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# A Photo for Change: A Mixed Methods Study of Using Photovoice Pedagogy to Foster Transformative Learning Among College Students

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## UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

## A PHOTO FOR CHANGE: A MIXED METHODS STUDY OF USING PHOTOVOICE PEDAGOGY TO FOSTER TRANSFORMATIVE LEARNING AMONG COLLEGE STUDENTS

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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College of Education and Behavioral Sciences School of Psychological Sciences Educational Psychology Program

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This Dissertation by: Maaly Younis

Entitled: A Photo for Change: A Mixed Methods Study of Using Photovoice Pedagogy to Foster Transformative Learning Among College Students

has been approved as meeting the requirements for the Degree of Doctor of Philosophy and College of Education and Behavioral Sciences in School of Psychological Sciences, Educational Psychology Program

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#### ABSTRACT

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Learning in adulthood should be a meaningful experience through which adult learners are able to re-examine their values and beliefs acquired over the years. Mezirow (1978a, 1978b) stated that learners' engagement with this process of reflection and making meaning leads to a change in one's perspective. To facilitate such a transformational learning experience, adult education scholars explored various pedagogical approaches that cultivates environments conducive to transformative learning, among which are art-based pedagogies. Photovoice is an art-based pedagogy that utilizes photography and storytelling to foster critical reflection and increase learners' critical awareness. To date, investigating the transformative affordances of photovoice pedagogy to foster personal transformation as defined by Mezirow among undergraduate students has been overlooked. Photovoice is a visual qualitative research method developed by Wang and Burris (1994) then it made its way to the classroom as an art-based pedagogy. Theoretically, it intersects with the underlying premise of transformative learning theory. However, no explicit connections between the two models have been established in the extant literature. Thus, this dissertation had both theoretical and empirical goals.

The dissertation followed the alternative format of developing two manuscripts. The first manuscript focused on theoretically establishing photovoice as a transformative pedagogy through explicitly stating the transformative affordances of the pedagogical approach. To

elaborate, I discussed the current models of transformative pedagogy in the extant literature and their intersection with photovoice pedagogy. I proposed a pedagogical model framing photovoice as a transformative pedagogy by expanding on the previous transformative pedagogical models and explaining the unique aspect photovoice pedagogy holds as an art-based approach to foster both transformative learning and aesthetics.

The second manuscript reported the outcome of a mixed method case study. Through utilizing an embedded case study approach that was primarily a visual qualitative investigation with a secondary quantitative component, the study explored the transformative affordances of implementing photovoice pedagogical intervention among undergraduate students in a developmental psychology course. A second goal of the study was to explore students' perceptions and experiences with the photovoice intervention. The data collection entailed both qualitative (photovoice interviews) and quantitative (post-intervention surveys) aspects. A total of 46 participants participated in the quantitative aspect of the study and a subsequent sample of 11 participants volunteered for the qualitative interviews. Both the quantitative and qualitative data were integrated and a photovoice transformative pedagogical model emerged from the data, explaining the process and the outcome of the participants' transformative journey. Data were analyzed through the theoretical lens of transformative learning (Mezirow, 1978a, 1978b) and transformative experience (Pugh, 2011). The outcome of this dissertation added to the current literature of both transformative learning and photovoice pedagogy. Framing photovoice as a transformative pedagogy added value to existing approaches that have been investigated empirically. The outcome of the embedded case study provided empirical evidence of the potential transformative affordances of photovoice pedagogy, especially in psychology courses. Finally, as photovoice methodology entails, there should be practical outcomes to share with the

target community. In the case of this study, the target community was adult educators. I concluded the dissertation by providing practical recommendations for adult educators to facilitate fostering transformative learning in their classrooms.

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#### CHAPTER I

### INTRODUCTION

Education is not preparation for life; education is life itself.

