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# FACILITATING TRANSFORMATIVE EXPERIENCES WITH FLOW IN EARLY CHILDHOOD EDUCATORS

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FACILITATING TRANSFORMATIVE EXPERIENCE WITH FLOW IN EARLY CHILDHOOD EDUCATORS

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## DEDICATION

I dedicate this dissertation to my two tiny scholars, Kit Hayes and Dane Ryan. I pray you always see that you are capable, kind, and deeply loved.

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## Abstract

Early childhood educators play an integral role in establishing a solid foundation for learning in young children. Teachers today are questioning their expectations of adhering to the developmentally inappropriate high-stakes accountability, which includes a multiplicity of externally controlled standards and regulations that dictate what must be implemented in the early childhood classroom setting. These well-trained professionals face a professional identity crisis, often going against their pedagogical beliefs. This crisis has engendered a complex range of emotions experienced by educators today.

The ramifications of this systemic pressure have radically impacted how early childhood educators conduct themselves in the classroom. The intense emotions experienced by teachers have devastatingly impacted the education realm, as teachers experience extreme stress and burnout, resulting in many electing to exit the profession. The core of establishing a solid foundation for learning in young children is the mental health and well-being of the educator.

This mixed-methods study proved that a shift in perspective regarding daily encounters in life poses excellent potential to impact teachers' outlooks on positively and negatively viewed exchanges with their environments. Facilitating transformative experiences with the motivational concept of flow, the focus of this study, showed great promise to enable teachers to view life exchanges differently than they ever had before, potentially counteracting negative emotions.

During this study, participants attended a 45-minute intervention meeting where they were introduced to the concept of flow, transformative experience, and TE with flow. They were then challenged to notice flow and journal the experiences. Analysis was completed on a one-

group pre-and-post-test administration of the transformative experience measurement, along with analysis of NCV journal entries collected over the course of five weeks. As a result of rigorous data analysis, themes from experience conveyed throughout the journals emerged to explain the impact of transformative experiences with flow on early childhood educators' lives. Findings suggest that within the three characteristics of transformative experience, there is an assortment of positive outcomes for early childhood educators. This study is significant in that it reports research-based outcomes that have the potential to impact how early childhood educators encounter life, both personally and professionally.

# Introduction

When progressing through an Educator Preparation Program (EPP), teacher candidates must learn the importance of pedagogical content knowledge and establishing and facilitating developmentally appropriate practices (DAP), often integrating this belief into their professional identity. Teacher candidates are taught that they can mindfully curate an optimal learning environment by employing DAP guidelines established by the National Association for the Education of Young Children (NAEYC) and their rich, deep understanding of child development (Copple & Bredekamp, 2009). However, upon entering the classroom, the many demands of stakeholders and expectations set forth by individual State Departments of Education (SDE) seemingly create an internal conflict between the developed identity of the individual teacher and the expected practices one must enact to meet the often unrealistic expectational outcomes presented by stakeholders.

The external control of a data-driven culture seemingly forces teachers to set aside personal beliefs (Wilson, 2007) towards their value of developmentally appropriate practices and the elated, engaged learning that this approach promotes. Instead, teachers face externally controlled standards, pre-prescribed, scripted curriculum, high-stakes testing, and rigid schedules, most of which school grades and governmental funding are based upon (Allee-Herndon & Roberts, 2021); this causes a pedagogical identity crisis amongst early childhood educators. Wilson (2007) stated that teachers have reported that they feel they have to alienate their beliefs, or overall identity, of what effective teaching is to meet the demands of these high-stakes restraints, which are camouflaged as accountability. The view of what society deems imperative for students to master, especially young children, and what is defined as knowledge

have historically evolved, many still rooted in unsubstantiated expectations and presumptions (Miller & Almon, 2009) about what is best for schools and the learners who attend. Descending from A Nation at Risk (1983), No Child Left Behind (2002) (modified to the now Every Student Succeeds Act), teachers began, and are still, facing externally mandated controls they must abide by within their learning environments to provide proof that growth is being made. Direct outcomes of these accountability measures have resulted in teachers going against their beliefs and teaching to the test (Guilfoyle, 2006) in developmentally inappropriate (Bredekamp, 1986; Copple & Bredekamp, 2009) ways to avoid punitive measures (Guilfoyle, 2006; Jennings & Rentner, 2006).

The implications of this pressure have significantly impacted the ways in which educators conduct themselves, having detrimental impacts not only on themselves but also on the students they serve and the education system as a whole. Statistics reveal that an alarming number of teachers leave the profession within their first five years of service (Ingersoll, 2001). The profoundly concerning, overarching plight experienced by educators is burnout. This anomaly has been directly connected to every aspect of teaching (Aloe et al., 2013) and has proven to be a primary factor in teacher turnover (Aloe et al., 2013; Chan, 2006; O'Brian et al., 2008) and has proven to be a primary factor in teacher turnover, as teachers are denouncing their roles, responsibilities, and overall expectations of the public education system (Aloe et al., 2013; Chan, 2006; O'Brian et al., 2008).

Burnout is a direct consequence of substantial, continuous exposure to stress, both directly and indirectly (Wethington, 2000). Educators are experiencing burnout as a direct result of escalating pressures (Gonzalez et al., 2016) within their profession. These factors correlate with adverse perceptions of self-efficacy, implementing developmentally inappropriate practices,

and an overall reduction in student expectations and student impact. Moreover, long suffering of occupational stress has been pinpointed as a key propelling factor of physiological changes in biological stress markers amongst educators (Schonert-Reichl, 2017).

Burnout is dynamic, meaning that an alarming number of conducive factors lead to one experiencing it. Stress, anxiety, and depression are among some of the most significant concerns experienced by teachers today (Alves et al., 2021). Stress within the education system has been further connected to the attenuation of self-efficacy (Gonzalez et al., 2016) and effectiveness in the classroom. Thereby, it is vital to concede that the educator's experiences have meticulously profound implications on the learners within their classrooms (Milkie & Warner, 2011).

**Research Problem**

Transformative Experiences (TE), according to Pugh (2011), is an instructional approach that enables individuals to view curricular concepts as ideas that can be experienced within their world. The continuous transaction between self and environment and the multiplicity of experiences with curricular concepts often go unnoticed throughout one's day. Engagement with subject matter outside the typical learning environment allows individuals to interact and perceive subject matter in meaningful ways that alter their current perception of a given concept, promoting the cultivation of value towards the idea (Heddy & Pugh, 2015; Pugh, 2002; 2004). The act of engaging with an idea was derived from the Deweyan conception that subject matter is experiential and possesses the capability to arouse anticipation through active interaction with the concept (Wong et al., 2001).

TE enables opportunities for individuals to authentically perceive concepts within their daily interactions, generalizing understanding of concepts and experiencing them as ideas to be engaged with. TE allows you to see beyond what meets the eye; Walter Lewin stated:

> All of you have looked at rainbows, but very few of you have ever seen one. Seeing is different than looking. Today we are going to see a rainbow. Your life will never be the same. Because of your knowledge, you will be able to see way more than just the beauty of the bows that everyone else can see. (Lewin, 2012)

Transformative Experiences meld three unique characteristics that harmoniously enable authentic interaction with the proposed concepts: Motivated Use, Expansion of Perception, and Experiential Value. (Heddy & Pugh, 2015; Pugh, 2004; Pugh, 2002; Pugh et al., 2017). The concepts can operate independently, but to fully experience TE, all characteristics must be achieved in unison.

Transformative Experiences are complex (Pugh, 2013; Pugh, 2002, 2004; Pugh et al., 2010) and must be facilitated and scaffolded (Bruner, 1978). Teaching for Transformative Experiences in Science (TTES) (Heddy & Sinatra, 2013; Heddy et al., 2016; Pugh, 2010) is an identified approach that has successfully facilitated TE. This model consists of strategies employed by a more knowledgeable other to generate learning experiences in such a way that anticipation to engage with the idea is aroused within the participants. Through framing contents as ideas and experiences, scaffolding re-seeing, and modeling (Pugh et al., 2017), individuals are provided opportunities to alter their perception of concepts.

The concept focus of this study is a motivational concept known as *flow.* Flow, according to Csikszentmihalyi (1975), is "a highly enjoyable psychological state that refers to the holistic sensation people feel when they act with total involvement" (p. 36). Engagement with flow is an experience that is capable by anyone, in any situation where individual skill meets the presented challenge of an environment. It is imperative to understand that flow is individualistic; this meaning that one may enter the state of flow at any given time when acting upon their

environment. Flow possesses unique traits (Csikszentmihalyi et al., 1996; Kowal & Fortier, 1999), each intimately interwoven at differing degrees depending on the individual and situation. The addressed qualities are:

> (a.) a person is able to concentrate on a limited stimulus field, (b.) in which he or she can use his or her skills to meet clear demands, (c.) thereby forgetting his or her own problems, and (d.) his or her own separate identity, (e.) at the same time obtaining a feeling of control over the environment, (f.) which may result in a transcendence of ego-boundaries and consequent psychic integration with metapersonal systems. (Csikzentmihalyi, 1975, p. 135)

These qualities align with the characteristics of *flow*. This further connects the three attributes of TE: motivated use, expansion of perception, and experiential value, all of which build upon the previous.

Flow experiences promote many positive implications for the brain; while significantly understudied, this area of research has continually evolved. While there are many differing theories of what occurs inside the brain when engaging with flow, it is certain that individuals' neurological pathways are altered (Dietrich, 2004; Sinnett et al., 2020). It is also theorized that the prefrontal cortex experiences temporary regression in activity (Gold & Ciociari, 2020) when experiencing flow. This positive experience is further connected to experiences of automaticity (Happe, 2001; Shiffrin et al., 1977), intrinsic motivation (Ryan & Deci, 2000), and overall contribution to a more competent self.

It is assumed that all engage in flow, perhaps daily, as one engages in intrinsically motivated, highly enjoyable activities. Due to the direct implications of burnout on one's personal life (Maslach & Leiter, 2017), facilitation of TE with flow in educators' personal lives

could assumably influence other areas of life as well, including but not limited to classroom practices.

The critical realization of the mass exodus of quality, effective educators experiencing burnout and leaving the profession calls for the facilitation of TE with flow. Providing intervention by introducing TE centered around the motivational concept of flow could have long-term, constructive consequences on early childhood educators' overall personal, the aim of this study, and professional life experiences. One's overall physical and mental health depends on a proper balance of work and leisure, overall energy expenditure, and recovery (Mikołajczyk, 2021). This balance is also necessary to aid in the prevention of teacher burnout, which is directly perceived by students and correlates with classroom effectiveness (Oberle et al., 2020). To mitigate the experience of burnout in the classroom, teachers must have the opportunity and time to engage in enjoyable activities that promote flow and overall life satisfaction. TE with flow has the potential to impact not only teachers but also indirectly impact students and their abilities based on the way in which the teacher presents themselves and the pedagogical practices employed in the classroom. If an early childhood educator can experience TE with flow in their personal life, there is justification for believing that it, within reason, can be experienced in one's professional life; further, one may also become mindful of recognizing flow in others, causing the aforementioned, shift in pedagogical practices to execute developmentally appropriate approaches within the early childhood learning environment. This has excellent potential to lead to seeing value in providing opportunities for self and others to experience flow.

**Research Purpose**

The purpose of this research was to understand better the overall perceptual change and the value impact transformative experiences with flow can have on early childhood educators

within their personal life experiences. This study focuses on the concept of flow, which Pugh (2011) compares to TE theory by labeling it as profoundly engaging as TE. Providing intervention covering TE with flow throughout this study allowed educators to become fully aware of the concept of flow and the importance of valuing this concept within their personal lives. This study was comprised of teaching educators about the concept of flow so that they may be able to identify flow experiences in their personal lives. Following the introductory meeting, educators were asked to complete NCV journals for five weeks to describe their flow encounter(s). It is crucial to first focus on TE with flow in early childhood educators' personal lives to provide opportunity and time to appreciate engaging in TE by noticing, changing perception of, and valuing the idea, object, or event engaged in. A mixed method, investigative experimental study was utilized to format this research study. The study focuses on providing intervention surrounding the theory of transformative experiences. As a researcher electing to implement a mixed-methods experimental intervention design (Creswell & Clark, 2018), this study aimed to provide intervention by facilitating TE with *flow*, further seeking individual meaning (Moustakas, 1994) and recognition of experiences with TE with *flow*, thereby permitting small shifts in perceptual change (Heddy & Pugh, 2015), and overall value impact (Pugh et al., 2010) of the radical engagement experience known as transformative experiences.

**Research Questions**

This study was guided by one primary question, and sub-questions branched from the overarching question to add depth to the understanding of the phenomenon. This study aimed to intervene and examine the lived experiences of early childhood educators, particularly focusing on enjoyable engagements, specifically *flow,* within their personal lives. The primary, overarching question: Does facilitating transformative experiences with flow through an

intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM?

Throughout this five-week intervention, the primary question, along with the following sub-questions, were addressed:

(1) How does a transformative experience intervention with flow result in noticing flow?
(2) How does Notice, Change, Value (NCV) Journaling reveal that they MU, EP, and EV with *flow*, thereby experiencing transformative experiences?

**Theoretical Framework**

The overall conceptual framework serving as the cornerstone of this study is that of Deweyan pragmatism. John Dewey's thoughts convey that "the worth of something is determined by its impact on every day, lived experiences" (Pugh, 2011, p.109). To foreground, Deweyan pragmatism connects to constructivist theory, both of which align with the philosophical assumption of Epistemology. Within epistemological assumptions, what is considered 'known' is purely subjective to the individual participants within this study (Creswell & Poth, 2018). Constructivism has been described as a theory of knowing (Branscombe et al., 2014), that is, the individual independently constructs their knowledge or meaning-making through transactions with and within their environment. Deweyan pragmatism expounds on constructivism in that individual knowledge is only valid if it can be applied within the world, and that knowledge within our daily interactions should be significant, luminous, and fruitful (Dewey, 1958).

As mentioned, John Dewey's theory is seen as a foundation for the transformative experience theory. Dewey's theory is grounded in the belief that education should be experiential (Dewey, 1958). He also centers the individual within a learning setting by stating, "the child is the starting-point, the center, and the end (Dewey, 1902, pg. 4). Dewey made his theory clear that education does not possess aims, rather the people are the aims, he conveys this by stating "it is he and not the subject-matter which determines both quality and quantity of learning" (Dewey, 1902, p.9). He continues that "learning is active…it involves reaching out of the mind…[and] organic assimilation starting from within. (Dewey, 1902, p. 9). Other significant theorists in constructivism and early childhood education include but are not limited to, Lev Vygotsky, Jerome Bruner, and Jean Piaget.

The presented study directly aligns with the Deweyan pragmatism framework. The early childhood educator's engagements in transformative experience(s) with *flow* depend solely on the individual and their engagements and the overall enrichment and expansion of experiences with their environments. Thereby, the participants are developing new or altering the current meaning of experience. It is critical to acknowledge that the environment includes the physical space and social interactions within, and further that the relationships within the environment, experiences, and individual learnings are reciprocal. This study examined early childhood educators' daily, personal interactions, particularly ones that they enter "a highly enjoyable psychological state… [promoting a] holistic sensation people feel when they act with total involvement" (Csikszentmihalyi, 1975; Kowal & Fortier, 1999, p. 356). In unison with *flow,* the knowledge of what transformative experiences encompass directly influences the recognition of the motivational concept, *flow*; this could otherwise go unrecognized and be perceived as another

typical engagement or act within one's world. This conceptual change regarding the concept of *flow* has great potential to impact early childhood educators in a plethora of ways.

**Significance of The Study**

This study contributes to the field of early childhood education and the overall understanding of the transformative experience (TE) theory, as it is a relatively new theory. Expanding on the overall knowledge of TEs with early childhood educators proved it possesses significant potential to improve one's comprehensive well-being and professional well-being and practices. Managing expenditure and recovery (Mikołajczyk, 2021) can improve holistic well-being. Early childhood educator's physical and mental health is contingent upon maintaining a harmonious equilibrium between professional responsibilities (i.e., continuous transactions with young children and the cultivation of the environment) and leisure activities (i.e., personal, enjoyable engagements with objects, ideas, or events). Ideally, this study aimed to improve one's overall life experiences, first through surrendering oneself (Pugh, 2011). The action of surrender fosters small shifts in perception (Heddy & Pugh, 2015), which provides the potential to alter and impact the overall value of the concept of engagement with *flow*. Maintaining equilibrium between one's personal and professional life is critical for averting teacher burnout, thereby increasing overall longevity in the classroom. In turn, this could, within future studies, contribute to shifts in pedagogical practices. This study has also furthered current levels of comprehension towards transformative experience as this is an evolving theory.

## Definition of Terms

A list defining terminology used throughout the research is provided to ensure a clear understanding for the reader.

