal stress as a critical component of their overall psychological well-being.

Anxiety. Anxiety is a state of uneasiness, nervousness, and fear associated with preparation for possible negative events in the future (Craske et al., 2011). Similar to teachers' depressive symptoms, the unsupportive workplace climate and lack of resources are related to teachers' anxiety (Buskila et al., 2020; Cox, 2009). A study among ECE teachers suggests that high work intensity and paperwork, as well as classroom management, are linked to teachers' increased anxiety (Buskila et al., 2020). Similarly, the study by Cox (2009) demonstrates that high levels of emotional labor and demands are related to increased anxiety among the ECE workforce. Specifically, the year-long anxiety symptoms among early childhood teachers are positively related to decreased job satisfaction and emotional exhaustion (Cox, 2009; Peele & Wolf, 2021). Although there is a lack of studies directly examining Head Start educators' anxiety

(Wilson et al., 2023), anxiety likely has a relationship with these educators' performance and children's experiences, as research shows that children who spend more time with emotionally distressed teachers have worse performance compared to their peers (Siekkinen et al., 2013).

## Professional Attitudes: Turnover Intentions

High turnover intentions, with approximately a third of ECE educators considering leaving their jobs annually, pose a significant challenge to the field (Bassok et al., 2016; Jeon & Wells, 2018). Frequent turnover relates to both educators' educational practices (Cassidy et al., 2011) and the quality of care they provide to young children (Horm et al., 2018; Wells, 2017). Studies suggest a connection between educators' reduced well-being, including stress, emotional exhaustion, and coping mechanisms, and their intentions to leave their jobs (Grant et al., 2019b). These adversities are associated with negative teacher-child interactions, which, in turn, are related to the learning and emotional development of children (Jeon & Ardeleanu, 2020).

Educators' turnover intentions are related to not only the children's development but also the ECE programs and educational equity. Programs lose valuable experience and expertise, requiring remaining staff to overburden themselves with additional responsibilities, complicating the recruitment and integration of new staff (Kwon et al., 2020). Such disruption can have negative associations with the program's supportive work environment (Cassidy et al., 2017; McDonald et al., 2018), teacher-child relationships (Cassidy et al., 2011), and ultimately, the overall quality of care and education (Horm et al., 2018). Moreover, previous research shows an association between limited resources and higher turnover intentions among educators working with student populations from marginalized communities (Abraham-Cook, 2012; Christian-Brandt et al., 2020; Hadush & Katheriyar, 2023). This could create a vicious cycle where already

under-resourced programs experience higher staff turnover, contributing to broader educational inequalities.

A number of studies have investigated turnover intentions among ECE educators, identifying different types of intentions to leave (Grant et al., 2019b; McMullen et al., 2020; Zhao et al., Under Review). Grant et al. (2019b) distinguished between educators' intentions to 1) remain in the ECE field but seek a different setting, 2) leave the field entirely and pursue a different career, and 3) stay in the current program. They found that emotional exhaustion was significantly related to the increased likelihood of leaving the field entirely, compared to simply changing settings within ECE (Grant et al., 2019b). Similarly, Zhao et al. (Under Review) examined Head Start educators' intentions to leave 1) the entire ECE field, 2) their current program, and 3) their current position. Their findings revealed distinct associations between specific well-being indicators (i.e., STS, emotional exhaustion, and compassion satisfaction) and each type of turnover intention (Zhao et al., Under Review). These distinctions suggest that individual experiences and motivations play a critical role in educators' turnover intentions (Bassok et al., 2021). The varied intentions for leaving indicate the complexity of addressing turnover intentions. Educators who consider leaving the ECE field might be driven by factors such as inadequate compensation across the ECE field, while those seeking changes of programs within the field may be searching for more supportive work environments or advancement opportunities (Bassok et al., 2021; Grant et al., 2019b; Zhao et al., Under Review). Understanding these distinct types of turnover intentions is critical to developing tailored interventions and support systems for the ECE workforce.

Interactional Relations Between Well-being and Attitudes: A Need for Person-Centered Approach

## P3: PROFILE OF WELL-BEING AND ATTITUDES

Most previous research studies apply variable-centered approaches to examine the associations between diverse well-being indicators and professional attitudes among ECE educators (Bassok et al., 2021; Grant et al., 2019b; Schaack et al., 2020). These studies have identified important relationships, such as the negative association between compassion satisfaction and turnover intentions, the positive connection between emotional exhaustion and intentions to leave (Bassok et al., 2021; Grant et al., 2019b; Schaack et al., 2020), and the relationships between teachers' depressive symptoms, anxiety, and their emotional exhaustion (Peele & Wolf, 2021). However, variable-centered approaches have limitations when capturing the complexity and uniqueness of these factors within each individual. For instance, educators with high emotional exhaustion typically experience low compassion satisfaction (low professional well-being; Conrad & Kellar-Guenther, 2006), high anxiety and depressive symptoms (low psychological well-being; Peele & Wolf, 2021), and are more likely to consider leaving the ECE field (high turnover intentions; Schaack et al., 2020). However, these relationships can be complex. For instance, educators with high compassion satisfaction (high professional well-being) might be motivated to stay in their jobs and help children and families in need (low turnover intentions; Berger & Nott, 2024; Conrad & Kellar-Guenther, 2006), even when they experience stress and anxiety (negative psychological well-being). In other scenarios, educators might report low anxiety and depressive symptoms (positive psychological well-being) but experience high job demands and burnout at work (low professional well-being). While these challenges might be difficult, the fulfillment they derive from helping children and families in need could motivate them to stay (low turnover intentions; McDonald et al., 2018). Using variable-centered approaches to analyzing these factors in a linear fashion makes it difficult to account for the interplay of multiple factors within each educator's unique experience.

In contrast, a person-centered approach, such as LPA, provides a more nuanced exploration of these dynamics. By grouping individuals according to similar patterns of well-being and attitude indicators, LPA can provide a deeper understanding of how these factors interact within educators' professional lives (Spurk et al., 2020). It reflects the diversity within the ECE workforce and can identify specific profiles of well-being and attitudes that characterize different educator subgroups. These insights can inform the development of more targeted support strategies and address the unique needs of educators in each profile.

## Healthy Lifestyles and Profiles of Well-being and Attitudes

In addition to identifying the latent profiles of Head Start educators, this study will examine how healthy lifestyles are associated with the probability of membership in those profiles. This is crucial because the demanding nature of ECE work environments often creates barriers to healthy living (Randall et al., 2021). Educators struggle with maintaining healthy eating habits, getting enough sleep, and prioritizing self-care (Guerrero & Herman, 2023; Otten et al., 2019; Randall et al., 2021). Research has shown prevalent health concerns among these educators. In particular, there are high rates of overweight and obesity among ECE teachers, with 75% of them falling outside the normal BMI range (Randall et al., 2021). Head Start staff specifically experience disproportionately higher rates of obesity, diabetes, hypertension, and missed workdays due to health concerns compared to national averages (Whitaker, 2013). These health concerns are potentially related to the lack of consistent access to healthy living resources (Guerrero & Herman, 2023; Otten et al., 2019). For instance, Guerrero and Herman (2023) found that less than 8% of Early Head Start and Head Start staff reported regularly consuming healthy foods like fruits, vegetables, and whole grains. These high risks of poor nutrition are likely related to the low-wage nature of the profession and the high job demands and stressful work

environment (Guerrero & Herman, 2023; Paschall et al., 2021). Sleep deprivation is also common among ECE educators, with studies reporting educators averaging 4.4 and 6.5 hours of sleep per night (Jeon et al., 2020; Toussaint et al., 2021), which is far below the recommended 7 to 8 hours of sleep for adults (National Center for Chronic Disease Prevention and Health Promotion, 2024). These experiences of physical unwellness are related to educators' reduced ability to engage with children in learning activities and compromise the quality of interactions (Whitaker, 2013). Overall, existing studies demonstrate the concerning health status among Head Start educators and the need to investigate their healthy lifestyles. Educators' health-related lifestyles are potentially related to educators' professional well-being and attitudes. The Early Childhood Professional Well-being framework emphasizes the role of personal experiences and health-related behaviors in shaping educator professional well-being and attitudes (Gallagher & Roberts, 2022). This framework suggests a connection between physical health, healthpromoting behaviors, and educators' professional well-being and turnover intentions. Empirical studies also support these connections. For instance, Steinlin et al.'s (2017) study found that when childcare workers experience symptoms of digestive and sleep problems, they report signs of STS and burnout. Similarly, ECE educators with health problems report a higher degree of burnout, often accompanied by reduced quality of life and feelings of personal accomplishment (Koulierakis et al., 2019; Ng et al., 2023). These demonstrate that when ECE educators lack resources and support to maintain healthy lifestyles, they are likely to experience physical unwellness, stress, and emotional exhaustion at work. By contrast, when educators practice frequent self-care strategies, such as taking a break during work and finding time to eat and drink or use the bathroom, they demonstrate fewer symptoms of STS and burnout (Alkema et al., 2008; Steinlin et al., 2017) and higher levels of compassion satisfaction (Alkema et al., 2008).