--John Dewey, Art as Experience, 1934/1980

Over the past two decades or more, the emphasis on measuring the educational outcomes shifted the focus of the educational trajectory for learners from a journey that offers opportunities to expand and grow to a product-oriented process where learners focus mainly on being achievement-oriented by achieving high grades (Biesta, 2009). In such an educational system that values grades and standardized learning experiences, can learning be transformative? How can educators create a learning environment that provides learners with learning opportunities that enrich their lives and expand their perception of who they are and the world they live in? What are possible pedagogical practices that foster transformative learning? All these questions represent challenges that face educators who have progressive and emancipatory views on education. They aim to extend the learning outcomes beyond mastering the content to enrich their students' lives, especially in higher education. In college, adults come to classrooms with well-established views about the world and hold many assumptions, limitations, and misconceptions that are hard to transform and usually act as an added challenge when there are not enough opportunities to integrate the academic and the personal views together (Mezirow, 2000; Taylor, 2000).

A considerable body of research indicated the traditional model of learning puts a huge emphasis on accumulating content information, facts, and concepts. These kinds of models are widespread throughout university undergraduate classrooms. Oftentimes, learners develop skills to fulfill the requirements of their courses successfully. However, they fail to incorporate the knowledge gained from these educational experiences into their existing ideas. (Entwistle & Entwistle, 1991; Gibbs, 1992; Moore, 2005). Most adult learners find it challenging to integrate information and knowledge they gain in the academic realm if it contradicts their existing beliefs (Taylor, 2000). Instead, these learners are very skilled at compartmentalizing academic knowledge from their personal beliefs to avoid mental discomfort (Taylor, 2000).

As an educator, in higher education, who holds progressive and emancipatory views about education, I witnessed this challenge over the years I have been teaching at the undergraduate level, especially in large classrooms where the learning environment feels less personal. Both the students and I are presented with logistical constraints like time, the amount of content that needs to be covered, and physical spaces that are not flexible enough to create a collaborative environment. Despite these challenges, I realized that presenting students with activities where they could connect what was being taught inside the classroom to their personal lives made the learning experience more meaningful and increased their academic engagement. Yet, I was always faced by another challenge that one or two assignments might not be enough to bring about a deeper shift in the students' understanding, transform their faulty assumption, misconceptions, or limited personal beliefs, and consequently, their worldviews.

Embarking upon this journey of earning a Ph.D. in educational psychology, I sought to investigate and explore pedagogical approaches that create learning environments, that foster academic engagement, and encourage personal growth inspired by academic learning. In other words, I became an educator in search of a transformative pedagogy. This continuous effort resulted in coming across the transformative learning theory for adult learners by Jack Mezirow (1978a, 1978b), transformative experience theory developed by Pugh (2004), and photovoice methodology (PV) developed by Wang and Burris (1997). Through integrating both transformative learning and photovoice in my teaching framework and practices, I found my calling as an educator and as an academic researcher through utilizing transformative learning, transformative experience, and photovoice as theoretical frameworks for both my teaching practices and my academic research endeavors. In the following sections, I provide an overview of the rationale for this dissertation; then I expand on transformative learning, transformative experience, and photovoice. Further, I explicate the potential connection among these frameworks that inspired and informed this scholarly endeavor.

#### Rationale

The core of transformative learning theory developed by Mezirow (1978a, 1978b) is that learning in adulthood should be transformative if adult educators present the learners with disorienting dilemmas that are intellectually and emotionally provocative to allow them to critically reflect and re-examine their existing values, views, and knowledge. The purpose of this reflection is to enable the learners to identify and critique uncritically acquired habits, values, beliefs and viewpoints that could be limiting and restricting for one to experience life fully. Mezirow goes on to highlight the central role of the learner to take it upon themselves to engage in the critical reflection process that might bring about cognitive and emotional discomfort as the person goes through the change. However, if the learner follows through with the transformative journey, they reframe their own world and experience life differently. Since the emergence of the theory in 1978, transformative learning scholars have extensively researched potential pedagogical practices that facilitate implementing or fostering transformative learning. The most recent research effort encouraged and recommended practices that encompass multiple ways of making meaning that go beyond the limitation of verbal expression only (Lawrence, 2008). Similarly, photovoice pedagogy is an innovative teaching approach that relies mainly on documentary photography as a tool for learners to explore topics and issues within their environment through a critical reflection lens. The act of taking photos that are paired with personal narratives becomes a medium of making meaning of the learner's world. Like transformative learning, photovoice emphasizes the central role of individuals in taking charge of re-exploring their world and reframing it through their active participation in re-defining that world (Gallo, 2001; Latz, 2017; Massengale et al., 2016). As I developed interest in both transformative learning and photovoice, my extensive review of the extant literature revealed two main gaps that I addressed through this dissertation. First, although the parallels between photovoice pedagogy and transformative learning were salient and the transformative potentials photovoice held a transformative pedagogy, no scholarly articles explicitly established the connection between transformative learning and photovoice in the existing literature. Second, most of the studies that explored the different pedagogical practices to foster transformative learning within classrooms were extensively conducted among students who were enrolled in nursing, health, and education undergraduate programs. Exploring how to foster transformative learning among undergraduate psychology students or in psychology courses was overlooked.