*Conceptual Change*: Changing strongly held prior views (Heddy & Sinatra, 2013)

*Developmentally Appropriate Practices (DAP)*: Refers to a framework of principles and guidelines for practice that promotes young children's optimal learning and development. DAP is a way of framing a teacher's intentional decision-making. It begins with three Core Considerations: (1) what is known about general processes of child development and learning; (2) what is known about the child as an individual who is a member of a particular family and community; and (3) what is known about the social and cultural contexts in which the learning occurs. (NAEYC, 2020) *Note: throughout this study DAP and pedagogical practices are used interchangeably, as well as together to support one another.*

*Early Childhood Education (ECE)*: A term defined using the developmental definition of birth through approximately age 8, regardless of programmatic, regulatory, funding, or delivery sectors or mechanisms. (NAEYC, 2020)

*Early Childhood Educator*: An individual who cares for and promotes the learning, development, and well-being of children birth through age 8 in all early childhood education settings, while meeting the qualifications of the profession and having mastery of its specialized knowledge, skills, and competencies. (NAEYC, 2020)

*Early Childhood Learners/ young children*—Refers to children in the period of early childhood development, from birth through approximately age 8. Although developmental periods do not rigidly correspond to chronological age, early childhood is generally defined as including all children from birth through age 8. (NAEYC, 2020)

*Expansion of Perception*: The act of seeing the aspects of the world (e.g., events, objects, issues, themselves) through the lens of the content and perceive deeper layers of meaning (Pugh et al., 2017)

*Experiential Value*: developing greater value for those aspects of the world re-seen through the lens of content and, consequently, developing greater value for the [science] content itself (Pugh et al., 2017).

*Flow*: Experiences during which individuals are fully involved in the present moment (Nakamura & Csikszentmihalyi, 2002)

*Motivated Use*: application of school content in contexts where application is not required (Pugh et al., 2017).

*Pedagogical Content Knowledge:* Knowledge of academic disciplines and the ability to create meaningful learning experiences for each child by using effective teaching strategies. (NAEYC, 2020)

*Pedagogical Practices*: See Developmentally Appropriate Practices

*Transformative Experiences*: Experiences in which students actively use [science] concepts to see and experience their everyday world in meaningful, new ways (Pugh, 2004)

## Organization of the Dissertation

Within this dissertation, Chapter One serves to provide readers with a comprehensive introduction to the study. Chapter Two provides an extensive literature review on transformative experience theory, the motivational concept of *flow*, and transformative experience with *flow*. Next, Chapter Three describes the methodology and justification, directly answering the research

questions driving this study. Chapter Four conveys the findings from the five-week mixed-methods study. Finally, Chapter Five addresses conclusions, implications, and suggestions for future research.

# Chapter Two: Literature Review

This literature review provides rich context regarding the Transformative Experience theory, the motivational concept of Flow, and the sources connected to the phenomenon teachers are experiencing today. The hyperfocus on external accountability and the profound negative implications of regulations on those serving young learners heed the need for intervention. To comprehend the profoundly positive implications TE have on the overall experiential enjoyment educators indulge in, we must first form apperception of the Transformative Experience theory, *flow,* and the reported pressures, stressors, and experiences encountered by this population.

## Transformative Experience

Transformative experience (TE) is defined as an occurrence that takes place when individuals employ and see subject matter outside of the classroom in such a way that personal encounters with ideas, objects, or events surrounding that material change perception and generate value for that specific content, and the learning experience that afforded it (Heddy & Pugh, 2015; Pugh, 2002; 2004). TE has also been phrased as an occurrence of active application of curricular concepts (Pugh, 2011) in such a way that one's view of, interaction with, and experience within the world is altered in a positive, meaningful way. This theory is based on the Deweyan idea of the subject matter being experiential, as having the capacity to evoke anticipation through active participation (Wong et al., 2001). This subject matter can be taught through framing content as ideas that can be put into action, further promoting the subject's anticipation, meaning, and value at differing degrees based on the individual (Pugh, 2002). TE allows an opportunity for one to truly see something for what it is, a step beyond looking and wonder and into experiencing the know.

**An Experience**

The idea of TE evolved from the theory of a well-known theologian who is heavily cited throughout multiple early childhood sources and seen as justification for many developmentally appropriate, experiential, hands-on practices utilized in early childhood education. Dewey's thoughts are seen as vital in the life and experiential education of learners of all ages today. John Dewey took what may go unrecognized, or unnoticed, in our daily interactions with the world we reside in and theorized that these experiences could become much more meaningful and impactful if they become *an* experience (Dewey, 1929; Dewey 1933), a way of re-seeing the world in a more profound aesthetic, more empathetic way, far more than just looking.

As humans, we have a deep yearning for understanding. It is thought that it is in our very nature to establish meaningful connections within our daily interactions with others, the earth, and, ultimately, the ideas that fuel our being. Connections generate meaning and connectedness to the world around us, giving us purpose and making us feel more human (Girod & Wong, 2002). These ideas promote understanding, leading to individualistic learning; learning is indebted to attending to, perceiving, and understanding. This learning is far beyond the prescribed, the expected, or the societal norm. Learning is directly affected by one encountering and analyzing the composition and evidence of ideas (Girod & Wong, 2002) presented within a given context, far beyond a measurable outcome. This understanding promotes the regeneration of and challenges the previous relationship between an individual and an idea; furthermore, the re-establishment of a transaction between the concept, the individual, and the world. Learning should not take place as an aim in itself (Pugh & Bergin, 2005), but instead, it should cultivate engagement and anticipation, allowing the individual to act on the world while

contemporaneously allowing the world to act on the individual (Girod & Wong, 2002), permitting one to indulge in an experience vulnerably.

This idea of *an* experience springs up authentic, powerful anticipation within an individual. This anticipation generated by an idea fueled by curiosity promotes the experience Dewey proposed in his literature. It is thought that anticipation is aesthetic. Meaningful educational experiences are driven by anticipation (Girod and Wong, 2002). Girod and Wong suppose that aesthetic thought comprises three essential qualities that foster anticipation and change within an individual: dramatization, transformation, and unification. Dramatization incorporates emotion to denote the meaningfulness of an experience, in turn eliciting emotional responses from individuals. This emotion compels an individual to act in a way that engenders more thinking, action, and experience. This fosters a new transformational relationship between the individual and the world and more eccentricity of experience. This anticipation also promotes coalesce; according to Jackson (1998), "when we are totally absorbed in what this object or event or idea is like, that the various components of our psychological being—our ability to think, to feel, to appreciate, to experience through all of our senses—come into play at once" (p. 149). This internal generation of anticipation allows individuals to place their psyche, emotions, and all into an idea.

*An* experience allows individuals to see the world as the idea they are engaging with. It is hypothesized that the individual is able to' time travel,' in a sense, to see the concept in action, to produce wonderment (Girod & Wong, 2002), to be completely absorbed, to come to be in the world differently and feel fully human, fully alive (Wong et al., 2001), to anticipate, and to promote new and different ways of existing. This way of experiencing allows intimate interaction between the idea, the individual, and the world.

**Transformative Learning**

From an educational perspective, it is critical to understand that TE is not the same as transformative learning. Transformative learning (Mezirow, 1991, 1995, 1996) is a widely used concept throughout the world of education; however, the complexity of achieving transformative learning within an individual is not expressed when working towards transformative learning. This learning is "a fundamental shift in an individual's personality that leads to an expanded consciousness" (Boyd, 2008; Boyd, 2009). Transformative learning is believed to change the individual's identity due to the requirement of critical analyzation of beliefs and overall awareness of self (Mezirow, 1997), but TE does not. With the vast complexity involved with altering one's very being, this internal transformation within an educational experience is not impossible but rather preposterously complex, especially within a highly structured, heavily mandated educational setting.

Transformative experiences allot for digestible, achievable acts of learning. Content and concepts must first focus on micro-changes, on more minor palatable shifts in perspective directly related to communicated disciplinary content. TE contains essential experiential characteristics that enable such microchanges (Heddy & Pugh, 2015). Within the application of TE, the individual does not undergo nor experience identity change nor a wholesome shift in worldview; instead, they experience small shifts in perceptions within interactions between self and concept or idea and between self and the world. These small shifts allow individuals to re-see the world through a lens of context, promoting the generation of authentic ideas and submission of self to anticipation, interaction, and unification, ultimately transforming one's overall perception of a particular concept or subject matter. These shifts have vast potential to contribute to large-scale transformative learning over time.

**Transformative Experience Characteristics**

TEs bring together three different characteristics that act in unison to allot authentic interaction with concepts; these characteristics are a) Motivated Use (MU), b) Expansion of Perception (EP), and c) Experiential Value (EV) (Heddy & Pugh, 2015; Pugh et al., 2017; Pugh 2004; Pugh, 2002). To understand the ability of these characteristics to expand one's perception and value of content (Pugh et al., 2010), individuals must realize that these work dependently and independently from one another.

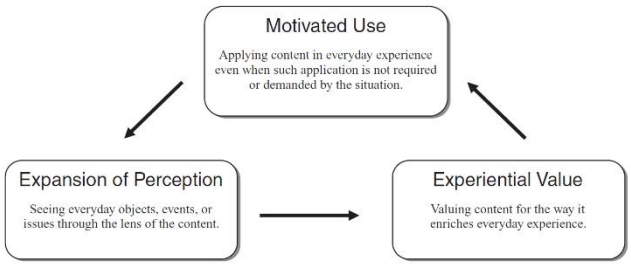



*Figure 1:* From "Transformative Experience: An Integrative Construct in the Spirit of Deweyan Pragmatism, by Kevin Pugh, 2011, Educational Psychologist, 107-121. Copyright [2011] by Kevin Pugh. Reprinted with permission.

Individuals first experienced motivated use, this being the action of noticing and applying the content or concept autonomously, freely, outside of regulated requirements (Heddy & Pugh, 2015; Heddy & Sinatra, 2017; Pugh et al., 2017; Pugh et al., 2010). This willing application could look like an early childhood teacher who engages in the act of leisurely reading, may pick up a book, lose track of time, and set the book down three hours later. After setting the book down, the individual then realizes that they engaged in the psychological act of *flow* and thinks

to themselves, "Wow! I completely lost track of time; I just experienced *flow."* the simple realization displays motivated use.

Expansion of perception occurs once an individual has noticed the content in action and begins to change their current perception of that idea, object, or event. EP allows the world to be seen through a lens of concepts, adding a deeper level of meaning and understanding (Heddy & Pugh, 2015; Heddy & Sinatra, 2017; Pugh et al., 2017; Pugh et al., 2010). This can be described as a critical aspect of the transformation that takes place in TE. Perception, or the development of awareness through the intake of the senses, directly impacts that act of experiencing; this means that an individual expands their understanding of a concept in such a way that they actively engage in a meaningful experience with it. An example of this would be an individual coming to experience and notice the concept of chlorophyll on a leisurely walk through the park after encountering the subject matter within the facilitation of learning in the classroom; this experience is expanding far beyond the understanding of what the concept is in one particular area of learning—instead, it is encapsulating experience and direct application of the idea through the perception of what was once seen as *just* a green leaf.

Once an individual's perception of an idea, object, or event begins to be seen in a content-focused frame, the individual may experience experiential value. This being that one has developed new founded value of the content in such a way that it influences one's perception of the world. This means that the individual now sees and interacts with the world in a different manner due to the developed value for the object, event, or idea encountered (Heddy & Pugh, 2015; Heddy & Sinatra, 2017; Pugh et al., 2017; Pugh et al., 2010). This may look like the individual changing their outlook on particular phenomena due to the newly constructed value derived from the interaction carried out between the individual, idea, and the world.

**Zone of Transformative Experience**

Lev Vygotsky believed that within individualistic learning, the learner exhibits a level of mastery and dependence—the Zone of Proximal Development (ZPD) (Vygotsky, 1978). The level of dependence signifies concepts or abilities that individuals cannot yet reach independently. In contrast, the level of mastery signifies the learner is apt to advance to more challenging experiences, thereby creating a new zone. Much like the ZPD, TEs are thought to encapsulate their zone, the zone of transformative experience (ZTE), one which provides an optimal understanding that not all ideas allot TE to take place. This means there are ideas or concepts that are too concrete or abstract to apply this theory. It is imperative to acknowledge that while Vygotsky's ZPD is directly applied to an individual's learning processes, ZTE is strictly bound to concepts or ideas that can be identified as too concrete or abstract. Within this study, *flow* is seen as a concept that is neither too concrete nor abstract. *Flow* is an achievable transaction between the experiencer and the experienced, promoting irrevocable change (Girod et al., 2010).


*Figure 2: Zone of Transformative Experience*

It is imperative to understand that TE must be deliberately addressed to provide opportunity, or rather reveal possibility, for individuals to experience the much-needed small-scale shifts in perspective (Pugh et al., 2009). Heddy and Pugh (2015) define this shift as a more

knowledgeable other (Vygotsky, 1978): a) framing the content experientially, b) scaffolding re-seeing, and c) modeling transformative experiences. The more knowledgeable other differentiating teaching practices (Pugh et al. 2017) through framing, scaffolding, and modeling allow individuals to relate to the subject matter and develop an understanding of the value and meaningful application of seeing the subject matter that TE provides.

**Teaching For Transformative Experiences**

Transformative Experiences theory is foundationally educational, derived from the Deweyan thoughts that education should be experiential (Dewey, 1958). Thereby, the term learned or learning will be replaced by experienced within this section. When teaching for TE, an individual's engagement with the material transforms the engagement with, perception of, and value of content. Teachers must consider time and current pedagogical practices to prime their learning environment for authentic TE.

When teaching for transformative experiences, individuals were able to transform ways of engagement (Pugh et al., 2009) with experienced content. With time (Pugh et al., 2010), this transformation of engagement with content promotes deep, meaningful acquisition (Pugh et al., 2010) and generalizability (Engle et al., 2012; Pugh et al., 2010) far beyond the walls of the classroom. Notice, Change, Value (NCV) journaling, previously referred to as UCV, has been proven effective in facilitating TE and fostering individual interest (Heddy et al., 2017; Heddy & Sinatra, 2017). Within NCV journals, participants describe encounters they have had with *flow* and further discuss their experience. Heddy et al. (2017) found that students often expressed higher levels of conceptual interest within studies where NCV journaling was utilized. The Teaching for Transformative Experiences in Science (TTES) model (Heddy et al., 2016; Heddy & Sinatra, 2013; Pugh, 2010) has also been proven to be successful in fostering transformative

experiences. Three principles identified by Pugh et al. (2010) within the model are believed to influence classroom pedagogical practices in such a way that content becomes an experience imbued with anticipation, development, and unity, becoming an act of thinking and meaning (Wong et al., 2001) development on a profoundly personal level.

The three principles include framing content as ideas, scaffolding re-seeing, and modeling transformative experiences (Pugh et al., 2017). Learning is compelled by understanding; understanding is compelled by experience. Through enacting these three principles, education will influence current experiences (Girod & Wong, 2002) and contribute to future experiences (Pugh, 2002; Pugh & Bergin, 2005) with content in such a way that the very perception of the content is forever altered. When teaching for transformative experiences, the more knowledgeable other (Vygotsky, 1978) is able to present the content and evoke anticipation (Wong et al., 2001) for experience (Dewey, 1959) within the given content. Far beyond understanding (Bloom, 1956), TE allows for higher levels of cognition development and overall transfer.

Framing the content as ideas enables students to see content as possibilities (Pugh et al., 2017) rather than concrete concepts (i.e., “every rock is a story waiting to be read”) (Girod and Wong, 2002, p. 209). Altering the introduction and instruction of content in a crafted (Pugh et al., 2017) manner allows individuals to become emotionally invested, awaiting engagement through experiences with the ideas, further enabling individuals to comprehend the content on a deeper, transformative level of understanding.

Scaffolding re-seeing builds on framing content as ideas. Scaffolding (Bruner, 1978) is an ideal practice for instruction. Meeting students where they are and providing adequate support, not too much or too little, enables them to succeed with the presented content. By scaffolding re-

seeing, the more knowledgeable other can help students identify (Pugh et al., 2017) potential experienced content beyond the classroom walls. The world does not always present prominent indicators of content as the student experiences in the classroom; through scaffolding, the student can better identify these out-of-classroom experiences, directly applying and identifying experiences as they enact with the world.

The final identified principle of fostering TE is that of modeling transformative experiences. As the more knowledgeable other scaffolds learners, incorporating modeled experience enables learners to connect and relate with like individuals concerning experiencing the content beyond the classroom. The passion (Pugh & Girod, 2007) embedded in the modeling of lived experience provides opportunities for students to see the content as more than a concept, even more than an idea, ideally sensing this potential experience as a capability.

**Perceptual Change**

For a learning experience to be considered complete, it must yield itself to the everyday interactions and experiences an individual encounters (Pugh et al., 2009). This perceptual change is foundational in fueling TEs within one's personal life through encounters with aesthetic, anticipatory, *an* experiences. Through perceptual change, individuals redevelop the ways in which they view subject matter within the world. This redevelopment generates new meaning and overall value for the newly discovered ways of seeing subject matter in everyday life (Pugh, 2002). Seeing the world through the lens of Art (Dewey, 1929; Dewey, 1934), Science (Pugh, 2002), Engineering (Heddy, 2021), or *flow* (Csikszentmihalyi, 1975) allows individuals to see, think, and act inversely to the ways others interact with the world, changing perception promotes wonderment (Girod & Wong, 2002)—this wonderment *is* transformative experience. TE encapsulates Dewey's beliefs that education should evoke emotion and anticipation, ultimately

enabling *an* experience to the extent that one comes to see and interact with the world in a way that they have never done so before.