Overall, existing studies suggest the importance of healthy lifestyles in educators' professional lives and the potential associations between health-related lifestyles and educators' well-being and attitudes (Alkema et al., 2008; Guerrero & Herman, 2023; Randall et al., 2021; Steinlin et al., 2017). However, there is limited understanding of how these health-related behaviors may differ in distinct subgroups of educators based on their well-being and attitudes. Therefore, the current study aims to analyze these associations, which can potentially identify specific health-related challenges and opportunities within each Head Start subgroup based on their needs. Additionally, it will help develop targeted interventions that support both educators' personal health and professional experiences.

## **Demographic Characteristics and Profiles of Well-being and Attitudes**

Educators' well-being profiles may also vary by their demographic characteristics, such as their educational attainment, job title, race/ethnicity, age, financial hardship, and food insecurity (Roberts et al., 2023). For instance, assistant teachers, who are often women of color (Roberts et al., 2023), may have opportunities to develop strong relationships with children in their classrooms. However, they might also face challenges due to lower salaries and power compared to lead teachers (Roberts et al., 2023). Furthermore, the economic hardships faced by these educators can have consequences for their food insecurity (Herman et al., 2024). These situations could be potentially associated with lower professional well-being and higher turnover intentions (Vesely et al., 2024). Conversely, educators in leadership roles often have more salary and decision-making power, but they may also experience increased workload and job-related stress (Douglass et al., 2022). While this role might lead to high professional well-being and lower intention to leave, it could also contribute to higher psychological distress if these educators struggle to manage work-life balance (Sorensen & McKim, 2014). Given the potential

different patterns of educators' experiences, this study aims to explore how these job-related demographic differences relate to the profile of educators' well-being and turnover intentions.

Understanding these connections can inform strategies to create a more equitable and supportive workplace that addresses the unique needs of Head Start educators across different demographic backgrounds.

# The Present Study

Building on the insights from existing research that primarily uses variable-centered approaches to examine the relationships between professional and psychological well-being and attitudes among educators (e.g., Bassok et al., 2021; Grant et al., 2019b; Jeon & Wells, 2018; Schaack et al., 2020), the present study proposes to provide a complementary perspective by applying a person-centered approach. It aims to identify the distinctive subgroups of Head Start educators based on their professional and psychological well-being status and job attitudes. Additionally, given the importance of health-related behaviors and demographics in Head Start educators' professional experiences, this study also aims to examine how educators' demographic characteristics and healthy lifestyle factors vary across the identified educator profiles. In particular, the study aims to answer the following research questions:

- What are the latent profiles of Head Start educators based on their professional well-being (i.e., STS, emotional exhaustion, compassion satisfaction), psychological well-being (depressive symptoms, perceived personal stress, and anxiety) and job attitudes (i.e., turnover intentions towards the profession, program, and position)?
- 2) What are the associations between health-related lifestyles (i.e., regular breakfast and lunch, high-protein breakfast and lunch, quality sleep, and self-care practices) and the latent profiles of professional and psychological well-being and attitudes within Head Start educators?

3) What are the associations between demographic characteristics (i.e., race/ethnicity, job title, age, educational attainment, access to food, financial hardship, and annual salary) and the latent profiles of professional and psychological well-being and attitudes within Head Start educators?

#### Methods

# **Participants and Procedures**

This study involved a survey of 304 educators across 54 Head Start sites located in a Mid-Atlantic state in the United States. These educators were recruited as part of a professional development (PD) training, specifically designed for enhancing the holistic well-being of Head Start educators. Head Start grantees and leaders interested in participating were contacted by the research team. After the programs were assigned to either a treatment group or a control group, the research team received a roster of all staff members in each program, including lead teachers, assistant teachers, and administrators. Then, the research team sent a pre-test survey link along with the informed consent form to each individual. The survey asked about participants' well-being and their perceptions of their work environments. This study only used the pre-test data that were collected before the first training session.

Table 1 presents the demographic characteristics of participants. Among those who completed the pre-test survey, 36% were lead teachers, 31% were assistant teachers, and 19% were in various administrative roles. Around 96% of survey respondents were female. The ethnic composition of the participants was primarily Black/African American, non-Hispanic (56%), followed by Hispanic (21%), and White, non-Hispanic (18%). The average age of participants was approximately 41 years, with an average of 11 years of experience in ECE. Regarding the educational attainment among the participants, 62% of them held an associate degree or higher,

and 42% had a bachelor's degree or above. In terms of salary, the majority (65%) reported annual earnings ranging from \$20,000 to \$50,000.

#### Measures

### **Turnover Intentions**

This study assessed three types of turnover intentions among Head Start educators: leaving the ECE profession, leaving their current program, and leaving their current position. To measure their intention to leave the ECE profession, participants rated their agreement with the statement "Within the next 12 months, I intend to continue as an early childhood educator" on a five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). We reversely coded this item, and higher scores indicated a stronger intention to leave the profession. The intention to leave the current program was measured by the statement, "Within the next 12 months, I plan to remain at my current program," using the same five-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). We reversely coded this item, and higher scores suggested a higher likelihood of leaving the program. To assess intentions to leave their current position, participants answered, "How many more years do you plan to be in your present position within your program?" (1 = 2 years or less, 4 = 10 or more years). We reverse-coded this item, and higher scores indicated a stronger desire to leave their position sooner.

## Secondary Traumatic Stress

We adopted the Secondary Traumatic Stress Scale developed by Stamm (2010) to measure educators' STS. The scale consists of nine items, with a high internal reliability (Cronbach's  $\alpha = 0.91$ ) in our sample. Educators rated items reflecting their exposure to proximal traumatic experiences on a five-point Likert scale (1 = Never, 5 = Very Often). Example items include "I think I am affected by the traumatic stress of the children and families I educate and

care for" and "I avoid certain activities that remind me of the traumatic experiences of the children and families I work with." The sum of the scores was calculated to represent the educators' level of STS. A higher score indicates a higher level of STS.

### **Emotional Exhaustion**

We adopted Maslach's Burnout Inventory to measure Head Start educators' emotional exhaustion (Maslach & Jackson, 1981). Participants rated eight items to report the frequency of experiencing emotional exhaustion, using a seven-point Likert scale (1 = Never, 7 = Everyday). Example items include "I feel emotionally drained from my work." The scale demonstrated good internal reliability in the current sample (Cronbach's alpha = 0.90). The sum of the scores indicates participants' emotional exhaustion level, with higher scores representing more severe emotional exhaustion.

# Compassion Satisfaction

Educators' compassion satisfaction was measured using the Professional Quality of Life Scale (ProQOL) subscale (Stamm, 2009). This subscale, with an internal reliability of 0.90 in the current sample, consists of 10 items assessing job satisfaction and fulfillment from serving in a helping role. Ratings were on a five-point Likert scale (1 = Never, 5 = Very Often). Example items include "I get satisfaction from working with children and families" and "I feel invigorated after working with the children and families I care for." The higher average score of these items reflects higher levels of compassion satisfaction.

## **Depressive Symptoms**

Educators' depressive symptoms were measured using the short form of the Center for Epidemiologic Studies-Depression Scale (Radloff, 1977), which consisted of nine items.

Participants were asked to rate the frequency of depressive symptoms they experienced in the

past week on a four-point Likert scale (0 = Rarely or none of the time, 3 = Most or all of the time). Example items included "I felt that everything I did was an effort" and "I had trouble keeping my mind on what I was doing." The internal reliability was good, with 0.82 Cronbach's alpha in the current sample. The sum of the items was obtained to represent teachers' depressive symptoms. A higher score means a higher level of depressive symptoms.