In Summer of 2019, I conducted a case study that focused on exploring the use of PV pedagogy among pre-service teachers in an online educational psychology course to expand and transform their pedagogical beliefs. The project was conducted to fulfill my doctoral comprehensive examination requirement and it was reviewed and approved in Spring 2020. In this study, I implemented a photovoice intervention that consisted of two assignments. The first assignment was a weekly photovoice reflection where the students responded to weekly prompts

by taking an original photo and providing a narrative to this photo as a response to the prompt. The second assignment was a teaching philosophy that included photos generated by the students representing the core of their teaching philosophy. For the case study, I interviewed four participants who took part in an hour photovoice one-on-one interview exploring and sharing their experiences with the photovoice intervention where they had to generate photos as part of their response to almost 50% of the interview questions. The major emerging themes showed that the participants experienced perspective transformation, which is the goal of transformative learning, on both the personal level as people and on the professional level as future teachers.

Another emerging theme indicated the participants went through a transformative experience due to the unique nature of the activity that inspired them to talk about it to others in their social circles like family and friends. Also, their search for photo elements engaged them with their daily life events and details through the course content lens. To elaborate, transformative experience was another learning theory developed by Pugh (2011) who explained learning as a transformative experience that happens when students actively use curricular concepts in everyday life to see and experience the world in a new, meaningful way. Pugh went further to elaborate on the three main characteristics of transformative experience: (a) motivated use (refers to applying the content to everyday situations), (b) expansion of perception (refers to seeing everyday details through content lens), and (c) experiential value (refers to valuing content as it enriches everyday life).

Both transformative learning and transformative experience intersect in several points as transformative theories (Heddy & Pugh, 2015). First, both theories aimed at enriching the individual's life experience through educational experiences that changes the way they see and interact with the world. Second, the concept of expansion of perception in transformative

experience intersects with the concept of critical reflection in transformative learning as both aim toward increasing the individual's awareness to examine their world closely to be able to re-see it through the lens of the new learning. This close and critical examination of everyday life could lead the person to go through a transformative experience and thus experience a rich personal transformation experience. The intersectionality between the two theories needs to be further explored as a possible outcome of the photovoice intervention. Therefore, the focus of this dissertation explored both theoretically and empirically the affordances photovoice pedagogy holds as a transformative pedagogy in fostering personal transformation among undergraduate students in psychology courses.

The focus of the theoretical paper was to explicitly frame photovoice as a transformative pedagogy. I started the article by providing an overview for transformative learning, photovoice, and different models of transformative pedagogy. Then, I used the core concepts of transformative learning theory as defined by Mezirow (1991): (a) experiencing a disorienting dilemma, (b) critical reflection, and (c) perspective transformation. Further, I discussed the art use as a medium for fostering transformative learning as discussed by Lawrence (2012). I proposed a pedagogical model that explicated how these components intersected with photovoice pedagogy as a transformative one. Finally, I concluded the chapter with remarks highlighting the potential transformative outcomes learners might experience as a result of going through personal transformation such as identity development (Illeris, 2014), and expansion of perception (Pugh, 2011).