## Flow

The motivational attribute, *Flow*, is "a highly enjoyable psychological state that refers to the holistic sensation people feel when they act with total involvement" (Csikszentmihalyi, 1975; Kowal & Fortier, 1999, p. 356). It has been specified that for an individual to experience *flow,* one must engage in an activity in which the individual's skill level meets the challenge presented by the activity (Nakamura & Csikszentmihalyi, 2002). Individuals who have experienced psychological growth and reach the self-deterministic, intrinsic level of motivation are highly capable of experiencing *flow*. *Flow* is non-discriminatory in that anyone can experience it regardless of any diversity they may present or endeavor they choose to engage in (Nakamura & Csikszentmihalyi, 2002).

The *flow* state is characterized as possessing the following nine attributes: a) the existence of a balance between the perceived skills of an individual and the perceived challenges of a situation, b) a merging of action and awareness, c) the presence of clear goals, d) the presence of unambiguous feedback, e) concentration on the task at hand, f) a sense of control over oneself and the environment, g) a loss of self-consciousness, h) a transformation of time, and i) the autotelic or enjoyable nature of the experience (Csikszentmihalyi et al., 1996; Kowal & Fortier, 1999). Each can be seen as interwoven to differing degrees amongst different experiences. One must understand that while flow can present itself to an individual of any age in differing activities, this does not mean all engaging in that particular activity will experience this motivational concept. *Flow* is individual dependent.

**Self Determination Theory**

A precursor to fully engaging in a *flow* experience is the ability to experience intrinsic motivation, the highest level of motivation within the Self Determination Theory (SDT) continuum (Ryan & Deci, 2000). **S**DT projects the assumption that all individuals are fundamentally predisposed to psychological growth. However, the foundation of this growth is a psychological need that must be met to achieve authentic intrinsic motivation. These psychological needs are categorized as the requirement of autonomy (deCharms, 1968; Deci, 1975; Ryan & Deci, 2020), competence (Ryan & Deci, 2020), and relatedness (Ryan & Deci, 2020). Autonomy, in this sense, promotes possession and enterprise over the activity the individual is engaged in. Competence addresses the feelings of self-efficacy, or ability to achieve, individuals hold towards an activity or idea. Lastly, relatedness underscores the identification of belonging and connection to an individual, group, or environment. Serving as a foundational cornerstone of his research, theorist Mihaly Csikszentmihalyi (1983) elaborates on the importance of intrinsic motivation in subjective learning experiences and everyday life. There is an intimate connection between individuals' level of motivation and the likelihood of experiencing *flow.*

**Challenge times Skill**

Emergent motivation (Csikszentmihalyi et al., 2005) coincides with the range of an individual's zone of proximal development (Vygotsky, 1978). Emergent motivation is defined as the understanding that a previously identified challenging activity may be sought out as enjoyable and intrinsically rewarding if the individual is able to discover *flow* within the activity (Csikszentmihalyi et al., 2005), meaning the individual’s skill or ability, met the challenge presented. Lavoie, Main, and Stuart-Edwards (2022) present the thought of *flow* fluency in a way

such that "fluency of action manifests as successful progress through an activity, and, alongside fluency of thought, forms the foundation of *flow's* fluency dimension" (p. 41). In other words, the more fluent an individual is in their interaction with a task that meets their appropriate skill level, providing adequate challenge, the more likely an individual is to experience *flow*.

**De-centering from Self**

Within the characteristics of flow defined by Csikszentmihalyi, Jackson, and Marsh (1996), individuals must experience a sense of control over themselves and the environment and experience a loss of self-consciousness. This requires one to de-center from oneself and become submissive to the task. This de-centering is identified as a shift from self, including thoughts and feelings of past, present, or future happenings (Teasdale et al., 2002). This allows one to submit control to the task at hand, ridding of pondering or active reflection. Eradication of such establishes opportunity and ability enhancement for one to experience the given task fluently (Lavoie et al., 2021). This act of de-centering allows an individual to displace unnecessary thought and become so aware of self that one is no longer hyper-vigilant of what others or self may be thinking—releasing the inner critic and promoting transversality between the environment and self.

**Manipulation of the Environment**

The environment an individual interacts with and upon is a direct determinant of flow. To provide optimal flow experiences, an environment must present the aforementioned challenge and skills, promoting flow fluency. If the challenge is not presented, one must be able to manipulate the environment to permit transversality further. This manipulation of the environment allows individuals to escape current realities and enact newly created realities. The

individual is "cognizant of themselves in relation to the world, but they do not perceive themselves as being confined by it" (Burt & Gonzalez, 2021, p. 199) —thus permitting flow.

### Multitasking and Flow

Flow is, perhaps, the highest level of experience an individual can engage in (Csikszentmihalyi, 1997). The outcome of this experience often results in experiencing optimal performance in many different areas of life. However, individuals are often presented with multiple tasks that contribute to an environment of confusion (Monsell, 2003), where individuals are incapable of properly completing said tasks at a high level of performance. According to Adler and Benbunan-Fich (2011), individuals surmise a resource-allocation issue due to their limited resources for the multiple tasks at hand. In sum, it is found that when an individual faces the resource-allocation dilemma, they will experience less flow (Pluut et al., 2024); thereby, the concept of multitasking is seen as an overall hindrance to one entering the flow state.

## Flow and The Brain

### Automaticity

The psychological aspect of entering a flow state has been theorized to have many positive neurological impacts. When captivated in a flow state, one is believed to maximize individualistic potential (DeCharms, 1968); the overall flow encounter is based on the level of challenge presented by the task at hand and the skill possessed by the individual acting upon the environment. This maximized potential is often exerted as individual automaticity (Happe, 2001; Shiffrin et al., 1977), which is inherently intrinsic to the flow state and entirely dependent upon individual abilities. Within this state of automaticity, individuals experience the aspect of automaticity both consciously and unconsciously (Happe, 2001) depending on the presented situation one acts upon. Automaticity, or overall fluency within thought and action (Lavoie et al.,

2021), are identified attributions of flow. Specifically with flow, automaticity begins consciously as one prepares to act on the given task, even though the overall loss of reflective self-consciousness is a critical factor in experiencing flow. According to Dietrich (2004), the identified characteristics of flow are harmonious with the intrinsic operations and degrees of transient frontal hypofunction. Due to automaticity being innately implicit, directly connecting with ones previously encountered or mastered skills or experiences, the loss of self-consciousness, or suppression of the inner critic, can only be displayed through action due to the intrinsic implicit systems contents being unattainable to one's conscious awareness (Dietrich, 2004).

**Intrinsic Motivation**

Intrinsic motivation directly concerns activities one engages with for 'one's own sake' (Ryan & Deci, 2000; Ryan & Deci, 2020), purely for self-enjoyment or overall happiness. Opposite to extrinsic motivation, intrinsically motivated individuals often experience more frequent flow within situations presenting challenges (Csikszentmihalyi & Nakamura, 2010). The intrinsic reward of flow has been theorized to direct individuals towards future success (Delle Fave et al., 2011), promoting persistence when presented with challenge. Intrinsic motivation is a critical component of *flow*. The autotelic personality (Csikszentmihalyi et al., 2005; Csikszentmihalyi, 1997) is an intrinsically motivated person engaging in the enjoyment of life, pursuing activities for the sake of interest or internal drive rather than meeting an external demand or goal. This simplification equates to approaching present engagement and becoming so fully immersed in an internally rewarding manner one enters into *flow*. Thereby, one can assume that *flow* can only be accomplished through the source of intrinsic motivation.

## Neuroscientific Impacts

There is limited research on the direct impact *flow* has on neurocognitive processing. There are many beliefs that *flow* experiences alter chemicals in such a way that promotes shifts in the way individuals interact with their environments at any given point. When in *flow*, an individual's neurological pathways are transformed, promoting optimal experience, thereby maintaining or elongating *flow* within a given situation. It has also been proposed that there are altered states of consciousness (ASCs) that correlate with the addressed qualities of the *flow* experience, as proposed by Csikszentmihalyi. This means that when in *flow,* what was once perceived as reality is altered (Dietrich, 2003; Sinnett et al., 2020).

## Locus Coeruleus Norepinephrine System and *Flow*

According to van der Linden, Tops, and Bakker (2021), the Locus Coeruleus Norepinephrine System (LC-NE), located in the brain stem, is a group of neurons that process the chemical Norepinephrine (NE). The LC-NE system functions in such a way that determines the overall engagement or exploitation (Aston-Jones et al., 2000) of a given task based on presented trade-offs between the cost of engagement versus the personal reward of engagement (van der Linden, 2021). When the reward of exploitation outweighs the cost, an individual's LC-NE is considered to be optimal. The individual's perceived environmental inputs impact the release of the neurotransmitter NE. This determines the overall NE release, thereby dictating the level of arousal (Aston-Jones & Cohen, 2005) experienced by the individual. It is critical to consider that in flow, the individual's skill must match the challenge presented by the environment. This means that the level of NE arousal determines task exploitation; this level can be too high or too low, hindering the flow experience. Figure 5 compares the LC-NE activity and performance with the level of arousal and performance within an individual; these directly align

with the previously discussed flow fluency in that prior engagement with an experience promotes the ability to approach and engage within the optimal, or task-engaged, level.

**Transient Hypofrontality Hypothesis**

As proposed by Arne Dietrich, the Transient Hypofrontality Hypothesis (THH) proposes the potential decline of prefrontal activity by the inhibition of the frontal cortices (Gold & Ciociari, 2020), or as known in flow as silencing or suppressing the inner critic (Burt, 2021; Csikszentmihalyi & Wong, 1991). This reduction allows other portions of the brain to engage in more profound, more intentional efforts toward achieving *flow*. THH, in theory, is proposed as a prerequisite to the flow state by Dietrich, stating that THH "enables the temporary suppression of the analytical and meta-conscious capacities of the explicit system" (2004, p. 746). The act of downregulating the frontal lobe, which foregrounds the flow experience, has been correlated to one's overall life enjoyment (Burt & Gonzalez, 2021) and overall sense of happiness (Burt & Gonzalez, 2021; Csikszentmihalyi, 1990; Maslow, 1959), enabling one to become their best, authentic self.

**Psychological Impact of Self**

It is theorized that one experiences one's true self when in flow. However, to resurrect their true self, individuals must first recognize they must suppress their 'I' by surrendering and attending only to matters in which there is keen awareness and acknowledgment of existential conceptual impact (Csikszentmihalyi, 1978). Directly impacting one's psychological understanding of self, the emergence of the 'me' rather than the 'I" signifies great growth and a different, more powerful, and more capable (Csikszentmihalyi, 2014) self. Thereby, it is unequivocal that flow experiences serve as an overall facilitator of ideal development (Delle

Fave et al., 2011; Massimini & Delle Fave, 2000; Rathunde & Csikszentmihalyi, 2006) by promoting a better 'me' than before the optimal experience.

*Flow* is a critical component all need to acknowledge, promote, and value within their personal and professional life. This level of enjoyment, that of being so engulfed in the experience that one seemingly loses self and time, ought to be respected. Utilizing this happiness flow could potentially promote additional happiness and enjoyment in life and bring about the realization of the multiplicity of benefits this experience affords individuals, both young and old.

## Connecting Transformative Experiences and Flow

### The Act of Suffering

The act of suffering can be applied as a strong proponent of TE and *flow*. Suffering is seen as submitting oneself or surrendering to the environment (Pugh, 2011; Wong, 2001) further proposes that TE necessitates individuals to give way to the act of suffering. It is imperative to understand that this suffering should not be negatively considered. Instead, Dewey proposes suffering in a positive, beneficial manner by stating,

> Without suffering—that is, without intense, honest interaction with the world—truly transformative learning is impossible. Without suffering, we cannot be moved and, therefore, cannot be overtaken in the experience passion. Our basic humanness depends on suffering of this kind and is diminished in its absence (Dewey, p. 215-216 as cited in Pugh, 2011, p. 117)

This honest interaction with the world can be seen as an imperative characteristic of both the theory of TE and that of *flow*.

### Factors of Transformative Experience

Pugh et al. (2019) suggest seven factors that could directly influence the depth and breadth of TEs an individual can have. These factors are 1) interest, 2) emotions, 3) task values, 4) dispositions and personality traits, 5) willingness to surrender, 6) epistemological beliefs, and

7) supportive out-of-school contexts. In my interpretation, these seven factors can also be applied to *flow* theory. In this study, TE and *flow* require individual interest to submit oneself to the task, engage in the transaction, surface emotional experiences, and ultimately promote the value of a given interaction.

Facilitating transformative experiences related to *flow* within early childhood educators could mean that experiencing small shifts of perceptual change in their personal life experiences has the potential to lead to additional change. Engaging in and becoming cognizant of these small shifts could lead to seeing these additional shifts in classroom experiences for the practicing educator and how they value time, space, and developmentally appropriate practice within the learning community while still meeting external expectations. TE with *flow* can occur in any setting, both in and out of the learning environment. For example, early childhood educators may engage in that act of *flow* while engaging in an activity they find enjoyable, such as baking. *Flow* may also occur while facilitating learning experiences by becoming so involved in instruction that time simply slips away. Experiencing *flow* could lead to facilitating opportunities for *flow* in EC learning communities and beyond. TE with *flow* has the potential to enrich (Heddy & Pugh, 2015; Pugh, 2002; Pugh, 2004) everyday lives through engagement with *an* experience in such an integral way that the individual understands and values the importance of cultivating and manipulating their students' learning environment, enacting pedagogical content knowledge in appropriate manners. Through this, early childhood educators intentionally establish opportunity within the learners' ZTE, which would, ideally, promote individual *flow*. Perhaps the foundation to recognizing *flow* in others begins with recognition *in* self.

## The Need for TE with Flow in Early Childhood Educators

The need for transformative experiences with flow in early childhood educators' lives is deep-rooted and multifaceted. Early childhood educators understanding of how the young child develops and how learning is viewed, valued, and cultivated through the lens of developmentally appropriate practices becomes a cornerstone in forming their professional identity. Due to conveyed skepticism in teachers' professional capabilities and the overall eradication of autonomy in the classroom (Allee-Herndon & Roberts, 2021), teachers face cognitive dissonance in the classroom. External regulations and expectations were implemented as accountability measures, beginning in 1983 with the issuing of A Nation At Risk (National Commission on Excellence in Education, 1983), followed by the No Child Left Behind Act of 2001 (No Child Left Behind, 2002), and the Every Student Succeeds Act (Every Student Succeeds Act, 2015). Implementing the high-stakes accountability measures enabled extensive external control and regulations, removing complete discretion of what was to be learned from local school boards (Vogler & Burton, 2010) and removing autonomy and trust from professionals in the teaching profession. A result of this accountability brought about mandated high-stakes testing, which has significantly impacted teachers' practices within the classroom. This, in turn, has exacerbated experiences of stress, burnout, and educators' overall mental health and well-being, inadvertently surfacing similar issues in young people.

### Developmentally Appropriate Practices

To fully grasp the stressors early childhood educators are facing, we must first understand the conflicting nature of high-stakes accountability with the educator's established philosophy founded upon developmentally appropriate practices (DAP). Copple & Bredekamp (2009) explicitly address that educators must be explicit in their knowledge of how to label and defend

DAP (p. 54) within their field. DAP is so foundational in early childhood philosophical beliefs that it is described as an essential framework driving the practices educators implement, being both intentional and informed, in their learning environments to facilitate optimal growth and development of the young child (Copple & Bredekamp, 2009; NAEYC, 2020). The fundamental principles of child development underpin DAP, focusing on the whole child and the interconnectedness of each developmental domain (Copple & Bredekamp, 2009).

The National Association for the Education of Young Children (NAEYC) published guidelines that provide a rich understanding of educators' vastly intertwined, strategic approach when facilitating learning with young children. These six guidelines foster DAP by stating that teachers should (1) creating a caring community of learners; (2) engaging in reciprocal partnerships with families and fostering community connections; (3) observing, documenting, and assessing children's development and learning; (4) teaching to enhance each child's development and learning; (5) planning and implementing an engaging curriculum to achieve meaningful goals; and (6) demonstrating professionalism as an early childhood educator (NAEYC, 2020). When implementing these practices alongside their rigorously developed knowledge of the whole child, teachers are better able to make well-informed, developmentally appropriate decisions to better facilitate learning.

DAP heavily emphasizes constructivism in that children build their knowledge through aesthetic (Dewey, 1958) and active interaction with their environment (Piaget, 1966). Central to this building of knowledge is the act of play and the multitude of developmental appropriateness benefits such interactions provide for developing young children.