### Perceived Personal Stress

Educators' *perceived personal stress* was assessed by the Ten-Item Perceived Stress Scale (Cohen et al., 1983). Participants were asked to report their perceived stress during the past month using a five-point Likert scale (0 = Never, 4 = Very often). Sample items included "How often have you been upset because of something that happened unexpectedly?" and "How often have you been felt that you were unable to control the important things in your life?" Internal reliability for the scale was acceptable in our sample of Head Start teachers (Cronbach's alpha = 0.79). We calculated the sum of participants' scores across all ten items to represent educators' stress. A higher score represents higher levels of stress.

# Anxiety

Teachers' *anxiety* was measured by two items that asked participants to rate their frequency of feeling anxious over the last two weeks on a four-point Likert scale (1 = *Not at all*, 4 = *Nearly everyday*; Spitzer et al., 2006). An example item includes "Not being able to stop or control worrying." The two items showed good internal consistency in our sample of teachers, with Cronbach's alpha value of 0.82. We calculated the mean score of the two items to represent each teacher's level of anxiety. A higher score represents higher levels of anxiety.

### Health-related Lifestyles

We measured educators' health-related lifestyles in different dimensions, including having regular breakfast and lunch, having high-protein breakfast and lunch, obtaining high-quality sleep, and self-care practices.

First, we asked participants about the frequency of eating breakfast and lunch over the past five workdays using two questions: "How many days in the past 5 workdays did you eat breakfast?" and "How many days in the past 5 workdays did you eat lunch?" For protein intake, participants responded to "How often do you typically eat a high-protein breakfast?" and "How often do you typically eat a high-protein lunch?" on a five-point Likert scale (1 = Rarely, 5 = Usually). Responses of "I don't know" were coded as missing.

As for sleep quality, we adopted four items from the PROMIS Sleep Disturbance scale (Cella et al., 2010) to assess sleep quality over the past seven days. Participants reported on a five-point Likert scale ( $1 = Not \ at \ all$ ,  $5 = Very \ much$ ) to items like "My sleep was refreshing." Two items were reverse-coded to ensure higher scores reflected better sleep quality. The internal consistency of the scale in this study was acceptable, with a 0.71 Cronbach's alpha.

Educators' personal self-care practices were measured by nine items in the subscale of the Self-Care Practices Scale (Lee & Jeong, 2019). Participants reported how often they engage in specific behaviors using a four-point Likert scale (0 = Never, 3 = Very often). The example items of the personal self-care subscale included "I engage in physical activities" and "I get adequate sleep for my body." The Cronbach's alpha is 0.80 in the current sample. The higher average score of the items presents more frequent self-care practices.

## Demographics and Background

The studies will examine educators' demographics and other characteristics that may be related to their well-being. Specifically, we will consider educators' gender, age, current teaching

position (binary coded "Lead teacher" as the reference category; "Assistant teacher"; "Administrative roles"; "Other roles"), race/ethnicity (binary coded "White, non-Hispanic" as the reference category; "Black, non-Hispanic"; "Hispanic", and "Other"), educational attainment (1 = Bachelor's degree or higher, 0 = Others), years of working in the current Head Start site, and years of working in the ECE field. Additionally, given that financial situations have been a significant challenge for ECE educators and may relate to their well-being, attitudes, and efforts to maintain healthy behaviors (Mefferd et al., 2024), we also included the indicators of their financial conditions. In particular, we included their salary, household income, whether they have enough food, and financial hardships ("How difficult is it for you to pay your family's bills each month?"; I = No difficulty at all; S = Great deal of difficulty.

## **Analytic Methods**

This study applied a three-step approach to identifying profiles of professional well-being and attitudes, and examining the associations between healthy lifestyles and membership in the profiles (Asparouhov & Muthén, 2014; Vermunt, 2010). This three-step method 1) established the LPA model with a set of variables, 2) employed the model assignment method to assign individuals to latent profiles based on their posterior probabilities, and 3) built a multinomial logistic regression model to analyze the relationships between the latent profile and predictor variables (Vermunt, 2010). The use of LPA in the current study is not intended to find the single true model of educators' well-being and attitudes. Instead, it aims to identify the meaningful patterns of educators' well-being and attitudes (Gearhart et al., 2024).

Following the three-step approach, I first conducted an LPA to identify the underlying groups of educators based on their well-being and turnover intentions (research question 1). The LPA was conducted using Mplus 8.0 (Muthén & Muthén, 2017). All the variables reflecting

educators' well-being and attitudes (i.e., STS, emotional exhaustion, compassion satisfaction, depressive symptoms, perceived personal stress, anxiety, intention to leave the ECE profession, intention to leave the program, and intention to leave the position) are continuous variables and will be standardized to account for differences in scales across indicators. Missing data were handled using full information maximum likelihood estimation, which accounted for all available data for analysis (Enders & Bandalos, 2001). The model-building process began by estimating a 1-class LPA model, which was a model that estimates the observed well-being and attitudes proportions in the sample. This 1-class model served as a comparative baseline for models with more than one class. Then, the number of classes increased by one (Nylund-Gibson & Choi, 2018).

The optimal number of latent profiles was determined by multiple factors, including the meaningful interpretability, various fit indices, and sample size of each profile (Zeigler-Hill & Shackelford, 2020). The model fit indices included Akaike's information criterion (AIC; Akaike, 1987), Bayesian information criterion (BIC; Schwarz, 1978), the sample-size adjusted BIC (SABIC; Sclove, 1987), the *p* values of the bootstrap likelihood ratio test (BLRT; McLachlan & Peel, 2004) and Lo-Mendell-Rubin likelihood ratio test (LMRT; Lo et al., 2001), and entropy (Celeux & Soromenho, 1996; Wang et al., 2017). AIC, BIC, and SABIC are goodness-of-fit measures used to compare competing models, and lower values indicate a better fit (Akaike, 1987; Schwarz, 1978; Sclove, 1987). The BLRT and LMRT compare the fit of a target model to a model with one less profile (k-1 profile model). When the *p* values obtained for the LMRT and BLRT are less than 0.05, the target model is statistically better than the model with one less class (Lo et al., 2001; McLachlan & Peel, 2004). By contrast, when the *p* values are greater than 0.05, it indicates the target model is not statistically better (Lo et al., 2001; McLachlan & Peel, 2004).

Entropy measures the classification accuracy, which ranges from 0 to 1. A higher value of entropy indicates better classification quality and the more precise assignment of individuals to a specific latent profile (Wang et al., 2017; Zeigler-Hill & Shackelford, 2020). When an additional profile is relatively close to an existing profile in the prior solution (e.g., only minor differences in all indicators), and provides little additional and meaningful insights, the new profile might be discarded due to reasons of model parsimony (Spurk et al., 2020). In other words, models with lower entropy values and redundant profiles without adding any theoretical meanings could be rejected. Another aspect of determining the optimal number of profiles is examining the sizes of the derived profiles. Any profile that includes less than 1% of the total sample size or fewer than 25 cases will be rejected (Spurk et al., 2020). Additionally, profiles with less than 5% of the total sample are often considered spurious because they tend to over-fit the data and are unlikely to be reproduced in independent datasets (Kircanski et al., 2017).

In the second step, after selecting the best-fitted model, an individual's most likely profile membership was assigned based on posterior probabilities (Mathew & Doorenbos, 2022). Individual profile membership was conducted in a way such that each individual in the sample was assigned to the latent profile for which he or she has the largest posterior profile probability (Mathew & Doorenbos, 2022). In the third step, multinomial logistic regression models were used to analyze the relationships between healthy lifestyles, demographics, and latent profile memberships to answer the second research question. This analysis provided logistic regression coefficients and odds ratios. For instance, odds ratios greater than 1 suggest that higher scores on health-related lifestyle variables are related to increased odds of belonging to a specific profile compared to a reference group (Asparouhov & Muthén, 2014). By contrast, odds ratios less than

1 indicate that higher health behavior scores are related to decreased odds of belonging to that profile (Asparouhov & Muthén, 2014).

#### Results

## Research Question 1: Latent Profile Analysis of Educator Well-being and Attitudes

The bivariate correlations among the well-being and attitude indicators are presented in Table 2. The fit indices for each potential class solution are listed in Table 3. In the LPA, the fiveprofile model had the lowest AIC, BIC, and SABIC values. However, with 500 random starting values, the five-profile model and models with more than five profiles were unstable with many local solutions. The majority of the models had a great entropy value (>.80), which indicates that the latent profiles are highly discriminating (Muthén & Muthén, 2007). We did not consider BLRT in the model comparison because all the models had significant p values of BLRT. The LMR indicated that the four-profile model had a better fit than the models with smaller numbers of profiles. In terms of the sample size of the profiles, one of the profiles in the five-profile model had only 3.95% (n = 12) of the total sample size, which is likely due to the nonidentification of the models and may indicate that the model is spurious and tends to over-fit the data (Kircanski et al., 2017). Overall, considering the BIC is likely to be overestimated, and theoretical and empirical interpretations show that the four-profile model was the most parsimonious and meaningful solutions. Given that, we then assessed the posterior probabilities of profile membership for the four-profile model regarding the acceptable clarity of profile membership. The results are presented in Table 4. The average probability was adequate for the four-profile model, with values greater than .90 for each profile.

Because of the distinguishable and meaningful groups, along with the model fit indices, we decided to accept the four-profile model. Figure 1 graphically presents the final solution of

the four-profile model with standardized scores for each indicator. The unstandardized means and standard deviations of each indicator were presented in Table 5 to show the descriptive statistics of the three profiles. The first profile (Profile 1) in the four-profile model is labeled as low turnover intentions, low professional distress, and low psychological distress. It was characterized by educators who reported relatively low levels of intention to leave the ECE profession, current program, and position, experiencing low levels of STS, emotional exhaustion, high compassion satisfaction, and low depressive symptoms, personal stress, and anxiety. The second profile (Profile 2) is labeled as low turnover intentions, medium professional distress, and high psychological distress. It is characterized by educators who reported relatively low levels of intention to leave the ECE profession, current program, and position, experiencing medium levels of STS, emotional exhaustion, and compassion satisfaction, and relatively high levels of depressive symptoms, personal stress, and anxiety. The third profile (Profile 3) is labeled as high turnover intentions, medium professional distress, and medium psychological distress. It is characterized by educators who reported relatively high levels of intention to leave the ECE profession, current program, and position, experiencing medium levels of STS, emotional exhaustion, and compassion satisfaction, and medium levels of depressive symptoms, personal stress, and anxiety. The fourth profile (Profile 4) is labeled as high turnover intentions, high professional distress, and high psychological distress. It is characterized by educators who reported relatively high levels of intention to leave the ECE profession, current program, and position, experiencing relatively high levels of STS, emotional exhaustion, low compassion satisfaction, and high levels of depressive symptoms, personal stress, and anxiety.

Profile 1 represented the most desirable subgroup, consisting of educators with the most optimal levels of well-being status and job attitudes. While educators from Profiles 1 and 2

demonstrated relatively low turnover intentions, educators in Profile 2 experienced less positive professional and psychological well-being compared to Profile 1. Both Profiles 3 and 4 were characterized by relatively high turnover intentions. However, educators in Profile 4 reported the lowest well-being and job attitudes among all four profiles. The most prevalent profile was the first profile with educators perceiving low turnover intentions, low professional distress, and low psychological distress (Profile 1; n = 143; 47%), followed by low turnover intentions, medium professional distress, and high psychological distress (Profile 2; n = 67; 22%), high turnover intentions, medium professional distress, and medium psychological distress (Profile 3; n = 67; 22%), and high turnover intentions, high professional distress, and high psychological distress (Profile 4; n = 27; 9%).

# Research Question 2: Educators' Personal Characteristics and Latent Profile Membership

After identifying the four well-being and attitudes profiles, we examined the associations between educators' characteristics (i.e., health-related lifestyles, demographics, and backgrounds) and the profile membership of educators. The multinomial logistic regression results are presented in Table 6. When teachers experienced high quality sleep, they were more likely to belong to Profile 1 (low turnover intentions, low professional distress, low psychological distress; OR = 3.34) or Profile 3 (high turnover intentions, medium professional distress, high psychological distress; OR = 2.06) compared to Profile 4 (high turnover intentions, high professional distress, high psychological distress; OR = 3.30). Educators who reported having more regular breakfasts were more likely to belong to Profile 1 (low turnover intentions, low professional distress, low psychological distress; OR = 1.26) compared to Profile 3 (high turnover intentions, medium professional distress, medium psychological distress).

In addition, the results suggest that educators' age and financial situations are significantly related to their profiles of well-being and job attitudes. In particular, educators of older ages were more likely to belong to Profile 1 (low turnover intentions, low professional distress, low psychological distress; OR = 1.13) and Profile 3 (high turnover intentions, medium professional distress, medium psychological distress; OR = 1.12) compared to Profile 4 (high turnover intentions, high professional distress, high psychological distress). Moreover, educators who reported lacking food were less likely to belong to Profile 1 (low turnover intentions, low professional distress, low psychological distress; OR = 0.12) compared to Profile 4 (high turnover intentions, high professional distress, high psychological distress). Educators with higher salaries were more likely to belong to Profile 2 (low turnover intentions, medium professional distress, high psychological distress; OR = 1.35) compared to Profile 3 (high turnover intentions, medium professional distress, medium psychological distress) and Profile 4 (high turnover intentions, high professional distress, high psychological distress; OR =1.90). Educators who reported experiencing financial hardships were less likely to belong to Profile 1 (low turnover intentions, low professional distress, low psychological distress) compared to belonging to Profile 2 (low turnover intentions, medium professional distress, high psychological distress; OR = 0.77) and Profile 3 (high turnover intentions, medium professional distress, medium psychological distress; OR = 0.55).

#### Discussion

The current study aims to identify existing well-being and attitudes profiles of Head Start educators. We utilized LPA to investigate whether there are different combinations of professional well-being (i.e., STS, emotional exhaustion, compassion satisfaction), psychological well-being (i.e., depressive symptoms, perceived personal stress, and anxiety), and turnover

intentions (i.e., intention to leave the ECE profession, current Head Start program, or present position) underpinning distinct subgroups of Head Start educators. In addition, the findings suggest significant associations between Head Start educators' personal characteristics (i.e., health-related lifestyles and demographic characteristics) and their profile memberships of well-being and attitudes.

# Head Start Educators' Well-being and Attitudes Profiles

The findings revealed four subgroups of educators based on their professional well-being, psychological well-being, and turnover intentions: a) low turnover intentions, low professional distress, low psychological distress (Profile 1); b) low turnover intentions, medium professional distress, high psychological distress (Profile 2); c) high turnover intentions, medium professional distress, medium psychological distress (Profile 3); d) high turnover intentions, high professional distress, high psychological distress (Profile 4). Educators in Profile 1 demonstrated the most positive well-being status and job attitudes among the four subgroups. However, our study demonstrates that the proportion of educators who experienced either medium or low levels of well-being characterized by medium or high levels of professional and psychological distress (53%; Profiles 2, 3, and 4) was slightly higher than the proportion of educators who experienced more positive well-being (47%) characterized by low professional and psychological distress (Profile 1). This finding is partially consistent with previous studies focusing on the profiles of educators' well-being. For instance, Roberts et al. (2023) identified two well-being profiles among ECE teachers: more positive well-being (e.g., higher psychological well-being and less mental and physical unhealthy days) and less positive well-being (e.g., lower psychological wellbeing and more frequent physical and mental unhealthy days). While Roberts et al. (2023) did not include educators' job attitudes in the profile identification, it shows that almost half of the

educators experience more positive well-being (49%), and another half experience less positive well-being (51%). However, when making these comparisons across different studies, it is important to note that previous research used different conceptualizations of the well-being construct, and no existing latent profile analysis studies in the ECE field included indicators of turnover intentions, which may have led to different numbers and constellations of profiles (Burić et al., 2021; Gearhart et al., 2024; Jeon et al., 2016; Roberts et al., 2023).