**Play**

According to Stuart Brown (2009), play consists of seven properties that allow individuals to visualize play without direct labeling or finite definition. These seven properties state that play is (1) apparently purposeless (done for its own sake), (2) is voluntary, (3) possesses inherent attraction, (4) allots freedom from time, and (5)—diminished consciousness of self. Play also (6) has improvisational potential, and (7) provides continuation desires within individuals. (Brown, 2009, p. 17-18). Dr. Peter Gray (2013) states that "an activity is play, or is playful, to the degree that it contains the following four characteristics: play is (1) self-chosen and self-directed, (2) intrinsically motivated, (3) guided by mental rules that leave room for creativity, and (4) imaginative." (p. 2). Further, Zosh et al. (2017) identify five characteristics that justify that play is foundational to learning: through play, children experience joy, meaningfulness, active engagement, iteration, and social interaction.

Play is innate, instinctual, and imperative in all individuals, not just children. According to Pellis, Iwaniuk, and Nelson (2001), play is such an integral part of development that there is a direct link between brain size and playfulness within the animal species. Play has been proven to be beneficial in a multitude of domains of child development by promoting social-emotional skills (Pyle & Danniels, 2017), self-regulatory behavior (Elias & Berk, 2002; Riley & Jones, 2010), social skills (Barnett, 2018) and cognitive flexibility (Barnett, 2018) and ego development (Erikson, 1950; Piaget, 1951) through the manipulation of their environment. The development of the differing domains, both separately and in supportive unison, is developed through the act of play (Yogman et al., 2018). Theorist Fredrick Frobel, the father of Kindergarten, stated that "play is the highest phase of child development—of human development at this period…play is the purest, most spiritual activity. ( [1887] 2005). Play is so critical to human development in that

it “develops lifelong skills … [the] absences of play can result in delayed and incomplete development (Nell et al., 2013, p.1).

It is imperative to understand that play is intricately interwoven throughout the philosophical approaches, standards, and research-based practices released by NAEYC. This professional membership organization provides the cornerstone on which the developing early childhood educator builds their foundational identity. The NAEYCs DAP position statement, a 44-page document released by the NAEYC National Governing Board in 2020, included the term “play-based” (p. 9) in defining appropriate practices, further stating that play is essential for all children.

Play is inherent, the most genuine vehicle of learning. Play enables the young to experiment with behaviors in a setting that does not present a threat, presenting an opportunity to learn and grow without facing threats or punishment for shortcomings. Learning, in and of itself, is heightened through play (Brown, 2009). Early childhood educators acknowledge that play should be integral to the young child’s day (Copple & Bredekamp, 2009). When teachers intentionally incorporate play in the classroom, it enables young children to naturally investigate (Isenberg & Durham, 2015), gather information, engage in possibility thinking (Craft, 2000), and make meaningful connections (Brown, 2009) through these first-hand developmentally appropriate experiences. Further, play serves as a vehicle for the whole child's development, addressing every development domain during the most formative years.

Csikszentmihalyi (1975), within his research, proposed that ‘the most typical kind of flow experience is play…” (p. 137) while also expressing that play and flow should not be viewed as equivalent or interchangeable synonyms. Instead, one needs to acquire a thorough baseline understanding of flow and play as individual, wholesome entities; however, when combined, a

unique synergistic opportunity arises for the individual at hand, that being flow. According to Csikszentmihalyi (1975), play is not an elementary reaction toward the demands of the environment but rather an intricately instinctive act performed by the individual toward the environment (p. 135). Within play, the challenge presented by any given environment must meet the current skill held by the individual. Individuals, at any moment, are conscious of opportunities presented by their environment while being keenly aware of their capacity to meet those presented demands. This challenge x skill plays a critical role in navigating, interacting with, and coping with the continuous demands presented (Csikszentmihalyi, 1975). Interestingly, individuals have the capability to manipulate their environment by increasing challenges or, according to Csikszentmihalyi, 'handicapping oneself' (p. 150) and suppressing one's skill to manipulate a given experience and engage in flow; this holistic sensation of acting with total involvement enables one to reach their full potential.

**High Stakes Testing**

High-stakes testing, a result of the high-stakes testing reform, is heavily controversial in public schools, especially in early childhood grades. High-stakes accountability has become so widely accepted it is viewed as central and vital in educational reform (Evans, 2012; Mathis, 2010). Significant events that heavily influenced the enactment of this external regulation and lack of autonomy in the classroom were the issuing of A Nation at Risk (National Commission on Excellence in Education, 1983) and No Child Left Behind (now modified to be Every Student Succeeds Act) (No Child Left Behind, 2002).

A Nation at Risk was curated out of a competitive mindset, stressing the inferiority of the American school system in comparison to other countries (National Commission on Excellence in Education, 1983). Due to the fallacy in stakeholders' understanding of the public school

system and the young child's development, policymakers proposed and enacted heavy external regulation, imposing that the American educational system should become increasingly more rigorous and be held accountable through the act of high-stakes testing.

Continuous advancement in the accountability movement brought about The No Child Left Behind Act of 2001 (NCLB). This movement heavily emphasized annual testing to measure student success in three identified subjects: math, science, and reading. (NCLB, 2002). From this heavy shift towards accountability through testing measures, the American public now had data for each school district's performance or overall ranking, furthering the comparative mindset. Schools were expected to meet predetermined annual performance targets, meaning that the school made adequate yearly progress (AYP) (Linn, 2008). Ramifications were set in place to incentivize districts that met their AYP, while others not meeting AYP were reprimanded, labeled, and faced further threats of succumbing to the rule of the state (Augustine & Freeman, 2011).

The shift in mindset by the public acceptance and support of policymaker's expectations and restrictions of what takes place in the public school, what is to be taught, and how the growth of each student, teacher, and school is measured has been detrimental to young children. The external pressures to meet AYP and prove oneself effective in the classroom cause remarkable tension in teachers and their overall identity and understanding of what is appropriate versus what is expected. The facilitation of learning in the early childhood setting has become a race to ensure students are prepared for the high stakes testing they will have to endure. This means the young child's education has transmuted into a fast-paced, developmentally inappropriate cesspool. The continuous conflict between what is appropriate and what is expected significantly impacts not only the teacher as a professional but also causes great strife at a personal level (Wilson, 2007).

## Teacher Impact

Professionals in the teaching profession report some of the highest levels of occupational stress (Kratz et al., 2015). The high stakes testing and accountability culture has significantly added to the expectations and obligations teachers are required to complete, including but not limited to assessments and paperwork to display the impact on student growth (Kozol, 2005; Milkie & Warner, 2007). High-stakes testing has also directly influenced interactions and daily instructional practices among teachers (Hannaway & Hamilton, 2008), lessening their autonomy and overall ability to implement DAP in the classroom (Gonzalez et al., 2016), causing great strife in teachers lives (Oberle et al., 2020), both professional and personal. Concerningly, it is stated that teacher attrition is rising in that 50% of teachers leave the profession within the first five years (Carver-Thomas & Darling-Hammond, 2017; Stewart et al., 2021). Further, there is an increase in rates amongst teacher attrition tends to increase over the first three years (Boyd et al., 2009). The impact of implementing this high-stakes culture of public schooling has resulted in a multiplicity of factors contributing to these astounding statistics.

***Burnout.*** An overwhelming number of educators have reported experiencing burnout. Early works emphasize that many individuals could begin experiencing symptoms of burnout before their careers even begin (Gold, 1985). This multifaceted phenomenon is detrimental to the individual as well as the profession at an organizational level (Schonert-Reichl et al., 2017). Identified as a byproduct of stress (Haberman, 2005), attributes of burnout include emotional fatigue, overall detachment from performance, and a pervasive sense of unfulfillment (Kokkinos, 2006; Schonert-Reichl, 2017). Maslach & Leiter (2017) characterize the root causes of burnout as prolonged responses to tenacious stressors within a work environment. Schwab et al. (1986) identified six ramifications of burnout, these being ‘intentions of leaving the profession, absences

from work, overall effort exerted, and lower quality of personal life (p.19). This overall experience profoundly impacts educators' well-being as teachers have reported experiencing symptoms of stress, anxiety, and depression (Alves et al., 2021). The pervasive nature of burnout undermines the professional as it is intimately linked to the demandingness the profession encompasses. Oberle et al. (2021) convey how educators can become emotionally depleted due to the high-stakes culture of schools. Educators are experiencing chronic interpersonal and intrapersonal stressors due to the ever-rising expectations and external pressures imposed by stakeholders.

Burnout is linked to every stage of a teacher's career (Aloe et al., 2013), which risks substantial adverse consequences not just for teachers' well-being but students overall responsiveness and performance within the learning environment (Salovita & Pakarinen, 2021) as this experience influences classroom quality, overall impact, and effectiveness. Burnout is also directly correlated to teacher attrition (Aloe et al., 2013; Chan, 2006; O'Brian et al., 2008) and overall willingness to remain in the profession.

***Stress.*** According to Kyriacou (1989), teacher stress is labeled as unpleasant negative emotions resulting from some aspect of their work. Occupational stress is further identified as a direct result of a discrepancy between the demandingness and expectations of a job and the educators' overall skill, resources, and self-efficacy (Schonert-Reichl, 2017). Gonzalez et al. (2016) lists emotions such as anger, anxiety, tension, frustration, and depression as psychological reactions towards the pressure felt within the teaching profession. As mentioned, burnout is identified as a derivative of consistent experiences of stress, including passive exposure (Wethington, 2000), due to the increased pressures (Gonzalez et al., 2016) within the educators' working environment. These directly correlate with negative perceptions of effectiveness,

engaging in developmentally inappropriate instructional practices in the learning environment, and diminished student expectations and outcomes (Schonert-Reichl, 2017). Further, experiencing persistent chronic occupational stress has astoundingly been identified as a root cause of physiological changes in biological indicators of stress among educators (Schonert-Reichl, 2017).

***Self-Efficacy.*** Self-efficacy is seen to be a loaded concept with profound implications (Tschannen-Moran & Hoy, 2001). Self-efficacy represents teachers' perception of their capacity to impact one's achievement; this can also be labeled as teachers' belief in self, explicitly regarding their abilities. Self-efficacy is intimately intertwined with student impact(Cornelius-White, 2007; Salovita & Pakarinen 2021). Directly connected to the working environment, self-efficacy diminishes when experiencing chronic stress (Gonzalez et al., 2016); the high-stakes accountability experienced by educators directly impacts self-efficacy.

***Mental Health and Well-Being.*** A result of the implementation of high stakes testing is significant stress to the teachers' already substantially full workload; this, in turn, results in higher stress levels, significantly impacting the overall mental health and well-being of teachers (Schonert-Reichl, 2017). Burnout, a common theme within the educator's occupation, directly correlates with teacher mental health and well-being (Oberle et al., 2020). Demands placed upon educators have continually increased (Kim et al., 2021) as accountability expectations incessantly rise. Identified factors impacting educators' mental health include feeling undervalued (Oberle et al., 2020), uncertainty, increased workload, caring for others' welfare, and taking on multiple responsibilities (Kim et al., 2021). The educators' well-being directly impacts the education system's health (Schonert-Reichl et al., 2017), which must be seen as a priority.

**The Impact on Learners**

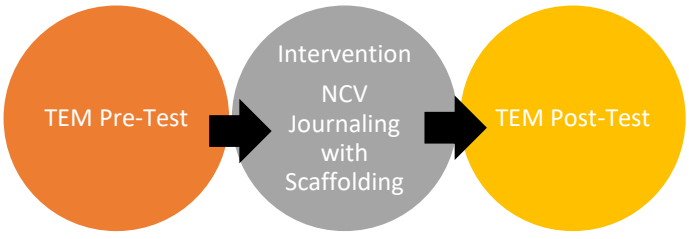
Alexander et al. (1987) noted that exchanges between the classroom teacher and students are central to the school experience. It is conveyed that the mental well-being, or social-emotional competence (Jennings et al., 2019), of the teacher has direct implications on students cortisol levels (Oberle et al., 2020; Oberle & Schonert-Reichl, 2016) and overall success. It has been identified that the continual manifestation of anxiety, stress, and burnout within the teaching profession directly influences daily interactions with learners, and this can detrimentally promote distress among the learners (Milkie & Warner, 2007). To further justify, Jennings et al. (2016) convey that these experiences are foundational to the support provided to the learners directly through practices used (Valli & Buese, 2007) and interactions and experiences provided (Jones et al., 2014). When educators experience disconnect, they are seen to be less responsive and more reactive (Jennings et al., 2017).

## Chapter Three: Methodology

Due to it being a young, emerging theory, at this time, this is the first research conducted related to transformative experiences focusing on early childhood educators. Further, this is also the first study with TE directly applied to the motivational concept of *flow*. This gap in research called for an investigation to enhance and advance research regarding TE and the positive, enduring, and (literal) transformative advantages this theory has to offer in one's personal and professional livelihood. Conducting TE research with the motivational concept of *flow* enabled educators to see small shifts in daily enjoyable occurrences, particularly where one's skill meets the presented challenge. Enabling early childhood educators to experience TEs in their personal lives led to the generation of value and employment of TE on a professional level for some.

This methodological chapter outlines, with reasoning, the techniques employed throughout the duration of this study. This chapter is comprised of a description of the study's design, participant selection, data collection, methods of analysis, and validation of findings. An overview of the method is presented in Figure two.

*Figure Three:*



**Research Purpose**

The purpose of this mixed-methods design is to understand the ways in which early childhood educators experience transformative experiences with *flow* in their personal lives. To date, there is limited, if any, research within the field of early childhood education or with teachers as the sole participants. Much of the TE research has focused on mixed methods approaches. This study aimed to examine and explain the ways early childhood educators in personal settings came to understand the concept of transformative experience with *flow* in day-to-day situations (Miles et al., 2014).

The selected research design was that of a mixed-methods experimental, One-Group Pre-Test-Post-Test (Creswell, 2009), designed to "enhance understanding of the intervention implementation and [overall] participant experience' (Creswell & Clark, 2018, p. 198), further acquiring a holistic indication (Miles et al., 2014) of these experiences and measuring conceptual change. Employing the mixed-methods approach, the researcher was able to collaborate with early childhood educators, facilitating intervening instruction of TE with *flow* and scaffolding (Bruner, 1978; Pugh, 2004) TE due to its complexity (Pugh, 2002, 2004; Pugh, 2013; Pugh et al., 2010).

**Research Questions**

Through an introductory meeting, pre-test/post-test measurements, and participant NCV journals, this study analyzed the following overarching question:

Does facilitating transformative experiences with flow through an intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM?

Within this primary question, the following sub-questions were addressed:

(1) How does a transformative experience intervention with flow result in noticing flow?

(2) How does Notice, Change, Value (NCV) Journaling reveal MU, EP, and EV with *flow*?

**Theoretical Framework**

Electing to employ any particular methodological study provides great insight into the positionality and overall belief of the researcher within the given research. As an evolving researcher, I was sure to understand and consider all frameworks and the multitude of implications the selection of frameworks can have on this personal research. I believe that a researcher may identify more strongly with one theoretical approach. Still, all approaches were considered to determine the best fit for the study at hand. Within the realm of education, more specifically early childhood education, qualitative methodological approaches are often utilized to capture an essence; I would consider myself fond of this type of study. However, due to my strong interest in psychology, I could see the clear benefits of quantitative and mixed-methods approaches. Therefore, due to the heavy educational psychology component, a mixed-methods approach was selected for this study. Greene (2007) postulates that mixed-methods thought provides 'multiple ways of seeing and hearing' (p.20). Further, Cresswell & Clark (2018) state that mixed-methods approaches "offers new insights" (p. 13) and "encourages the use of multiple worldviews, or paradigms" (p.13).

**Research Design**

To best gain an understanding of this phenomenon and the effectiveness of the intervention, a mixed methods design was integrated into this study. A quantitative transformative experience measurement and qualitative NCV journal collection process were the

data collection methods used to answer the proposed research questions. This mixed-methods study encompassed the one-group experimental intervention design (Creswell & Clark, 2018). This design portrays itself as embedded. Within this design, qualitative data is seen as a secondary component (Creswell & Clark, 2018, p. 104), which enhances the experimental outcomes. During this study, qualitative data collection took place convergently. This design allowed proper mediation, modeling, and scaffolding to occur (Creswell et al., 2009; Creswell & Clark, 2018), further strengthening the experiment (Creswell & Clark, 2018). The initial quantitative data collection provided a baseline to measure the overall growth and impact of the introductory meeting. The introductory meeting, followed by qualitative data collection, provided detailed support for the outcomes quantitative data and also provided an in-depth look at the phenomenon; this was collected at the ceasing of the five-week intervention. All data informed each research question. The justification for selecting this research design was to allow the merging of qualitative data collections, NCV journals with qualitative data outcomes, and TEM growth scores to best describe the phenomenon at hand and the effectiveness of the intervention.

The demographics questionnaire and TEM were administered using Qualtrics after receiving approval from OU IRB. An email (Appendix A) was sent to those willing to participate, informing the participant of the study's purpose, which is to understand how early childhood educators experience transformative experiences with *flow* in their personal lives. Once the demographic information was completed, participants were directed to complete the TEM.

**Participants and Setting**

Participants in this study were selected through purposive, convenient selection (Creswell & Clark, 2018; Miles et al., 2014). Utilizing purposeful selection enabled the researcher to adequately acquire the overall essence of the phenomenon of transformative experiences with *flow,* as well as provide thick, rich descriptions (Geertz, 1973; Miles et al., 2014) encompassing early childhood educators' experiences with TE with *flow*; further giving depth to the anticipated growth from the intervention. The population targeted for this study were those currently serving in some capacity in early childhood education, from birth to 8 years of age. The overall criteria for participation were: 1) Participants are currently working with children aged birth to eight years of age, and 2) Participants must be 18 or older. Participants could be serving in, but not limited to, the public school system, private school system, Head Start system, or a daycare setting. OU IRB approval was sought and obtained prior to the research beginning. Consent forms (Appendix B) was required before participation. Through social media groups and personal connections, the research was publicized to recruit participants. Those willing to participate were asked to provide their email privately to ensure the protection of participants. Teachers meeting the study requirements were purposefully and conveniently selected for weekly participation in this five-week study.

I was optimistic about reaching a significant figure of 50-100 participants. The rationale behind this elected sample size and anticipated number of participants was due to the complexity of the transformative experience and the scaffolding needed to enhance the efforts to unveil and elucidate the essence of TE with *flow.* Two prominent studies that contributed to this number were that of Pugh et al. (2017) and Heddy and Sinatra's (2017). The authors' argue for the

critical data collection aspects of the TEM scale and NCV journaling require this range of participants.

The recruitment round of questionnaire data collection resulted in 56 recorded responses. After an initial review of the data, it was found that a large number of the responses collected were invalid due to incompleteness and duplicate responses. Through a data-cleaning process, it was found that 22 responses were valid and legitimate. Of those 22 responses, only 16 attended the introductory meeting. Furthermore, of the 16 that attended, only 13 began documentation during week one. For proper pre-and-post-test measure outcomes, I deleted the 43 responses that did not contribute to the entirety of the study. The 13 respondents continued to participate through the remainer of the study, with no attrition taking place.

It was also theorized that not all, when presented with the opportunity to engage in TE, will experience it (Pugh et al., 2019; Pugh et al., 2010; Wong, 2007). Due to the varying interest and overall intrinsic motivation with the concepts or ideas presented by the more knowledgeable others, it was expected and found that not all participants would experience this transformative learning. However, participants were able to engage in experiences that build toward TE, these being motivated use, expansion of perception, and experiential value. TE was consciously and explicitly addressed (Pugh et al., 2019) throughout the scaffolding process during this five-week study.

**Quantitative Data Collection**

Due to the mixed methods experimental design, the quantitative data collection was be implemented at the beginning and end of the intervention. During the initial data collection phase, all participants were asked to complete a demographic questionnaire (Appendix C) and a modified Transformative Experience Measurement (Appendix D). These were administered through the use of an accessible Qualtrics link provided on social media platforms for those willing to participate to obtain essential, general information at the beginning of the study. To alleviate delimitations and to ensure that a range of essences is captured, participants' gender, race, and identified neurodiversity were considered. All participants in this study were assigned pseudonyms to ensure protection of their identity.

***Demographic Questionnaire.*** Before the first meeting, participants were asked to complete a demographic questionnaire via Qualtrics. Questionnaires are seen to ensure that what is being measured is undeviating across all participants, as this increases overall validity (Johnson & Turner, 2003). Demographic questions cover age, gender, and any identified neurodiversity. As well as questions addressing the education level and the age of the children they currently work with. Including this demographic questionnaire provides great depth of the characteristics of the educators within this study, allowing for a more comprehensive analysis and thick, rich descriptions regarding the data pertinent to this study.

***Participant Demographics.*** The tables that follow embody the participant demographics of this study. There were 13 participants who provided their age, gender, level of education, neurodiversity, and age level they are currently working with. All percentages are rounded to the nearest whole number. There was no table needed to represent the gender of the

participants who participated in the questionnaire, with the largest number of participants identifying as female, which was 100%.

Table 1 displays the recorded ages of participants in range format. The greatest number of participants were in the 25-34 age range, with 62% of participants. The age range of 45-54 contained 23%, while 18-24 and 55-64 both contained 8% each.

**Table 1**

*Participants' Age*

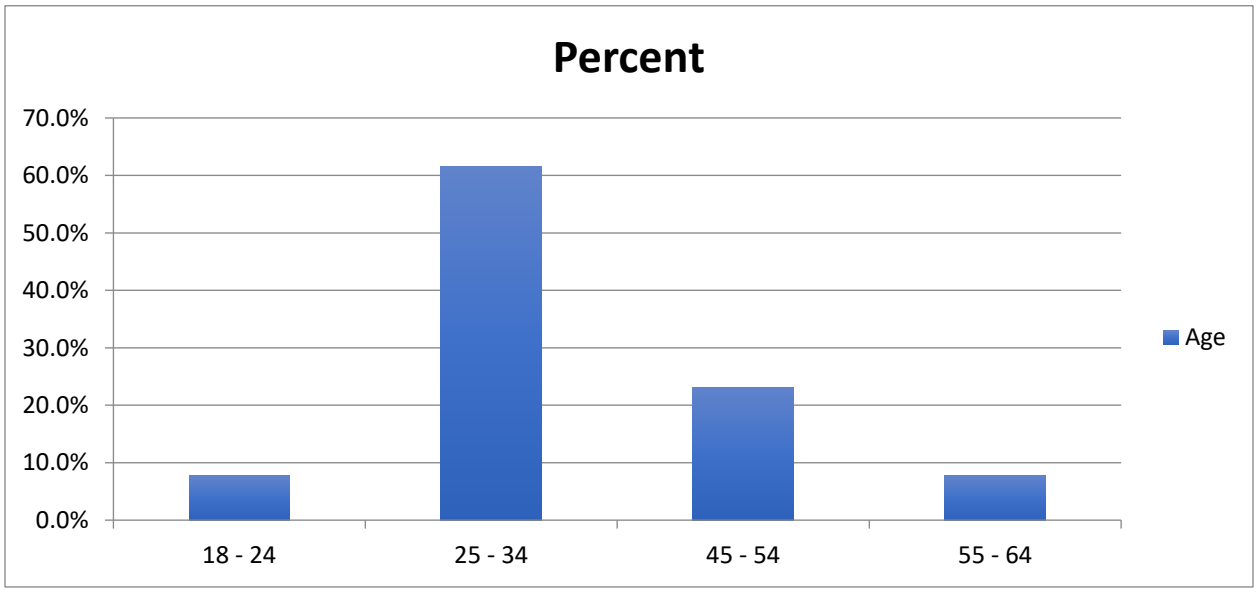



Table 2 contains the level of education claimed by the participants. The largest level held by participants was a bachelor's degree, which represented 62% of the participant pool.

**Table 2**

*Participants' Level of Education*

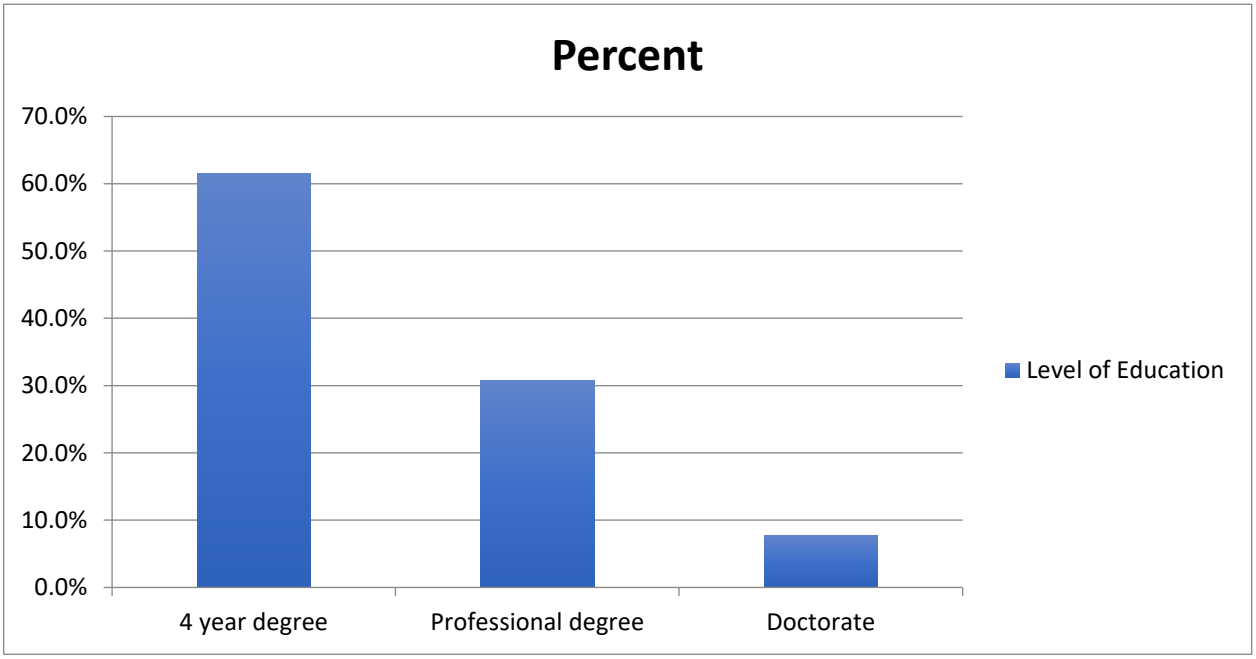



Table 3 displays any identified neurodiversity(s) the participant may carry as part of their identity. The greatest number of participants indicated they were diagnosed with ADHD and/or ADD.

**Table 3**

*Participants' Neurodiversity*

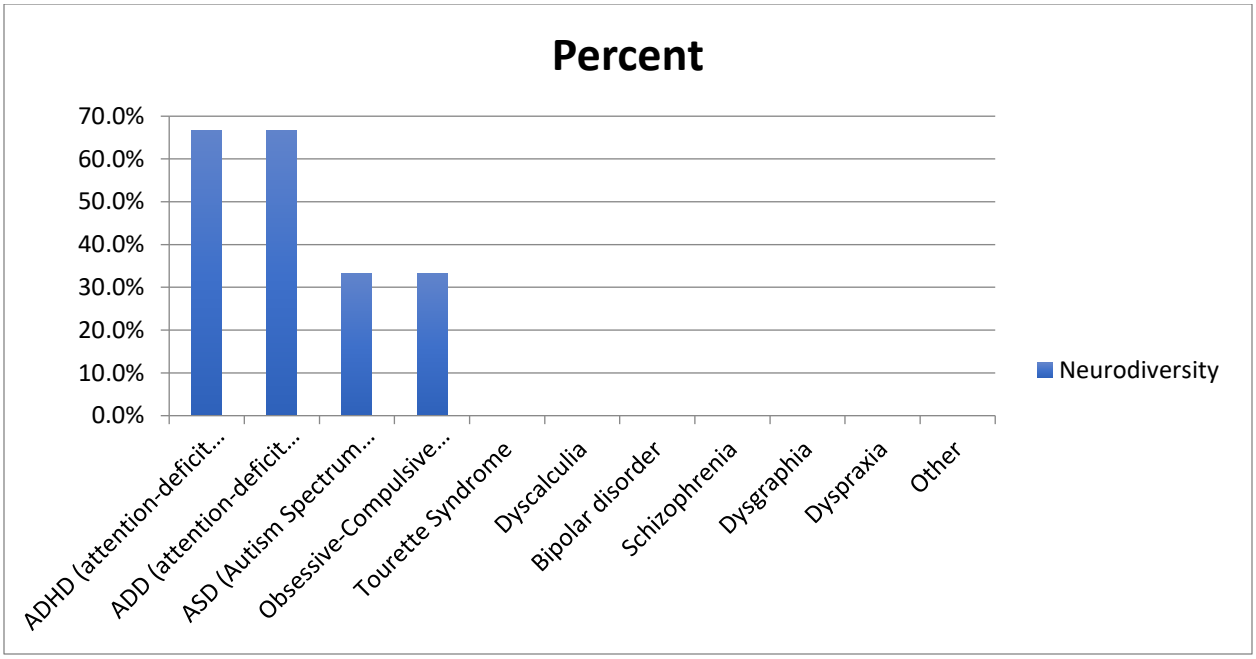
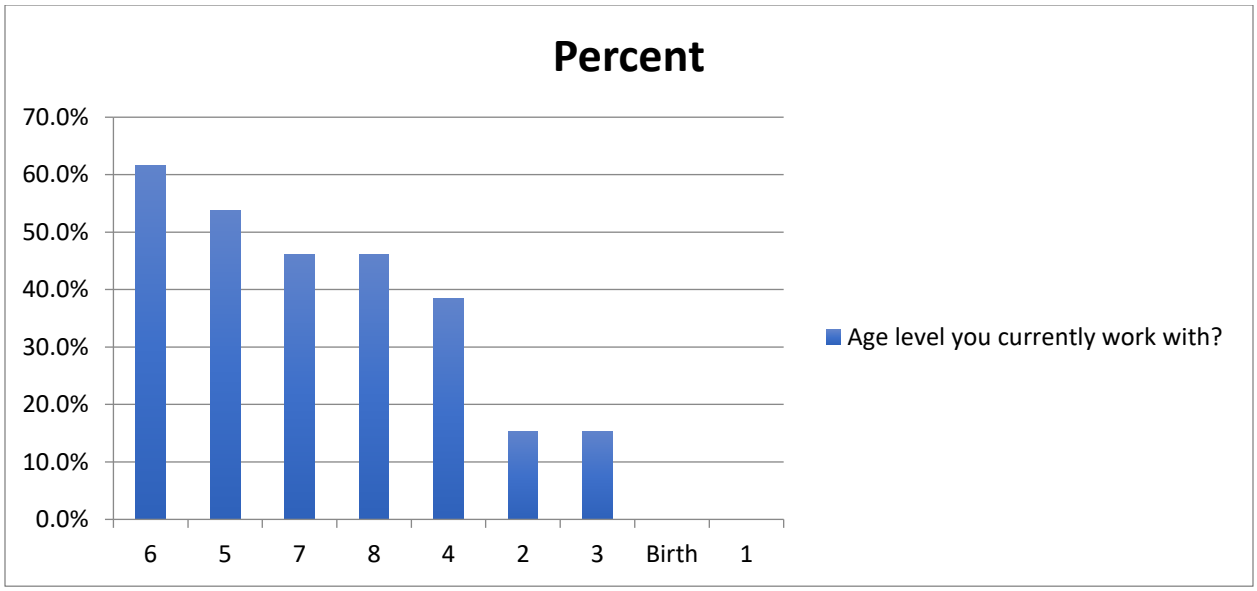



Table 4 displays the current age level that the teachers were currently working with. On the survey, teachers were able to select all that applied, as many teach mixed-age classrooms. The greatest number of teachers were currently working with students aged 6.

**Table 4**

*Age Level Currently Working With*




***Transformative Experience Measurement.*** The quantitative data collected is the transformative experience measurement, a 27-question, four-point Likert scale modified to measure TE with *flow*. Previous studies in which the TEM was administered reveal that utilization of Rasch analysis (Rasch, 1960; 1980) produces favorable, reliable outcomes. The Rasch analysis orders items based on the difficulty developing composite TE scores (Pugh et al., 2010). Pugh et al. (2010) found that the TEM "item reliability was .99 and person reliability was .94, suggesting that we can be confident of the item difficulty ordering and ordering of respondents according to performance on the instrument" (p. 285). The TEM was administered at the beginning, before the intervention, which provided an opportunity to establish a baseline measuring participants' current level of experiencing TE with *flow*. Creswell and Clark (2018) convey that administration of the measure before the intervention would further document the need for the intervention (p. 109). This was also administered at the end of the five-week intervention period to reveal sustained effects of the intervention (Creswell & Clark, 2018, p.9).

The data gathered from the Transformative Experience Measurement (TEM) contributed to and led to a baseline and outcomes understanding of individual and cohesive understanding and engagements with the transformative experience theory focused on the motivational concept of *flow.* The TEM served as an instrumentation to identify pre-and post-test measures and further document the need for TE intervention (Creswell & Clark, 2018; Creswell et al., 2009). This 27-question, 4-point Likert scale has been determined to be valid and reliable when pertaining to the participants' measured experiences regarding motivated use, expansion of perception, and experiential value of the concept (Heddy & Sinatra, 2013; Koskey et al., 2016; Pugh et al., 2010). The Transformative Experience Measurement, administered in this study as pre-intervention and post-intervention, asked participants to respond to higher-order statements such as, "I talk with others about Flow concepts just for the fun of it, I find myself thinking about *flow* concepts in everyday situations, and knowledge of *flow* concepts is useful in my current, everyday life." Participants were able to react to each of the questions by responding (1) strongly agree, (2) agree, (3) disagree, and (4) strongly disagree on the 4-point Likert scale. The TEM was accommodated into the concept of *flow* for this research to fit the area best; no other wording was altered. At two points, prior to the initial delivery and once the NCV journaling phase was complete at the end of the 5-week intervention, the participants received a Transformative Experience Measurement (TEM) (Pugh, 2009; Pugh et al., 2010; Pugh, 2011).