In the current study, the majority of the educators were most likely to belong to Profiles 1 and 2, which are characterized by low turnover intentions. On a positive note, among these educators who experienced low turnover intentions, most of them perceived positive psychological and professional well-being (Profile 1). This is consistent with the existing research suggesting that educators who reported higher levels of professional commitment are more likely to experience less psychological distress (e.g., perceived personal stress; Byun & Jeon, 2022) and low levels of job-related distress (e.g., job burnout; Jeon et al., 2021). However, while some educators reported low turnover intentions, they experienced medium levels of professional distress and high levels of psychological distress (Profile 2; 22%). It indicates that this group of educators might be equipped with effective coping skills to maintain their positive well-being from interfering with their job attitudes, even though they experienced distress from work and personal life. This is particularly pronounced for Head Start educators, who often express strong passion for their work and have a sense of fulfillment that their jobs are rewarding and positively impacting children's and their families' lives (McCormick et al., 2022). This may motivate them to persevere in their jobs even though they are aware that they work in a demanding work environment.

As expected, those who reported high turnover intentions experienced either medium or high levels of distress both professionally and psychologically (Profiles 3 and 4). It indicates that professional and psychological well-being plays an important role in educators' work attitudes. This is consistent with literature showing that educators who experience increased stress and emotional exhaustion are more likely to move to other programs or leave the field (Grant et al., 2019b). While the proportion of Head Start educators within our sample experiencing high levels of professional and psychological distress and strong intentions to leave their jobs was relatively small (9%), this group of educators may require more substantial support interventions compared to educators in other profiles, considering that they are in the most unfavorable situations regarding well-being and job attitudes.

In summary, the majority of the Head Start educators (69%) belonged to subgroups characterized by high levels of commitment to their jobs and expressed relatively low intentions to leave the field, program, or position (Profile 1 and Profile 2). On the other hand, 31% of educators fell into Profiles 3 and 4, demonstrating relatively high turnover intentions, which was close to the overall turnover rate of the Head Start workforce during 2021-2022 (28%; LaParo, 2024). This suggests that the ECE educators' strong turnover intentions, to some extent, can potentially reflect their turnover behaviors. It is also noted that not all these educators experienced positive well-being. Specifically, one subgroup, despite expressing high levels of job commitment, perceived medium levels of professional distress and relatively high levels of psychological distress (Profile 2). Additionally, the other two subgroups of educators who reported relatively stronger turnover intentions experienced either medium or high levels of professional and psychological distress (Profiles 3 and 4). These findings underscore the diverse

patterns of Head Start educators' experiences and job attitudes and suggest the need for more tailored strategies to support each subgroup.

Associations Between Personal Characteristics and Profiles of Well-being and Attitudes

Health-related Lifestyles and Profiles of Well-being and Attitudes

After identifying the four well-being and attitudes profiles, we examined the associations between educators' characteristics (i.e., health-related lifestyles and demographics) and the profile membership of educators. The findings demonstrated the critical role of sleep quality in educators' well-being and professional experiences. In particular, when they experienced better sleep quality, they were more likely to be the profiles with low psychological and professional distress and less likely to consider leaving their jobs. While there is a lack of studies exploring the associations between sleep quality and professional lives among ECE educators, our findings are aligned with existing studies in general population showing that sleep is related to individuals' job performance (Henderson & Horan, 2021) and mental health conditions, such as anxiety and depressive symptoms (Merrill, 2022). Additionally, the current study suggests that when educators had consistent breakfasts, they were more likely to belong to the profile of positive well-being and attitudes, experiencing less distress and being more committed to their job. While our study suggests the importance of sleep and consistent meals for educators, unfortunately, Head Start educators report having breakfast for only an average of 3 workdays per week (Jeon, et al., 2020), and ECE educators in general experienced insufficient sleep and disrupted sleep quality (Jeon et al., 2020; Souto-Manning & Melvin, 2022). These findings indicate that more targeted interventions are needed to promote healthy sleep and eating patterns among ECE educators.

Demographic Characteristics and Subgroups of Well-being and Attitudes

ECE educators with different demographic characteristics varied in their profiles of well-being and attitudes. The study demonstrated that educators' age and financial situations are significantly related to their profiles of well-being and job attitudes. In particular, older educators were more likely to belong to the profiles characterized by lower to medium levels of distress (Profiles 1 and 3) compared to high levels of distress (Profile 4). One of the explanations may be that older educators are equipped with better coping strategies for handling daily challenges and stressors than young educators, which may benefit their well-being. In addition, our study suggested the importance of educators' salary, access to food, and financial hardships were related to their well-being and job attitudes profiles. In particular, educators who reported lacking food were more likely to belong to the profile characterized by higher turnover intentions and distress (Profile 4). Educators facing more difficulties paying bills were less likely to experience positive job attitudes and well-being. This is aligned with literature indicating that financial hardships have been major challenges for ECE educators considering leaving their jobs (McLean et al., 2021).

### Limitations

While the present study provides a unique perspective on how Head Start educators experience well-being and professional attitudes, it has some limitations. First, it focused on educators working full-time in center-based Head Start programs, and the identified well-being and attitude profiles may not reflect the experiences of educators in other types of ECE programs, such as private and home-based ECE programs, or those who work part-time.

Additional studies are needed to examine educators' well-being and attitude profiles in diverse ECE programs. Second, while the current study provides an understanding of the relationships between these critical indicators of educators' personal and professional lives, we used cross-

sectional data to examine the associations between educators' demographics, healthy lifestyles, and their profile memberships. The findings cannot provide causal conclusions. For instance, it might be the case that educators' healthy lifestyles contribute to their higher likelihood of being in the profile of low turnover intentions, low psychological distress, and low professional distress. There is also a possibility that their positive well-being and job attitudes lead to their motivation for healthier lifestyles. Third, we intended to provide a comprehensive picture of ECE educators' personal and professional experiences with multiple indicators. However, we could not include all relevant covariates in the same model due to the limited sample size. Using this exploratory study as a starting point, future studies can explore a wider range of covariates to better understand the co-occurrence of teachers' well-being and job attitudes and capture the complexity of the ECE work.

## **Implications for Research and Practice**

Early childhood educators' well-being and attitudes are critical in promoting a sustainable and quality ECE workforce and children's ECE experience. The findings of the current study indicate that there is a broader range of individual differences among Head Start educators regarding their well-being states and job attitudes. The existence of subpopulations of educators who have distinct experiences and attitudes can guide future research and inform more effective practices in the ECE settings. In particular, using our study as the foundation, future research can benefit from exploring a more diverse and nationally representative ECE workforce population to understand their well-being and attitude profiles, including educators working in various types of ECE programs and from more diverse racial/ethnic backgrounds. This can provide a more comprehensive picture of the ECE workforce's experience. Additionally, future research can integrate children's outcomes to examine the interplay between teachers' profiles of well-being

and attitudes and children's outcomes. Teachers' levels of well-being and job attitudes may be influenced by the level of children's emotions and behaviors (Friedman-Krauss, et al., 2014). Meanwhile, children may demonstrate various emotions and behaviors because of educators' levels of well-being and job attitudes. Furthermore, it is valuable for future research to investigate the associations between organizational factors, such as workplace justice, equity, sense of community, and educators' well-being and attitude profiles. This research can provide insights for program leaders and policymakers on strategies to support ECE educators by improving the workplace environment.

In addition to guiding future research, the current study also provides insights into the coaching or professional development of ECE educators. Currently, there is a lack of programs that provide tailored coaching that considers educators' various levels of well-being states and job attitudes. Incorporating the unique profiles of well-being and attitudes of individual educators can potentially improve the effectiveness of professional development programs. For instance, educators in Profile 2, characterized by low turnover intentions, medium professional distress, and high psychological distress, could benefit from receiving interventions to improve their personal coping resources, reduce psychological distress, and increase support to reduce their job-related emotional exhaustion and STS. Existing literature indicates that creating a supportive work environment and providing adequate training on professional skills and mindfulness might prevent and reduce teachers' STS and job-related emotional exhaustion (R. Berger & Gelkopf, 2011; Finklestein et al., 2015; Thieleman & Cacciatore, 2014; Thompson et al., 2014). On the other hand, educators in Profile 3 exhibiting high turnover intentions would benefit from receiving increased support to address the job-related challenges that may lead to prevent actual turnover. They are also likely to need a combination of both personal and

professional interventions to support their personal and professional well-being. For instance, research suggests that when ECE educators recognize the potential benefits of an appropriate stress level, they tend to feel less stressed and are less likely to quit their job than those who perceive stress as entirely negative (Kim et al., 2020). This suggests that helping educators reframe their perceptions of stress and develop strategies to manage challenging situations can promote a positive stress mindset and improved well-being. In terms of enhancing occupational health, the organizational and systematic level of support for creating a positive and fair workplace environment characterized by healthy relationships with co-workers, leadership, and equal pay and promotion opportunities can be beneficial to improve ECE educators' professional commitment (Byun & Jeon, 2022). Educators in Profile 4, characterized by high turnover intentions, high psychological distress, and high professional distress, face the most significant challenges. Therefore, they would require more comprehensive and intensive support that addresses their personal and professional well-being. Overall, professional development programs that are tailored to the unique needs of educators based on their distinct patterns of well-being states and job attitudes can better support educators who are struggling with their jobs and well-being. ECE administrators can also consider screening for well-being and attitudes when implementing programs to support educators (Gearhart et al., 2024), which can ultimately contribute to positive outcomes for both educators and children.