**Qualitative Data Collection**

Incorporating qualitative data serves as a motive to integrate subjective, contextual, and experiential insights as experienced by the participants during the intervention (Creswell & Clark, 2018; Merriam, 2009). In this particular study, encountering *flow* in everyday encounters was documented through NCV journals throughout the five weeks.

***Introductory Meeting.*** Prior to beginning the qualitative data collection, participants were asked to attend one of six provided meeting times based on which time best fit their busy schedule. Utilizing virtual meetings, 16 willing participants joined in on a 45-minute introductory meeting. As the researcher, I aligned the meeting with the philosophy of transformative experience theory by framing contents as ideas and experiences, scaffolding re-seeing, and modeling (Pugh et al., 2017). During this meeting, participants received information regarding transformative experience and flow to best align with framing the concept of flow as 'more than a word.' I then provided real-life examples of how I have personally engaged in TE with flow through reading, teaching, playing, and writing. After providing an opportunity for the teachers to re-see the concept of flow in action, I provided opportunities for all to reflect on and voice how they feel they may have engaged in flow in their lives. Common answers provided during this sharable opportunity were "organizing," "cleaning," "singing," and "reading" (Field Notebook, Week Zero). Beyond scaffolding reseeing, I then modeled an in-depth full TE where I noticed, changed my perception of, and curated deep value of flow through the act of reading in my personal life. Establishing this foundation alongside the assurance of scaffolding fortified the completion rate of the five-week mixed methods study. The concept of scaffolding participant NCV journals was also addressed in depth prior to the ceasing of the meeting. Scaffolding (Bruner, 1978) within TE helped teachers identify (Pugh et al., 2017) potential experienced content beyond this study.

***Notice, Change, Value (NCV) Journals.*** Participants were tasked with utilizing secured Google Docs to have the opportunity to document detailed experiences they believe are TE. Notice, Change, Value (NCV) (Appendix E) allowed on-the-spot documentation of believed TE occurrences with *flow*. This was the first study utilizing NCV journaling to document *flow*

experiences; however, NCV journaling has been employed to document other areas of conceptual change with TE (Heddy & Sinatra, 2013). The individuals documented where they noticed *flow* (MU), how they saw that circumstance, activity, or event differently (EP), and how they valued that experience (EV). Each participant was asked to submit a minimum of 5 entries via Google Documents, at least once weekly, of this documented experience to provide context and display individual growth as they progress in understanding, applying, and recognizing TE and *flow*. Through the utilization of the act of journaling, the written ideas and understanding of each participant enabled and eased the maintenance of a continuous record of participation. This allowed the researcher to monitor activity and provide critical scaffolding feedback when needed, enabling opportunities to validate trustworthiness during the implementation phase. Participants were given the option for additional entries throughout this study.

Scaffolding was provided through conversation, guidance, and feedback to NCV journals. This provided the opportunity to guide participants to stay within the NCV framework and hopefully begin experiencing more TEs without scaffolding. Heddy et al. (2017) expressed that students who engage in NCV discussion reported higher levels of interest in the presented ideas. Scaffolding consisted of commenting on, questioning, probing, or sharing personal experiences with Noticing (motivated use), Change (expansion of perception), and Value (experiential value) within the participants' documented NCV journal entry. Ideally, scaffolding would lessen each week, which held true for most participants in this study. Heddy and Sinatra (2013) successfully utilized NCV journaling, stating that participants were able to reflect on their experiences systematically (p. 8). Further, when moderation is missing, Heddy and Sinatra (2013) state that misconceptions may arise (p.14-15).

***Researcher Field Notebook.*** Throughout the five weeks, I maintained a well-kept, descriptive field notebook (Merriam & Tisdell, 2016). The field notebook contains my personal responses that occurred at multiple points during the data collection process. This notebook reflected the outward thoughts throughout the process, documenting ideas that arose, data collection notes, coding approaches, and audit biases. It also included insights, thoughts, and possible ponderings during the data analysis process. I reread all of the field notes taken each week, beginning with week zero. Using the comparative process (Bazeley, 2013) allowed me to compare my attitudes and feelings about the entries and scaffolding responses to and from each participant to the findings within the codes. It also provided the opportunity to look at potential biases I held. These biases were noted and carefully considered throughout my research. The perceptions were written in the field notebook and compared to the emerging themes. The researcher's field notebook also helped to determine the areas of need for future research.

**Data Analysis**

Qualitative data analysis first required exploring the data by reading through it to develop a general idea of the data (Creswell & Clark, 2018). Through this approach, augmentation enabled the participants' voices to remain (Creswell & Clark, 2018; Morse, 1994). Analyzation of the qualitative data began with inductive coding. Inductive coding first occurred through open coding (Morse, 1994). With this approach, I was able to begin with coding and then theming (Creswell & Clark, 2018), thus providing evidence for the research questions. Codes describing the lived experiences and identification of motivated use, experiential value, and perception expansion were generated to ensure NCV takes place. Upon the completion of coding, synthesizing began by revising the codes in search of similarities (Morse, 1994). Within this stage, codes were merged, generating categories that elucidated themes (Creswell & Clark,

2018) across the NCV entries. Themes were then used to enable theorizing and further allow connections to existing theories (Morse, 1994). In addition to this approach, I also utilized in case analysis to further understand the experiences of those cases that documented full TEs each week. Moustakas (1994) states that through the the integration of in case analysis, the researcher seeks individual meaning within the group to then, as stated by Creswell (2013), provide a unique lens to examine the phenomenon.

**Trustworthiness**

This study served the purpose of delving into a deeper understanding of the phenomenon of transformative experiences with *flow* within early childhood educators' personal lives. The four criteria (a) credibility, (b) transferability, (c) dependability, and (d) confirmability establish trustworthiness; thereby, each will be elaborated upon as to how the researcher was able to ensure trustworthiness.

**Credibility**

Multiple data sources, such as Transformative Experience Measure, NCV journaling, and researcher field notebooks, offer triangulation (Creswell & Poth, 2014). As mentioned, participant selection was purposeful and convenient. The researcher and participants' roles were established from the beginning for NCV scaffolding purposes. The field notebook enabled the researcher to engage in reflective practice throughout the study and screen for bias within the emerging themes within coding. To minimize the threat, instruments used are seen as established and reliable. The TEM, proven reliable through the utilization of Rasch analysis (Rasch, 1960; 1980), produces favorable, reliable outcomes.

**Transferability, Dependability, Confirmability**

Throughout this methodology chapter, rich descriptions of ideas and proposals have been provided in the methods section. Extensive descriptions of the differing methods utilized are listed within the procedures section. The methods listed include demographic surveys, participant NCV journals, TEM surveys, and the utilization of researcher field notebooks.

Confirmation of results is derived from experiences with the phenomenon and the data collected throughout the study. The employment of a researcher field notebook supports information tracking throughout the study.

# Chapter 4: Findings and Discussion

The purpose of this mixed-methods experimental design was to understand the ways in which early childhood educators engage in transformative experiences with *flow* in their personal lives. More specifically, the overarching research question in this one-group pre-test-post-test questioned: Does facilitating transformative experiences with flow through an intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM?

There were two sub-questions that focused heavily on qualitative data derived from Notice, Change, Value journaling. These questions were:

> How does a transformative experience intervention with flow result in noticing flow?
>
> How does Notice, Change, Value (NCV) Journaling reveal MU, EP, and EV with *flow*?

The findings in this study are organized to first provide answers to the three research questions. However, beyond those, themes and sub-themes emerged from the data analysis of the transformative experience measurement and NCV journaling completed by the participants, as well as the field notebook kept by the researcher. Support for the three characteristics of transformative experiences are addressed, split into supporting findings of Motivated Use, Expansion of Perception, and Experiential Value. Direct quotes from NCV journal entries were used to authentically articulate the lived experience of the participants. Pseudonyms have also been used to protect participant identity.

It is imperative to address two critical components of this study. First, while this study focuses on early childhood educators, this study does not focus on the act of teaching. It is hypothesized that experiencing small shifts of perceptual change in their personal life

experiences can lead to additional change in multiple areas of life, ideally teaching practices. The focus on personal life experiences directly correlates to burnout and lower quality of personal life which an astoundingly alarming number of educators have reported experiencing. Secondly, due to the demands and expectations of teaching in early childhood education, as well as the immense emotions correlated with the teaching profession, such as stress, burnout, external pressures, and overall mental health and well-being, this study took place during the summer months where teachers were off-contract and better able to focus on themselves and personal moments of flow.

## Research Question: Overarching Question

Does facilitating transformative experiences with flow through an intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM?

There were four separate t-tests run to measure the overall growth of participants' TEM scores. A two-tailed t-test with 12 degrees of freedom and a 95 percent confidence interval was ran within each test. The first test measured growth in motivated use, which was measured through questions one through eleven of the TEM. Based on the data, I was able to reject the null hypothesis due to the significant difference between the t-table value and the t-test. Within this measure, the t-table value was that of 2.179, and the t-test revealed 7.60, a significant change.

The second test measured growth in the expansion of perception, questions twelve through eighteen. This area displayed the most growth of the three characteristics of transformative experience. Based on this data, I was able to reject the null hypothesis. Within the measure of expansion of perception, the t-table value remained at 2.179, and the t-test revealed 10.69. Statistically significant growth was expounded through this test.

The third test measured growth in experiential value, questions nineteen through twenty-seven. Based on the data, I was, once again, able to reject the null hypothesis. The t-table was that of 2.179, and the t-test was that of 8.54.

Lastly, based on the complete data of the population of early childhood educators, the results for the complete TEM measuring MU, EP, and EV, questions one through twenty-seven, also showed significant change between pre-and-post-test measures. A two-tailed t-test with 12 degrees of freedom and a 95 percent confidence interval proved such. The t-table value was 2.179 in comparison to the t-test, which revealed 5.78.

Based on these tests, all fall out of 2.179, which enabled me to reject the null hypothesis in each and show significant growth, further proving that facilitating transformative experiences with flow through an intervention results in a higher measure of engaging in transformative experiences in early childhood educators.

**Research Question: Sub-Question One**

How does a transformative experience intervention with flow result in noticing flow?

The act of noticing flow is directly associated with the transformative experience characteristic of Motivated Use, which is the action of noticing and applying the content or concept freely, outside of structured requirements. During this act, individuals can better identify the concept of focus through the exchange of experiences between self and their environment, of which they present a dynamic balance between opportunity and ability. Through this direct application and identification of flow experiences, teachers were better able to experience what may go unrecognized or unnoticed in their daily interactions with the world. John Dewey (1958) theorized that these experiences could become much more meaningful and impactful if they

become *an* experience. To best address the noticing of flow in everyday experiences, this research question solely focused on the notice (N) portion of each individual's journal entry across the five-week study. Data analysis revealed that teachers noticed the concept of flow in a plethora of areas. These areas have been categorized into three overarching themes: Physical Exchanges, Mental Stimulation, and Play.

**Physical Exchanges**

A majority of the teachers reported that within their personal lives, they noticed flow while engaging physically with their environment. According to the World Health Organization (WHO), physical activity is defined as "any bodily movement produced by skeletal muscles that requires energy expenditure" (2023, para. 1). It is critical to note at this point that, by this definition, some of the activities categorized in mental stimulation could be placed in either physical exchanges or mental stimulation. However, for this study, I chose to classify physical exchanges as moments that required gross motor movement.

***Chores.*** An interesting commonality that arose pertaining to noticing flow was engaging in the act of chores. Housework, organizing, mundane little dreaded tasks—as a society, it is ingrained in us that these should be continuously labeled as undesired or unenjoyable. Teachers documented noticing flow in an array of chores, including washing their face, cleaning, organizing, doing household dishes, folding laundry, and completing yard work. The noticing flow in this act of completing an often-undesired task is directly associated with a highly enjoyable psychological state that surfaced shifts of perception and anticipation in those individuals. For example, one participant stated, "noticing flow changed the way I saw this routine. Sometimes (okay… often), I view it as a chore. I think this is why I turn on my phone -

to distract and “help me through it.” However, last night it was really enjoyable” (Shelly, week 1).

***Exercise.*** Another area of physical exertion documented was the act of exercise, which was recorded through the manifestation of walking (n=-4), hiking (n=3), running (n=1), and riding (n=1). The noticing of flow in these areas was stated as the individual being “completely engrossed by the beauty and only being able to focus on what was in front of me” (Charlie, week 2). This directly connects with the requirement of complete submission to the task at hand. This direct submission resulted in a loss of time and overall enjoyment, as stated by another participant engaging in bike riding: “I did not pay attention to the timer or my intensity level because I got caught up in the enjoyment of the ride” (Kenzie, week 4).

**Mental Stimulation**

Attention is a form of psychic energy needed to control the stream of consciousness. Within this study, there were many documented moments of noticing flow in activities that did not require exhaustive physical output but rather required a different exertion of attentiveness. Teachers recorded noticing flow in various areas that involved total submission to the task: Dreamy States of Being, Creative Outlets, and Conversation.

***Dreamy State of Being.*** An aspect of mental stimulation presented itself in a very passively relaxing manner. Dreams are considered to be a mental process; however, they do not demand attention. When in an actual dream, choice amongst the experienced consciousness is not an option for the individual partaking in the experience (Csikszentmihalyi, 1978). In all, while dreaming, attention is paralyzed.

Within this study, there were documented moments of engagements requiring attention, particularly mental stimulation, yet presenting itself as a moment of “dreaminess” (Charlie, week

1) were found in 15 different entries. These states of escape were most documented in moments of reading such as Terris' encounter stating, "I realized I was in flow when I was so into my read that I didn't realized how much time had passed me by" (week 1), and observing nature: Davy noted that she noticed flow while "looking out across the lake" (week 2) while Maddie engaged with nature by being "out on the balcony and listen[ing] to the rain"(week 3).

***Creative Outlets.*** Creative activities, like art, provide boundless opportunities for growth and development within an individual. Through continual enhancement of ability, individuals are able to alter the way they understand and interact with their surroundings. Through this study, creative outlets were documented, including drawing, painting, and decorating (classrooms, of course). Through this, individuals construct new ways of thinking and outcomes that are unique solely to that person. For example, Maddie stated, "I notice when I start painting … I will look at the time and realize a couple of hours have gone by and it only feels like 30 minutes" (week 2) and another reported, "I noticed flow when I went up and worked in my classroom this week… I love having my summers off, but I also get excited to start a new school year and get my classroom ready for my new little students" (Kitty, week 5).

***Conversation.*** Within the coding process, I began to identify that participants noticed flow when in verbal exchanges with another. Teachers documented engaging with another person just prior to noticing flow within the activity in 26 of the 65, or 40%, of the NCV journal entries. Shelly noticed flow in conversation while out at dinner, stating, "during dinner, we all had a good time visiting, laughing with one another, enjoying our meal … I was truly enjoying the company" (week 3). While stepping out of her comfort zone in a local mission, Kenzie noticed flow when evangelizing; she noted, "I noticed flow when our Sunday School Class went out to complete a local mission in our community. Being gathered with other believers with the same

goal in mind kindled my own excitement gave me peace and encouragement about stepping out of my comfort zone. I totally lost track of the time and could have continued what we were doing" (week 3). Others documented noticing flow in conversation, relaying, "we spent about 30 minutes just talking about music that we both like" (Kitty, week 1) and "I experienced flow in our conversation, and before I knew it, I had walked 4 miles" (Patty, week 3). Conversation and the meaningfulness behind the words require individuals to adhere to an understood cultural framework of social norms individuals follow in conversation, this meaning that we alternate opportunities to speak. Flow is possible in conversation due to the complexity of psychic energy involving knowledge turn-taking between listening and speaking. Documentations of conversations included many expressions of expansion of perception regarding the intimacy towards the individuals involved in a conversation, as well as a deeper value and heightened appreciation of the moments in conversation.

**Play**

It has been found that the most typical kind of flow encounter was through play. Within this study, 21.5 % of all journal entries mentioned noticing flow while playing. Play is complex in that it is not identified as a mere elementary reaction toward environmental demands. Play can encompass physical exchanges and mental stimulation, thereby creating a standalone theme within this study. Through these lived experiences with play, 12 of the 14 play documentations involved engaging in this act with others. It was stated that "we were having so much fun, we had to intentionally stop and think about dinner" (Angel, week 2) and "I lost track of time, and we played for much longer than I thought we did" (Charlie, week 1). It was also well documented that through these acts, expansion of perception and experiential value was also

experienced. This meaning that during the act of play, participants were able to experience all three characteristics of transformative experience, thereby having a full TE.

## Research Question: Sub-Question Two

How does Notice, Change, Value (NCV) Journaling reveal MU, EP, and EV with *flow*?

It is critical to remember that transformative experiences possess three critical components: Motivated Use, Expansion of Perception, and Experiential Value. All must be achieved to have a full transformative experience. It was well understood that due to the vast complexity of TE that not all participants would engage in a full TE each week or at all. Within this study, especially during week one, there were documented experiences that would not qualify as flow. A common experience in many households, television viewing produces a feeling of mild discomfort that is noticeable to the individual, but often disregarded. Television viewing is also considered passive, which does not align with the characteristics of flow. Thereby, in this study, while there were four documentations of television experience, it was noted that there was an overall awareness of flow, but flow nor MU was experienced.

Sub-Question one solely focused on motivated use, the first critical characteristic of flow. Aside from the four journal entries listed above, there were several documentations of flow experiences that fostered expansion of perception and/or experiential value within teachers' transformative experiences. Expansion of perception allowed the micro-changes, or minor palatable shifts in perspective with the concept of flow to take place across many experiences in educators' lives. ~~In~~ most cases where expansion of perception was well-documented, individuals also experienced experiential value, achieving a full transformative experience. The individuals documented where they noticed the concept of flow, how they were able to change their perceptions towards that engagement, and how they also cultivated value of the concept.

**Expansion of Perception**

Throughout this study, teachers were challenged with and scaffolded towards seeing, thinking, and acting inversely to the ways others interact with the world, in essence, a challenge to change their perception.

***Self.*** It was found that teachers experienced a shift in the way which they viewed themselves. While in flow, the individuals were able to possess an overall self-awareness of their place in the world, but did not allow themselves to be limited by that understanding. In other words, teachers were able to identify their best, authentic self in moments of flow. They authentically experienced engagement that promoted a sense of overall life enjoyment and an overall sense of happiness. It seems that noticing flow permitted an overall loss of self only to rediscover true self in a new light. Terri felt that she became more aware of her place in the world. She stated, "when I noticed flow, my view on the vastness of our world changed, and my view of self-changed as well" (Terri, week 2). Iris felt she developed a deeper understanding of identity by noting, "in those times of flow, I was able to reflect and recognize that my purpose in my home is so important and it is a gift to care for and serve my family" (Iris, week 4).

Within re-seeing self, many expressed recognitions of the abilities they possessed. Benny, while in church listening to her preacher, stated that she was able to change the way she saw that she "can put [her] total focus on what [she's] learning" (Benny, week 3). Iris was able to change the way she views moments of intense study. She revealed surprise by expressing, "the fact that I am able to reach the flow state while studying shows the growth in me" (Iris, week 3). The ability to change the way individuals approach adversities in life and view them in a different perspective due to the experiencing of flow illuminates the profound impact TE with flow can

have on individual's lives. Perhaps the most expressive shift in perspective regarding one's ability came from Kathy:

> I noticed flow during a hike on vacation. We spent multiple days in a row hiking, and after one bad experience, I felt like I was done! I was encouraged by a friend to push through and do one more hike since it was our final day. I was in my head about feeling inadequate and thinking I would not be able to complete it after my previous experience. After I began the hike, I started to focus on the beauty around me. Before I knew it, I had reached my destination, which was the top of a waterfall. Noticing flow [during the hike] helped me to continue to push through and complete the hike that I almost talked myself out of. It distracted me from my previous ¨I can´t do this¨ way of thinking.

***Others.*** It was heavily documented that when noticing flow, the individual teachers altered their perception of those they were engaging with during that noted moment. Teachers shared moments of expansion of perception regarding others in an array of ways. The intentionality of the time and conversations documented with friends and family proved to be conducive to flow in many of the teachers' life experiences. The shift in perspective of how the other is viewed reveals the intimacy of connection and how such connections can go unnoticed without the experiencing of TE with flow.

Specifically speaking towards the view of the other, Terri was able to deepen her understanding of the child through play. She noted, "noticing flow changed the way I saw a child's imagination and view of the world. Although I've known that a child can have a wild imagination and be creative, playing with my niece and nephew (2.5 years and 5 years,

respectively) showed me the extent of the things they take in on a daily basis and learn without even realizing that they are learning" (week 3). The power of flow through interactions enabled Davy to identify "how much an individual I do know can pour into me (week 3)".

A common finding in NCV journal entries was the quality of the time spent with the loved one. Teachers were able to engage in the active awareness and responsiveness of the moment with comments such as "it's really fulfilling to not only be fully present but to mentally note it, too… it's encouraging me to be mindful of the present moment I am in" (Shelly, week 2). Amidst common get-togethers, Shelly was able to recognize, within flow, how much she has changed her perception by stating she is now "appreciating, enjoying, and spending time in the moment with the people around me. I do see my grandparents often, but it was a great reminder to be present. I'm glad I was unexpectedly present" (week 3). She continued in a future entry that "noticing *flow* is changing the way I am perceiving and taking advantage of the moments with the people around me. I am trying to be more mindful of putting away my phone/not looking at my phone. As a result of the mindfulness in this - I'm also naturally just not reaching for my phone anymore!" (Shelly, week 4).

This value of time spent with others allowed for those moments to be transformed. Davy noted how she viewed that time with her daughter differently (week 1), while Angel revealed that when experiencing flow while playing with her family that, they were all "focused on one another and not worried about other things" (week 2). Flow, in time spent with others, can also be experienced in the midst of the night, alone with a new baby. Cameron stated, "when I noticed flow, it changed the way I wanted to spend my time with my newborn, even if it was at 2:30 in the morning. It made me realize I needed to soak these precious moments in" (week 4).

***The World.*** There were multiple occasions where teachers revealed an expansion of perception regarding how they view the world we live in. They were able to express experiencing their everyday world in meaningful, new ways. Noticing flow changed the way one participant engaged with the world through exchanges with the way they viewed "the wildlife interacting with each other, and all the sounds that come with nature" (Davy, week 2). The mentioning of being keenly aware of the sounds of nature was further supported by another experience where another stated, "I took in all of my surroundings. Not even just the sights but the sounds as well. I noticed the sound of the beautiful wind chime they have more than ever" (Cameron, week 1). The ability to re-see through a transformative experience is compelling, as it has the powerful ability to change ones very being, immediately— "when I noticed flow, my view on the vastness of our world changed" (Terri, week 2).

***Daunting Tasks.*** Another common shift in perception experienced throughout this study was the ways in which moment and events are viewed. There was an overwhelming sense of optimism in journals that documented tasks that are heavily influenced by societal views. Household or personal tasks that society has labeled as chores and forms of exercise were well-documented throughout this study. What is typically labeled as a mundane experience, provided opportunities for participants to notice flow as well develop value for those tasks within a new lens. It was stated within Kenzie's journal, "I was proud of myself for finding flow in something I usually find daunting. I was so happy that I allowed the flow to happen and just felt joy in the moment that I was grateful for flow" (week 2). Angel stated that "this experience has helped me change the way I see tasks. I am able to dive into work-related tasks and focus on them completely. Flow helps me "get in the zone" and tune everything else out. I feel more efficient and productive" (week 5). Flow also transformed a dreaded moment for Patty where she

documented, “I found flow in an activity that I was really dreading. I had planned on walking two miles, it was hot, I did not want to do it, but I made myself go to the track. I ended up walking with my grandson. We had a wonderful time, I experienced flow in our conversation, and before I knew it, I had walked four miles. Noticing *flow* changed the way I saw [how] a difficult situation quickly turned into a pleasant experience” (week 3).

Cleaning was a common code within this shift. The transformation in outlook towards these tasks further justified that the flow experience, even in mundane tasks, can result in enjoyment, perseverance, and generate anticipation towards future like experiences. Kenzie also stated noticing *flow* changed the way she saw cleaning as a task or dreaded chore, “the time passed quickly... my mind seemed to be relaxed and drifted to happy thoughts rather than the thought of how much flooring I still had left to clean” (week 2). Kathy also expressed a shift in her outlook towards cleaning in that “noticing flow changed the way I saw cleaning because it helped me focus on the positive of how I felt mentally instead of focusing on the amount of time that had passed by missing out on things I would normally feel I should have already accomplished” (week 1). Lastly, Charlie revealed that the expansion of perception towards mundane tasks can generate anticipation by stating, “I normally hate cleaning, but I saw it differently knowing that I was so lost in it I wasn’t even listening to my favorite podcast. This allowed me to view cleaning in a new light, and I’m actually looking forward to cleaning again” (week 2).

**Experiential Value**

Within this study, not all participants engaged in experiential value. It is also critical to state that even those that did experience experiential value did not experience full TE’s each week; they did, however, progress in their evolution of experiencing full TE’s. This section

consists of multiple cross-case examples of how individual teachers within this study experienced experiential value. However, due to the impact of three participants engaging in MU, EP, and EV consistently each week, I elected to do an in-case analysis with those three. Identifying motivated use, expansion of perception, and experiential value within the first week of Charlie, Shelly, and Iris' entries revealed that with a successful introductory meeting, followed by successful scaffolding, full TEs are able to be experienced with flow.

***Charlie.*** Upon noticing flow, for the first time, through the act of play. Charlie stated, "I've never really thought about flow before, but now I can see how it can transform small mundane things into what makes our lives dreamy. Romanticizing the small moments and noticing flow, I believe, will change my outlook on even the most minuscule tasks" (week 1). She was properly scaffolded and challenged to notice flow in addition to the act of play. She was encouraged to continue to notice how noticing flow may impact her life. Week two revealed that with continuous experiences of flow, it is possible that others are able to see the value impact on your life. Charlie stated, "I'm noticing more joy in my life. My husband even commented that I've been more joyful and happy this week, and I've been much more patient with my kids. I feel like this has allowed me to view my life differently" (week 2). This deep impact continued influencing Charlie while she was on vacation with her family: "It's given me a new perspective in so many areas of life and being able to enjoy our vacation on a deeper level was life-changing for me" (week 3). Aside from the overall enjoyment and life impact she stated she had experienced in just three short weeks, Charlie continued to experience TEs and recognizing the power of flow. During week four, she stated, "I'm giving myself more grace to allow myself to get lost in the moment. I'm not being so hard on myself when I lose track of time but finding joy in the moments that I get lost in what I'm doing" (week 4). This theme of grace and change in

self-reactions followed through during week five, where she stated, “I’ve found myself giving myself more grace and having much more peace when I notice flow in my everyday life. I’m so happy to take this practice and continue to notice flow from here on out” (week 5).

***Shelly.*** Shelly was a participant who engaged in deep reflection throughout her NCV journal entries. Each week, she conveyed the deep meaning experiencing TE is having in multiple areas of her life, especially in the moments that she spends with others. In three of her five entries, she documented how flow is surfacing deep emotion and appreciation towards those surrounding her. Shelly identified herself as an introvert, stating, “I definitely feel less tense/stressed when we go out around people. The flow experience has really made me work to be more present, which in turn has tuned more of a natural and mindless experience. It’s almost therapeutic” (week 4, scaffolded question response).

Shelly’s cultivation of value towards others speaks volumes toward the power of TE with flow with others. Moments with her husband and son were documented by stating, “*Flow* is valuable to me because it is helping me to be more intentional with the people around me during my free time. As a result, I am mindlessly more engaged with those around me and the experiences I have” (week 3). She also expressed the magnitude of small moments in that TE with flow “is changing the way I view and appreciate the “little moments.” It’s honestly like I’m filing away core memories” (week 4).

***Iris.*** Iris documented experiences with flow in multiple areas of her life, both solo and with others. Immediately, during a blueberry picking adventure in the heat of summer, she was able to recognize flow. This flow experience provided a “respite of worry and overthinking. I was able to do a task and enjoy it even if not everything about the situation was “ideal” (week 1). Although flow is considered to be a highly enjoyable psychological state, this, along with others,

reveals that not all situations are classified as enjoyable, but joy can be discovered within the flow experience. Iris continued to experience flow in an area that would not be one's ideal view of an enjoyable experience: studying. During her study session, Iris noticed flow and stated, "I believe that is when we all learn the best. We aren't thinking about anything else but the task at hand" (week 3). Experiential value continuously grew as Iris journaled, further experiencing flow while with others and documenting how it is an avenue for powerful connection. During week three, she said, "flow continues to be so valuable to me as each week goes by because I see that it helps me reflect on how I need to disconnect from external stimuli and focus on what is most important. Experiencing flow with my daughter has been my favorite state of flow yet, and I'm constantly learning on how to find connection with her through this process" (week three). This was followed by another connection experience while playing a game, Iris stated, "flow this week became more valuable to me because even though we tend to think of flow as an individual experience, I learned that flow can be an opportunity for connection. It can be a way to laugh or work together for a common goal" (week 4). TE with flow has revealed that it enables a person to find great power in moments of daily life that may have otherwise been overlooked. Iris ended her NCV journal entries by revealing this power by stating:

> noticing flow has been so valuable to me because when I am in flow, I am at peace, and the more I recognize flow, the more I have come to realize how truly fulfilled I am. I think sometimes when we get resentful or overwhelmed with our life and all of the things that we have to take care of, the voice of discontentment can get really loud. The more that I recognize flow in my daily life, that voice of the negative outlooks doesn't seem so loud. I am able to recognize that there is so

much more good in my life than the one or two times a day that something doesn't go just the way that I want it to.

***Others.*** Other participants within the study displayed that they, too, experienced full TEs, just not weekly, as revealed in previous sections of this study. Flow has the ability to expand perception and generate value of self, as stated by Terri, "it shows me that it's okay to be your true self" (week 5), and life approaches, as stated by Kathy, "it helps me find the silver lining in what can sometimes be a daunting task" (week 4). Flow promotes "peace [in the] midst of being very overwhelmed" (Cameron, week 3), "efficiency" (Angel, week 1, week 3), and has potential to provide opportunities to "allow you to just really focus on whatever you are doing in that moment" (Maddie, week 4). All participants engaged in the characteristic of experiential value at least once during their journey.

## Summary of Findings

This chapter discussed the lived experiences of 13 early childhood educators and their transformative experiences with flow. The teachers in this study attended an introductory meeting where they were introduced to the transformative experience theory, the motivational concept of flow, and the idea of scaffolding NCV journal entries. Over the course of five weeks, early educators documented their perceived transformative experience encounters with the concept of flow. The characteristics of Motivated Use, Expansion of Perception, and Experiential Value were identified each week and properly coded, categorized, and themed. Findings revealed that not all teachers engaged in transformative experiences each week, but scaffolding did increase the advancement in

experiences toward a full TE. The findings were significant, as motivated use, expansion of perception, and experiential value were well documented.

Through documentation, motivated use, which is the action of noticing and applying the content or concept autonomously, freely, outside of regulated requirements revealed that educators experienced noticing flow when in 1) physical exchanges with their environment, 2) receiving mental stimulation from their environment, and 3) in the act of play. Expansion of perception, the act of seeing the aspects of the world (e.g., events, objects, issues, themselves) through the lens of the content and perceive deeper layers of meaning, revealed that teachers were able to see themselves, others, and their world differently due to engaging in transformative experiences with flow. Experiential value, developing greater value for those aspects of the world re-seen through the lens of content and, consequently, developing greater value for the content itself, was documented. Engaging in transformative experiences with flow in their daily lives was proven to be beneficial in supporting the educator's well-being. There is hope that due to this experience, educators will generalize their flow experiences into their classrooms to continue to recognize flow in themselves and, hopefully others. "I really hope these flow-state experiences continue to be more noticeable throughout the school year. Especially when I am off-contract" (Shelly, week 4).

# Chapter 5: Discussion and Implications

There is an ever-present, daunting crisis that teachers today face within their profession. While considered professionals in their respective areas, they are continuously presented with externally controlled, high stakes demands. Due to these demands, teachers are entering into their careers daily with externally controlled standards, pre-prescribed curricula, high-stakes testing, rigid schedules, and governmental mandates—all of which dictate school rankings and funding (Allee-Herndon & Roberts, 2021). Due to these external pressures, educators are continuously cognizant of how they conduct themselves, even if it goes against their educated identity (Wilson, 2007). The consequences of the relentless, extraneous decrees are impacting teachers, students, and the entirety of the education system.

Statistics show that an astounding number of educated certified teachers leave the profession within their first five years of service (Ingersoll, 2001). Professional educators have revealed that they are experiencing a range of harmful emotions that emerge from the detrimental work environments caused by the high stakes testing culture (Oberle et al., 2020). This pervasive culture has impacted the ways in which teacher's implement instructional practices (Hannaway & Hamilton, 2008), ways which they view their autonomy, or lack of (Gonzalez et al., 2016), and overall consideration of exiting the field (Boyd et al., 2009).

Identified as a byproduct of stress (Haberman, 2005), attributes of burnout include emotional fatigue, overall detachment from performance, and a pervasive sense of unfulfillment (Kokkinos, 2006; Schonert-Reichl, 2017). This overall experience profoundly impacts educators' well-being as teachers have reported experiencing symptoms of stress, anxiety, and depression (Alves et al., 2021). The pervasive nature of burnout undermines the professional as it is intimately linked to the demandingness the profession encompasses and further linked to teacher

attrition (Aloe et al., 2013; Chan, 2006; O'Brian et al., 2008) and overall willingness to remain in the profession.