Furthermore, the study suggests that educators' healthy lifestyles, specifically more consistent eating habits and improved sleep quality, are related to educators' latent profile membership. In particular, educators who practice more healthy lifestyles are more likely to belong to the profiles characterized by lower turnover intentions and higher levels of well-being. Therefore, organizational leaders could implement strategies to create more supportive work

conditions, which could include providing adequate break times during the day to allow educators to have access to healthy meals within the workplace. Health promotion programs targeting improving the knowledge of eating practices and sleep quality could be one of the focuses of the program-level support for Head Start educators' well-being and job attitudes (Guerrero & Herman, 2023; Linnan et al., 2020). Furthermore, given that educators' age and financial situations were associated with their latent profile membership, these components might be considered in policy decision-making processes to ensure a high-quality and healthy ECE workforce. For instance, programs may provide more resources to improve educators' access to healthy food, which can benefit their well-being and professional attitudes. Additionally, providing financial support and addressing financial insecurity is a critical component in retaining ECE professionals in the field, as many of them even struggle to meet their basic needs with their salary (McLean et al., 2021).

## Conclusion

The current study explored and identified four latent well-being and job attitude profiles among Head Start educators. Findings suggest that the majority of educators were committed to their jobs; however, some educators were struggling with their well-being while trying to commit to their jobs. The emerging subgroups of well-being and attitudes may inform more tailored personal and professional support for Head Start educators. In addition, educators' healthy lifestyles and demographics are related to their profile memberships of well-being and attitudes, which should be considered when implementing program interventions and policies.

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**Table 1**Participants Characteristics

Variable	N	Mean/%	SD	Range
Age	237	40.67	12.54	19-73
Female	278	96.19%	_	0-1
Race/ethnicity				
White, non-Hispanic	52	18.12%	-	0-1
Black, non-Hispanic	161	56.10%	-	0-1
Hispanic	61	21.25%	-	0-1
Others	13	4.53%	-	0-1
Married or Cohabitating	104	36.49%	-	0-1
Educational attainment				
Less than high school, no GED	2	0.66%	-	0-1
High school diploma or GED	113	37.17%	-	0-1
Associate's degree	64	21.05%	-	0-1
Bachelor's degree	92	30.26%	-	0-1
Master's degree or above	33	10.85%	-	0-1
Educator role				
Lead teacher	108	35.64%	-	0-1
Assistant teacher	93	30.69%	-	0-1
Administrative roles	59	19.47%	-	0-1
Other ECE educator roles <sup>a</sup>	43	14.14%	-	0-1
Annual salary				
\$10,000 or less	11	3.89%	-	0-1
\$10,001 to \$20,000	19	6.71%	_	0-1
\$20,001 to \$30,000	69	24.38%	-	0-1
\$30,001 to \$40,000	72	25.44%	-	0-1
\$40,001 to \$50,000	42	14.84%	_	0-1
\$50,001 to \$60,000	24	8.48%	-	0-1
\$60,001 to \$70,000	16	5.65%	-	0-1
\$70,001 or more	7	2.47%	-	0-1
Years of experience in ECE	299	11.06	9.47	0-44
Years of experience in current Head Start	285	5.34	6.31	0-37

*Note. N* = 304. GED= Graduate Equivalency Degree, ECE= Early Care and Education.

<sup>&</sup>lt;sup>a</sup>Other ECE educator roles included substitute teacher, teacher aid,family resource worker, home visitor office assistant, etc.

 Table 2

 Descriptive Statistics and Bivariate Correlations Among Well-being and Turnover Intentions

	1	2	3	4	5	6	7	8	9
1. Intention to leave the profession	-								
2. Intention to leave the program	.54***	-							
3. Intention to leave the position	.30***	.38***	-						
4. Secondary traumatic stress	.14*	.20***	.14*	-					
5. Emotional exhaustion	.23***	.35***	.34***	.50***	-				
6. Compassion satisfaction	35***	32***	19**	35***	37***	-			
7. Anxiety	.14*	.22***	.07	.40***	.45***	16**	-		
8. Perceived personal stress	.11	.24***	.14*	.39***	.54***	29***	.64***	-	
9. Depressive symptoms	.14*	.24***	.12*	.41***	.50***	27***	.72***	.71***	-
Me	ean 1.71	1.82	2.68	7.43	2.12	4.23	1.58	17.00	8.95
Standard Deviati	on 1.09	1.07	1.18	7.18	1.38	.70	1.79	6.82	5.82
Rar	ige 1-5	1-5	1-4	0-36	0-5.3	1-5	0-6	0-33	0-26

<sup>\*</sup> *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001.

**Table 3**Latent Profile Model Fit Comparisons

Classes	LL	AIC	BIC	SABIC	Entropy	LMR (p)	BLRT(p)	Group Size
1	-3980.325	7996.65	8063.56	8006.47	-	-	-	-
2	-3647.285	7350.57	7454.65	7365.84	0.851	.00	.00	61%, 39%
3	-3380.454	6836.91	6978.16	6857.64	0.826	.02	.00	34%, 45%, 21%
4	-3294.168	6684.34	6862.75	6710.52	0.863	.04	.00	47%, 22%, 22%, 9%
5	-3223.588	6563.18	6778.76	6594.82	0.878	.26	.00	4%, 49%, 22%, 8%, 17%

Note. LL = Loglikelihood; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; SABIC= Sample size-adjusted Bayesian information criterion; LMR (p) = p-value for the Lo-Mendell-Rubin; BLRT (p) = p-value for the bootstrapped likelihood ratio test.

**Table 4**Average Latent Profile Probabilities of Most Likely Profile Membership

	Latent Profiles								
Estimate Profiles	Profile 1	Profile 2	Profile 3	Profile 4					
Profile 1	0.938	0.030	0.032	0.000					
Profile 2	0.031	0.921	0.030	0.018					
Profile 3	0.049	0.029	0.909	0.014					
Profile 4	0.000	0.061	0.007	0.932					

*Note*. Profile 1: low turnover intentions, low professional distress, low psychological distress; Profile 2: low turnover intentions, medium professional distress, high psychological distress; Profile 3: high turnover intentions, medium psychological distress; Profile 4: high turnover intentions, high professional distress, high psychological distress.

**Table 5**Descriptive Statistics for Latent Profile Groups

				Lat	ent Profil	es île 3: high						
	Profile 1: low turnover intentions, low professional distress, low psychological distress		turnov mediun dist	file 2: low er intentions, in professional cress, high ogical distress	turnover intentions, medium professional distress, medium psychological distress		Profile 4: high turnover intentions, high professional distress, high psychological distress			Total		
	n = 143 (47%)		n = 67 (22%)		n =	n = 67 (22%)		n = 27 (9%)		n = 304		
Variable	M	SD	M	SD	M	SD	M	SD	M	SD	Range	
Intention to leave the profession	1.25 <sup>bc</sup>	0.09	1.34 <sup>bc</sup>	0.12	2.76	0.21	2.53	0.32	1.73	1.1	1-5	

P3: PROFILE OF WELL-BEING AND ATTITUDES

Intention to leave the program	1.23 <sup>bc</sup>	0.07	1.35 <sup>bc</sup>	0.12	3.01	0.19	3.14	0.29	1.82	1.08	1-5
Intention to leave the position	2.37	0.12	2.24 <sup>bc</sup>	0.18	3.52	0.12	3.40	0.24	2.68	1.19	1-4
Secondary traumatic stress	3.80 <sup>abc</sup>	0.51	9.15	1.70	8.67°	1.14	17.69	2.28	7.41	7.15	0-36
Emotional exhaustion	1.25 <sup>abc</sup>	0.11	2.40	0.20	2.81°	0.25	3.81	0.28	2.12	1.38	0-5.3
Compassion satisfaction	4.52 <sup>bc</sup>	0.06	4.29 <sup>bc</sup>	0.10	3.79°	0.13	3.71	0.13	4.23	0.7	1-5
Depressive Symptoms	4.89 <sup>abc</sup>	0.37	12.95	0.96	8.62°	0.76	18.61	1.33	1.6	1.81	0-6
Perceived personal stress	12.07 <sup>ac</sup>	0.71	21.83 <sup>b</sup>	0.69	18.07	0.91	24.42	1.21	17	6.82	0-33
Anxiety	0.39 <sup>abc</sup>	0.09	$3.06^{b}$	0.29	1.14 <sup>c</sup>	0.16	4.76	0.78	9.06	5.88	0-26

Note. Unstandardized descriptive statistics are presented in the table. <sup>b</sup>Significantly different from Profile 2. <sup>c</sup>Significantly different from Profile 4.

**Table 6**Odds Ratios from Three-step Multinomial Logistic Regression

	Profile 1 (vs. Profile 4): low turnover intentions, low professional distress, low psychological distress			Profile 2 (vs. Profile 4): low turnover intentions, medium professional distress, high psychological distress			Profile 3 (vs. Profile 4): high turnover intentions, medium professional distress, medium psychological distress		
	В	SE	OR	В	SE	OR	В	SE	OR
Health behaviors and Resources		- 52	011		- SE	011		- 22	011
Days having regular breakfast	-0.18	0.21	0.83	-0.32	0.21	0.73	-0.42	0.22	0.66
Having high-protein breakfast	0.34	0.35	1.41	0.44	0.36	1.55	0.61	0.37	1.83
Days having regular lunch	-0.02	0.25	0.98	0.10	0.25	1.11	0.02	0.25	1.02
Having high-protein lunch	-0.35	0.30	0.70	-0.43	0.31	0.65	-0.44	0.32	0.64
Sleep quality	1.21***	0.35	3.34	0.72*	0.35	2.06	1.20***	0.36	3.30
Personal self-care practices	0.05	0.05	1.05	0.03	0.05	1.03	0.04	0.05	1.04
Demographic characteristics									
Gender	1.07	1.11	2.91	1.62	1.07	5.06	1.52	1.17	4.58
Age	0.12*	0.05	1.13	0.08	0.05	1.08	0.11*	0.05	1.12
Racial/ethnicity									
Black/African American,									
non-Hispanic	1.21	0.73	3.35	0.74	0.70	2.10	1.17	0.77	3.21
Hispanic	0.48	0.83	1.62	-0.19	0.82	0.83	0.81	0.89	2.25
Other	0.93	1.69	2.54	1.07	1.56	2.92	2.11	1.61	8.26
Salary	0.56	0.33	1.75	0.64*	0.32	1.90	0.34	0.33	1.40
Household income	0.05	0.19	1.05	0.07	0.18	1.07	0.17	0.19	1.19
Financial hardship	-0.33	0.25	0.72	0.02	0.25	1.02	0.26	0.26	1.30
Lack of food	-2.10*	0.94	0.12	-1.09	0.86	0.34	-1.45	0.92	0.24
Job role									
Assistant teacher	0.21	0.80	1.23	0.43	0.80	1.54	-0.05	0.84	0.96
Administrative roles	-1.37	0.97	0.25	-1.17	0.99	0.31	-0.68	0.99	0.51
Other ECE educator roles	-2.03*	0.83	0.13	-0.99	0.82	0.37	-1.35	0.88	0.26
Bachelor's degree or above	-1.01	0.89	0.36	-1.47	0.91	0.23	-0.84	0.93	0.43
Years of working in the ECE field	-0.09	0.07	0.91	-0.07	0.07	0.93	-0.09	0.07	0.91

Years of working at the current site	-0.06	0.06	0.94	-0.05	0.06	0.95	-0.05	0.06	0.95	
	Profile 1	(vs. Pro	file 2): low	Profile 3	Profile 3 (vs. Profile 2): high			Profile 1 (vs. Profile 3): low		
			ions, low	turnover intentions, medium			turnover intentions, medium			
	profess	sional dis	tress, low	prof	essional o	distress,	profess	professional distress, high		
	psycl	nological	distress	medi	um psych	nological	psych	nological	distress	
					distres	S				
	В	SE	OR	В	SE	OR	В	SE	OR	
Health behaviors										
Days having regular breakfast	0.13	0.13	1.14	-0.10	0.15	0.91	0.23*	0.13	1.26	
Days having regular lunch	-0.10	0.21	0.91	0.17	0.23	1.18	-0.26	0.21	0.77	
Having high-protein breakfast	-0.12	0.16	0.89	-0.09	0.18	0.92	-0.03	0.16	0.97	
Having high-protein lunch	0.08	0.19	1.09	-0.01	0.23	0.99	0.09	0.21	1.10	
Sleep quality	0.48*	0.20	1.62	-0.47*	0.22	0.63	-0.01	0.20	0.99	
Personal self-care practices	0.02	0.03	1.02	0.01	0.03	1.01	0.01	0.03	1.01	
Demographic characteristics										
Gender	-0.55	0.81	0.58	-0.10	0.82	0.91	-0.45	0.77	0.64	
Age	0.04	0.02	1.04	0.03	0.02	1.04	0.00	0.02	1.00	
Racial/ethnicity										
Black/African American,										
non-Hispanic	0.47	0.52	1.60	0.43	0.59	1.53	0.04	0.61	1.04	
Hispanic	0.67	0.60	1.95	1.00	0.68	2.72	-0.33	0.63	0.72	
Other	-0.14	1.04	0.87	1.04	0.95	2.82	-1.18	1.05	0.31	
Salary	-0.08	0.13	0.93	-0.30*	0.15	0.74	0.22	0.14	1.25	
Household income	-0.02	0.10	0.98	0.11	0.11	1.11	-0.12	0.10	0.88	
Financial hardship	-0.35*	0.15	0.71	0.24	0.16	1.27	-0.59***	0.15	0.55	
Lack of food	-1.01	0.67	0.37	-0.36	0.68	0.70	-0.65	0.73	0.52	
Job role										
Assistant teacher	-0.23	0.46	0.80	-0.48	0.54	0.62	0.25	0.49	1.29	
Administrative roles	-0.20	0.56	0.82	0.49	0.63	1.64	-0.69	0.56	0.50	
Other ECE educator roles	-1.04	0.59	0.35	-0.37	0.66	0.69	-0.68	0.61	0.51	
Bachelor's degree or above	0.46	0.50	1.58	0.63	0.58	1.88	-0.18	0.52	0.84	
Years of working in the ECE field	-0.02	0.03	0.98	-0.02	0.03	0.98	0.00	0.03	1.00	
Years of working at the current site	-0.01	0.04	0.99	-0.01	0.04	0.99	-0.01	0.04	0.99	

\* p < .05; \*\* p < .01; OR = odds ratio.