Critical contributors to the anomaly of burnout, as reported being experienced by teachers, are stress, negative self-efficacy, and concerningly low mental health and well-being across the profession. Experiencing persistent chronic stress within the field of education has been identified as a root cause of physiological changes in biological indicators of stress among educators (Schonert-Reichl, 2017). Due to facing chronic stressors, teachers have reported a diminished self-efficacy (Gonzalez et al., 2016), which is critical to the teaching profession. In addition to this, the educators' vulnerability of their well-being has direct implications on the education system's health (Schonert-Reichl et al., 2017).

The motivational concept of flow is "a highly enjoyable psychological state that refers to the holistic sensation people feel when they act with total involvement" (Csikszentmihalyi, 1975, p. 36). Engaging in flow experiences has been proven to promote many positive implications for the brain (Dietrich, 2004; Sinnett et al., 2020). Transformative experience is an instructional approach that enables individuals to see concepts in action or as being able to be experienced (Pugh, 2011). When engaging with subject-matter outside of typical learning environments, individuals are able to alter their perception of and cultivate value towards that concept in a personal, meaningful way (Heddy & Pugh, 2015; Pugh, 2002; 2004). Through the unification of three distinctive characteristics Motivated Use, Expansion of Perception, and Experiential Value (Heddy & Pugh, 2015; Pugh, 2004; Pugh, 2002; Pugh et al., 2017), individuals are able to forever change the way in which they engage with their environment.

It is believed that due to the positive implication of flow, facilitating transformative experiences with flow could positively alter the ways which teachers act upon their environment.

Overall physical and mental health depends on a proper balance of work and leisure, overall energy expenditure, and recovery (Mikołajczyk, 2021). TE with flow provides the opportunity to generate transferability of TE with flow between one's personal and professional life. Permitting small shifts in perceptual change (Heddy & Pugh, 2015) and overall value impact (Pugh et al., 2010) with the concept of flow gives hope for the mitigation of overwhelming feelings of stress and burnout educators experience. The present study investigated the shifts in perceptual change and the value impact transformative experiences with flow could have on early childhood educators within their personal life experiences. This study was guided by the primary research question: Does facilitating transformative experiences with flow through an intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM?

There were two sub-questions that focus heavily on qualitative data derived from Notice, Change, Value journaling. These questions were:

How does a transformative experience intervention with flow result in noticing flow?

How does Notice, Change, Value (NCV) Journaling reveal MU, EP, and EV with *flow*?

This chapter will discuss some of the important implications from the data. Providing significant insights derived from the data analysis, then connecting the findings with supporting literature. The chapter will conclude with limitations and suggestions for future research.

**Transformative Experience Measure**

A one-group pre-and-post-test measure was administered prior to the introductory meeting and at the ceasing of the five-week NCV journaling period. The transformative experience measurement (TEM) is a 27-question, four-point Likert scale which was modified to measure TE with flow. The overall goal of this was to measure participant growth and overall

impact of this study. The TEM was administered at the beginning, before the intervention, to provide a baseline of the participants current level of understanding and experiencing TE with flow.

Four individual two-tailed t-tests with 12 degrees of freedom and a 95% confidence interval were run to assess overall growth in TE and the three individual characteristics, MU, EP, and EV. The results revealed statistically significant growth across all measures, each t-test outcome surpassing the t-table value of 2.179. Expansion of perception displayed the most notable growth (t= 10.69) followed by experiential value (t= 8.54) then motivated use (t= 7.60). The transformative experience measure as a whole also revealed statistically significant growth (t=5.78). These findings denote that participants in this study experienced substantive reconfiguration in their abilities to notice flow, alter perceptions, foster value, and engage in transformative experiences as a result of this intervention.

**Transformative Experience Characteristics**

Throughout the five-week journaling process, participants in this study documented their transformative experiences with flow in their daily lived experiences. Within the journal format, participants stated where they noticed flow (motivated use), changed the way they viewed the encounter (expansion of perception), and potentially developed a newfound value of flow (experiential value) (Heddy & Pugh, 2015; Pugh, 2004; Pugh, 2002; Pugh et al., 2017). It was found that within each of the characteristics, teachers acted upon their environment in differing ways.

**Motivated use**

Motivated use is the application of content in contexts where application is not required but freely applied (Pugh et al., 2017). This study revealed that teachers engage in three different

types of motivated use, or overall noticing of flow. Within their daily life interactions, teachers reported noticing flow in physical exchanges with their environment through the acts of chores and exercise, through engagement in mental stimulation through dreamy states of being, creative outlets, and in conversation, and most often when in the act of play.

**Expansion of perception**

Expansion of perception is conveyed as being the act of seeing the aspects of the world (e.g., events, objects, issues, themselves) through the lens of the content and perceiving deeper layers of meaning (Pugh et al., 2017). Teachers, within this study, clearly displayed that they are able to enjoy life experiences and change the ways in which they view these exchanges. Findings show that teachers were able to change the way they see or expand their perception regarding multiple aspects of life encounters. It was found that early childhood educators expanded their perception in areas of how they view themselves, others, the world and their new outlook towards daunting tasks.

**Experiential value**

Experiential value occurs when an individual develops greater value for those aspects of the world re-seen through the lens of content and, consequently, greater value for the content itself (Pugh et al., 2017). Transformative experience theory aims to transform engagements. Transformation is achieved through the individual developing experiential value (Pugh et al., 2009) or the newfound value of the concept. In this study, TE with flow generated value in a multiplicity of areas in life, as documented by early childhood educators. It was found that educators who experienced flow undoubtedly changed the ways in which they interacted with their environment, now approaching engagements in deep, meaningful ways as a result of developed value.

## Limitations

This study included early childhood educators who are currently working with students aged two to eight. This study was a five-week long study, requiring participants to join a 45-minute introductory meeting, complete two > 7-minute surveys, and journal once weekly for five weeks. There was difficulty in finding a large number of educators to participate in such a demanding study for that length of time. Thereby, a limitation of this study was the length of time to complete.

Diversity could be considered another limitation. Despite efforts to recruit many, thirteen individuals who identify as female participated. Of these thirteen, the only diversity identified was that of neurodiversity, with one identifying as ASD, two as ADHD, two as ADD, and one as OCD. A related limitation was that those educating children aged between birth and one were not represented in the data set.

Another limitation of this study that could be considered is geography. All participants teach in an area of the Midwest. However, the thick, rich descriptions provided by the lived experiences (Glense, 2011) of the teachers generated a deep understanding of the phenomenon.

An ever-present limitation could be the difficulty some participants encountered in understanding TE, as well as the difficulty assessing TE (Pugh et al., 2017); therefore, they may not have experienced encounters. According to TE researchers, the theory of TE is difficult to understand, and multiple attempts are needed to comprehend its complexity.

Finally, due to the large focus on qualitative research through NCV journaling, researcher bias was a potential limitation to the overall credibility. As an early childhood educator who

actively engages in TE with flow, I closely related to the experiences of the thirteen participants. To counter this, I kept a field notebook.

Regardless of the research's limitations, this study's outcomes present advancement in the field of transformative experience, the field of flow, and the field of early childhood education.

## Recommendations for Future Research

This was the first study to focus on transformative experiences with early childhood education teachers. Future research with this group, in addition to elementary teachers, needs to be done. Transformative experience theory within teachers' personal and professional lives properly displays the benefits of the theory. Experiencing first as self could potentially prosper into enacting transformative experience theory through their own personal practices. The same could be said for promoting flow in the classroom. Further research could focus on several early childhood teacher and their class to see how this theory impacts their classroom practices.

Further research is also recommended in the neuroscientific area of brain research when in the state of flow. There is very little research focused on the activity of the brain while in the flow state. It is known that when engaging with flow, individuals' neurological pathways are altered (Dietrich, 2004). The overall downregulation of the prefrontal cortex enables this state. However, from this study, I theorize that when exiting out of the state of flow, the prefrontal cortex could experience a brisk state of heightened sensory memory due to the depravation state it is coming out of. Thereby, I recommend a future study incorporating electroencephalograms (EEGs) to further investigate and monitor brain activity prior to, during, and immediately after engaging in the state of flow to fully understand how this manifests in someone’s brain.

Lastly, more research should be conducted within the area of transformative experience regarding the theory of an "awareness of [concept]." That is, theoretically, based on this study, I hypothesized that individuals may experience a general awareness of the concept of focus prior to engaging in the act of motivated use.

## Conclusion

This research presented the overarching goal of understanding perceptual change and the value impact transformative experiences with flow can have on early childhood educators within their personal life experiences. Data analysis revealed that there are multiple positive outcomes when facilitating transformative experiences with flow. Through this five-week study, early childhood educators were able to use, alter the perception of, and generate an authentic value of the concept in a multiplicity of areas that directly impact their very being. The thirteen early childhood educators have equipped themselves with powerful tools they can use to forever view life encounters differently.

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# Appendix A

*Participant Recruitment Email*

Hello,

You are invited to participate in a research study for early childhood educators. This study will focus on transformative experiences with the motivational concept of *flow*. This five-week study aims to facilitate understanding, perception, and value of *flow* through the transformative experience theory. Further aims are to measure the overall perception and value of individual experiences you find enjoyable within your personal life experiences. Flow is theorized to elicit enjoyment and happiness when engaged in it.

You are eligible for participation if you are an early childhood educator interacting with young people.

Participation in this study will include one 45-minute introductory meeting (held virtually and recorded on Zoom), utilization of an online journaling system (these will be referred to as NCV journals) once or twice a week for five weeks, and two ~7-minute surveys completed before and after the five-week study completes.

Please complete the online questionnaire if you agree to participate in this study. The questionnaire will ask for demographic information and your contact information so that the researcher may gain contact with you.

If you have any questions about this study, please contact:

Shaylee Chester

(580) 467-7788

schester@ou.edu

## Appendix B

*Participant Consent*

You are invited to participate in a research study for early childhood educators. This study will focus on transformative experiences with the motivational concept of *flow*. This five-week study aims to facilitate understanding, perception, and value of *flow* through the transformative experience theory. Further aims are to measure the overall perception and value of individual experiences you find enjoyable within your personal life experiences. Flow is theorized to elicit enjoyment and happiness when engaged in it.

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Please complete the online questionnaire if you agree to participate in this study. The questionnaire will ask for demographic information and your contact information so that the researcher may gain contact with you.

There are no risks or benefits to your participation in this study. Your participation is voluntary, and your individual responses will be shared only with the researcher. Data will not be shared; to maintain confidentiality, pseudonyms will be used in the final reports to safeguard identity.

You may elect to cease participation in this study anytime for any reason. Data are gathered through an online survey system with security and privacy policies to maintain confidentiality.

If you have any questions about this study, please contact:

Shaylee Chester

(580) 467-7788

schester@ou.edu

You may contact the faculty advisor if you cannot contact the researcher.

Dr. Courtney Beers Dewhirst

### ### ####

cbeers@ou.edu

You may also contact the University of Oklahoma- Norman Campus Institutional Review Board at 405-325-8110 irb@ou.edu with questions, concerns, or complaints about your rights as a research participant or if you don't want to talk to the researcher.

# Appendix C

*Demographic Survey (Qualtrics)*

Please respond to each of the following to the best of your knowledge:

Age:

Gender:

Neurodiversity:

Level of Education:

Identified Age Level you currently work with (if multi-age, please select identified ages)

# Appendix D

*Transformative Experience Measurement (Qualtrics)*

## Transformative Experience Measure

(for a study of transformative experiences with *Flow*)

**Instructions:** For each question, select the response that best matches the extent to which you agree or disagree.

[Responses will be on a four-pt. Likert scale, (1)Strongly Disagree, (2) Disagree, (3) Agree, (4) Strongly Agree]

(Adapted from Pugh et al. 2010)

1. I talk with others about experiencing Flow during this intervention/study.
2. Outside of this study, I talk with others about experiencing Flow.
3. I talk with others about Flow just for the fun of it.
4. During this intervention/study, I thought about how the concept of Flow applies to real-world objects and events.
5. Outside of this study, I think about Flow.
6. I find myself thinking about Flow in everyday situations.
7. I apply the knowledge I've learned about Flow during the intervention/study.
8. Outside of this intervention/study, I apply the knowledge I've learned about Flow.
9. I apply the stuff I've learned about Flow even when I didn't have to.
10. I look for chances to apply my knowledge of Flow in my everyday life.
11. I think about experiencing objects, events, and/or issues differently now that I have learned about Flow.
12. During this intervention/study, I notice Flow.

13. If I see someone enjoying an object, event, and/or issue (either in real life or on TV), then I think about it in terms of Flow.
14. The concepts I learned in this intervention/study changed the way I see experiences.
15. I can't help but see experiences in terms of Flow now.
16. I notice examples of Flow in my everyday life that I would not have noticed before participating in this Flow study.
17. Outside of this intervention/study, I look for examples of Flow.
18. Learning about Flow is useful for my practices.
19. Flow helps me to better understand the world around me.
20. Knowledge of Flow is useful in my current, everyday life.
21. I find that Flow makes my current, out-of-study experience more meaningful and interesting.
22. Flow makes experiences much more interesting.
23. During this intervention/study, I find it interesting to learn about Flow.
24. I think Flow is an interesting concept.
25. I find it interesting when we talk about experiences in terms of Flow during this intervention/study.
26. I am interested when I hear things about Flow experiences outside of this intervention/study.
27. Outside of this intervention/study, I find it exciting to think about Flow.

1-11 measures Motivated Use

12-18 measures Expansion of Perception

19-27 measures Experiential Value

# Appendix E

*Participant NCV Journal*

## Flow NCV Journaling

***Flow***: "a highly enjoyable psychological state that refers to the holistic sensation people feel when they act with total involvement" (Csikszentmihalyi, 1975; Kowal & Fortier, 1999, p. 356).

**Other ways *flow* has been described:** losing track of time, time flying by, being in the zone, effortless control and enjoyment, being fully absorbed by the moment.

**Example of *flow*:**

- Motivated Use- Noticing flow in your life.

  I enjoy reading. I have picked up books and sat them down three hours later. Then I thought to myself, "Wow! I completely lost track of time; I just experienced *flow."* I notice *flow* more.

- Expansion of Perception—One begins to change one's current perception of an idea, object, or event.

  I have recognized that I experience *flow* in other areas of life besides reading, such as playing, teaching, and even writing. Flow has changed the way I see interactions I have with the world.

- Experiential Value—One has developed a newfound value for the concept of flow in such a way that it influences one's perception of the world.

  I have changed the way I view reading, teaching, playing, and writing due to my knowledge about flow and its benefits. I value *flow*.

---

**Week X: Reflection:** Think about the experience that you just had. Where did you notice *Flow* (N)? How did it change the way you experienced that activity? (C). And why is *Flow* valuable to you (V)?

**N:**

I noticed *flow* when…

**C:**

Noticing *flow* changed the way I saw…

**V:**

*Flow* is valuable to me because…

# Appendix F

| Research Question | Data Collection | Data Information |
|---|---|---|
| Does facilitating transformative experiences with flow through an intervention result in a higher measure of engaging in transformative experiences, as measured by the TEM? | Transformative Experience Measurement | The TEM will inform this overarching question. Each of the 27 questions aim at each of the three TE characteristics Motivated Use, Expansion of Perception, and Experiential Value. The TEM will display growth in one, two, or all of the different characteristics. If growth is made in all three, we can thereby assume that TE was achieved. |
| How does a transformative experience intervention with flow result in noticing flow? | Transformative Experience Measurement & NCV Journaling | The TEM will reveal if there was measurable growth in the areas of Motivated Use, and/or Expansion of Perception, and/or Experiential Value based on the different components of the TEM.<br><br>NCV journaling will reveal documented experiences of Motivated Use, and/or Expansion of Perception, and/or Experiential Value regarding the concept of flow. |
| How does Notice, Change, Value (NCV) Journaling reveal MU, EP, and EV with flow? | NCV Journaling | NCV Journaling will allow documentation of events where participants believed they encountered flow. |

# Appendix G

**Re: Permission to Use Figure in Dissertation**

PK Pugh, Kevin <Kevin.Pugh@unco.edu>
To: Shaylee Chester
Sat 3/2/2024 10:51 AM

You don't often get email from kevin.pugh@unco.edu. Learn why this is important

CAUTION: This email originated from outside of USAO, and/or from an unknown/non-trusted domain. Do **NOT** click on links or open attachments **UNLESS** you recognize the sender and know the content is safe.

Hi Shaylee.

Yep! You are welcome to use it. For a dissertation I think that is all the permission you need, but for a publication, I think you have to get permission from the journal to reproduce figures.

Tell Ben hi from me and good luck on your dissertation!

Kevin
--
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# Appendix H

*Codebook of Qualitative Codes*

| *RQ#* | *Theme* | *Category* | *Sub-Category* |
|---|---|---|---|
| s-1 | Motivated Use | Physical Exchanges | Chores |
| | | | Exercises |
| | | Mental Stimulation | |
| | | | Dreamy States |
| | | | Creative Outlet |
| | | | Conversation |
| | | Play | |
| s-2 | Expansion of Perception | | |
| | | Self | |
| | | Others | |
| | | The World | |
| | | Daunting Tasks | |
| | Experiential Value | | |
| | | Charlie | |
| | | Shelly | |
| | | Iris | |
| | | Others | |