**Table 7**Summary of Study Measures

Construct	Measures Description	α	Items (n)	Example Items
Psychological Well-being	Educators' <i>depressive symptoms</i> were measured using the short form of the Center for Epidemiologic Studies-Depression Scale (Radloff, 1977), which consisted of nine items measured on a 4-point Likert scale (0 = Rarely or none of the time, 3 = Most or all of the time).	0.82	9	"I felt that everything I did was an effort."  "I had trouble keeping my mind on what I was doing."
	To assess teachers' <i>perceived personal stress</i> , we utilized the Ten-Item Perceived Stress Scale (Cohen et al., 1983). Participants were asked to report their perceived stress during the past month using a 5-point Likert scale ranging from 0 (Never) to 4 (Very often).	0.79	10	"How often have you been upset because of something that happened unexpectedly?"  "How often have you been felt that you were unable to control the important things in your life?"
	Teachers' <i>anxiety</i> was measured by two items from the Generalized Anxiety Disorder that asked participants to rate their frequency of feeling anxious over the last two weeks on a 4-point Likert scale (1 = <i>Not at all</i> , 4 = <i>Nearly everyday</i> ; Spitzer et al., 2006).	0.82	2	"Not being able to stop or control worrying."
Professional Well-being	We adopted the Secondary Traumatic Stress Scale developed by Stamm (2010) to measure educators' <i>STS</i> . The scale consists of nine items; educators rated items reflecting their exposure to proximal traumatic experiences on a 5-point Likert scale (1 = <i>Never</i> , 5 = <i>Very Often</i> ).	0.91	9	"I think I am affected by the traumatic stress of the children and families I educate and care for."  "I avoid certain activities that remind me of the traumatic experiences of the children and families I work with."
	We adopted the subscale of Maslach's Burnout Inventory to measure Head Start educators'	0.90	8	"I feel emotionally drained from my work."

	emotional exhaustion (Maslach & Jackson, 1981). Participants rated eight items to report the frequency of emotional exhaustion using a			
	7-point Likert scale (1 = Never, 7 = Everyday). Educators' <b>compassion satisfaction</b> was measured using the Professional Quality of Life Scale (ProQOL) subscale (Stamm, 2009).	0.90	10	"I get satisfaction from working with children and families."
	This subscale consists of 10 items and ratings were on a 5-point Likert scale ( $1 = Never$ , $5 = Very Often$ ).			"I feel invigorated after working with the children and families I care for."
Health-related Lifestyles	Firstly, we asked participants about the frequency two questions: "How many days in the past 5 wo 5 workdays did you eat lunch?"			
	For <i>protein intake</i> , participants responded to "Ho "How often do you typically eat a high-protein lu Responses of "I don't know" were coded as miss	ınch?" on		
	As for <i>sleep quality</i> , we adopted four items from the PROMIS Sleep Disturbance scale (Cella et al., 2010) to assess sleep quality over the past seven days. Participants reported on a 5-point Likert scale ( $1 = Not \ at \ all$ , $5 = Very \ much$ )	0.71	4	"My sleep was refreshing."
	Educators' <i>personal self-care practices</i> were measured by nine items in the subscale of the	0.80	9	"I engage in physical activities."
	Self-Care Practices Scale (Lee & Jeong, 2019). Participants reported how often they engage in specific behaviors using a four-point Likert scale ranging from 0 ( <i>Never</i> ) to 3 ( <i>Very often</i> ).			"I get adequate sleep for my body."
Turnover Intention	To measure their intention to leave the ECE profe "Within the next 12 months, I intend to continue <i>Disagree</i> ) to 5 ( <i>Strongly Agree</i> ; Buettner et al., 20	as an earl	ly childho	ood educator" on a scale from 1 (Strongly

The intention to leave the current program was measured by the statement "Within the next 12 months, I plan to remain at my current program," using the same 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree; Buettner et al., 2016). We reversely coded this item, and higher scores suggested a higher likelihood of leaving the program.

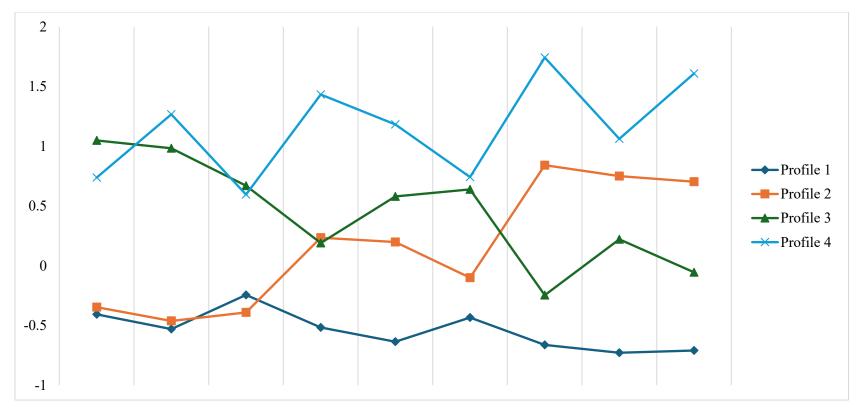
To assess intentions to leave their current position, participants answered "How many more years do you plan to be in your present position within your program?" with options from "1 = 2 years or less" to "4 = 10 or more years." We reversely coded this item, and higher scores indicated a stronger desire to leave their position sooner. To understand the specific reasons behind educators' intentions to leave their jobs, participants who indicated a desire to leave within the next two years were asked to specify their reasons. This approach ensured the collection of relevant data from those considering turnover.

# Demographics

Educators' current teaching position (binary coded "Lead teacher" as the reference category; "Assistant teacher"; and "Other administrative roles"), race/ethnicity (binary coded "White, non-Hispanic" as the reference category; "Black, non-Hispanic"; and "Other"), educational attainment (1 = Bachelor's degree or higher, 0 = Others), age and salary.

Figure 1

Four-Class Model of Head Start Educators' Well-being and Work Attitudes Profiles



*Note.* n = 304. Standardized means are presented. Compassion satisfaction was reverse-coded here to allow the results to be more interpretable; lower values in the figure represent higher levels of compassion satisfaction. Profile 1: low turnover intentions, low professional distress, low psychological distress; Profile 2: low turnover intentions, medium professional distress, high psychological distress; Profile 3: high turnover intentions, medium professional distress; Profile 4: high turnover intentions, high professional distress, high psychological distress.

#### **Dissertation Conclusion**

How to retain ECE professionals has been a critical topic, given the ongoing staff shortage crisis and the increasing need to provide high-quality care and education for young children (Atwell et al., 2024). Within this context, Head Start educators face unique challenges when working with children and families who are primarily from marginalized communities and require more extensive support (National Head Start Association, 2025; Kwon et al., 2022). These educators play a critical role in fostering more equitable learning environments and improving the outcomes of young children from less advantaged socioeconomic backgrounds (Kwon, et al., 2019). Therefore, it is critical to understand the workplace experiences of these educators and how that might connect with their consideration of leaving in order to develop effective retention strategies and retain a high-quality Head Start workforce.

Drawing upon the Ecological Holist Early Childhood Educators' Well-being Model (Jeon et al., 2022), the current dissertation examined the distinct dimensions of Head Start educators' well-being, work environment, and professional attitudes. The first study demonstrates the significant associations between educators' perceptions of psychological distress, physical safety, and their professional commitment and satisfaction. The second study indicates that educators' professional well-being plays a critical role in educators' turnover intentions. While workplace discrimination did not moderate the relationships between these two factors, it was significantly associated with educators' turnover intentions. The third study identified four distinct profiles of well-being and job attitudes among Head Start educators based on their experiences of professional well-being, psychological well-being, and turnover intentions. It also suggests the interplay between educators' demographics and health-related lifestyles, such as

meals, sleep, as well as financial situations, in relation to their profile membership of well-being states and job attitudes.

Overall, the dissertation provides valuable implications for the ECE practice, policy, and research. First, program administrators can make efforts to improve the multi-faced dimensions of well-being among Head Start educators, including both psychological and professional wellbeing and health-related behaviors, to promote their positive work attitudes and commitment. Strategies may include offering more tailored interventions and resources for individual educators with distinct backgrounds, experiences, and needs, creating opportunities and spaces for self-care, and advocating for the value of educators' well-being. Second, the findings suggests that the workplace environment are related to educators' experiences, which, in turn, is associated with their professional performance. Specifically, physical safety can explain the variances in Head Start educators' professional commitment and satisfaction extending beyond their well-being. As a result, program leaders and policymakers can identify the potential risks to physical safety concerns among Head Start educators and strengthen their ability to face potential emergencies and accidents at the workplace. Additionally, workplace discrimination was negatively related to educators' intentions to leave the ECE field and the current Head Start program. Thus, promoting equity and justice in the Head Start work environment can potentially motivate educators to stay. In particular, leaders and policymakers should promote a more diverse Head Start workforce and more career advancement opportunities among these educators. Third, the studies in this dissertation serve as the foundation for a comprehensive understanding of Head Start educators' experiences and needs. Future research can duplicate the study among educators working in different types of ECE programs and incorporate children's

# CONCLUSION

outcomes into ECE workforce studies, which can contribute to a more comprehensive understanding of educators' experiences that can impact children across different settings.

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