To write this dissertation, I used the manuscript format option offered by the University of Northern Colorado (UNC) Graduate School. This format entails writing two articles publishable in journals such as *The Journal of Transformative Education* or *The Journal of*  *Transformative Learning*. The manuscripts adhered to all guidelines required by the Graduate School for dissertation manuscripts. I followed the outline of the chapters listed below:

- I. Introduction: Overview of topic and literature review
- II. Literature Review
- III. Methodology
- IV. A publishable article that is a theoretical argument/position paper to establish a connection between photovoice pedagogy and transformative learning. The article outline is:
  - a. Introduction
  - b. Overview of the history transformative Learning theory
  - c. Overview of existing transformative pedagogy models
  - d. Overview of the history of photovoice pedagogy
  - e. Proposed Photovoice transformative Pedagogy Model
  - f. Conclusion
- V. Publishable article presenting the empirical results of the photovoice case study.
   The results of the study were discussed and framed through the lens of transformative learning and transformative experience theories. The article outline is:
  - a. Introduction
  - b. Purpose of the Study
  - c. Methodology
  - d. Results
  - e. Discussion

- f. Limitations
- g. Future Directions
- h. Conclusion
- VI. Summary and Conclusion

## **Definitions and Terms**

To operationally define some of the key terminology used in this study, the definitions for the terms listed below were utilized throughout the dissertation. The following terms might provide context to better understand transformative learning, transformative experience, and photovoice pedagogy:

- **Critical Reflection**. Heightened forms of cognition that "involve us becoming aware of why we perceive, think, feel or act as we do, bringing about a lasting change in meaning perspectives (Mezirow, 1991, p. 108).
- **Disorienting Dilemma**. A kind of experience that is challenging or painful that varies in intensity from experiencing the loss of loved ones, severe illness or sometimes an eye-opening like a discussion of a book or a poem that promotes a different and deeper understanding of the world (Mezirow, 1991).
- **Personal Transformation**. This term refers to participants in this study experiencing either transformative learning or transformative experience or both.
- Photovoice Methodology. A visual qualitative research method that utilizes photos generated by participants as the main source of data to explore and examine issues in their lives. (Wang & Burris, 1997).

- **Photovoice Pedagogy**. An art-based pedagogy and research method that utilizes photography as an educational tool along with written narratives to engage learners with critically examining their surrounding environment through the content.
- **Transformative Experience**. A learning experience in which students use in-school learning to see and experience the outside of the school world differently. A transformative experience is described by three interrelated characteristics: (a) motivated use, (b) expansion of perception, and (c) experiential value (Pugh, 2011).
- **Transformative Learning**. The process of making new and revised interpretation of the meaning on an experience, which guides subsequent understanding, appreciation, and action (Mezirow, 1990, p. 1).
- **Transformative Pedagogy**. An activist pedagogy combining the elements of constructivist and critical pedagogy that empowers students to examine critically their beliefs, values, and knowledge with the goal of developing a reflective knowledge base, an appreciation for multiple perspectives, and a sense of critical consciousness and agency (Ukpokodu, 2009a).
- **Visual/Photo Data**. Photos produced by participants as part of their response to research themes or questions (Latz, 2017).
- **Word Data**. Narrative data that accompany photos produced by participants, whether this narration is verbal or in writing (Latz, 2017).

#### **Current Study**

To date, no studies have looked at pedagogical approaches that adapt a transformative learning lens to foster personal transformation among undergraduate students in psychology courses. Psychology as a social science informs everyday life interactions and the content of psychology courses holds rich opportunities for developing self-awareness and re-exploration of one's own experience in life. Further, adapting transformative pedagogical approaches in teaching psychology courses to college students encompasses a more comprehensive approach that addresses multiple learning goals developed by American Psychological Association (APA, 2016) for undergraduate psychology courses. Some of these goals are developing reflective skills, embracing diversity and inclusion values, developing effective writing skills, and developing scientific awareness that informs individual personal and professional interactions (APA, 2016). Therefore, this study addressed this gap through implementing photovoice pedagogy in a developmental psychology undergraduate course to explore how such a pedagogy could bring about personal transformation among college students as they re-explored their lives using their new knowledge of psychology.

#### **Purpose of the Study**

The purpose of this mixed methods study was to explore students' perceptions and experiences with the photovoice intervention in fostering personal transformation in a developmental psychology course as well as examining the overall level of the students' engagement in personal transformation. The results added to the literature of both transformative learning and photovoice pedagogy and could be a resource for adult educators who consider research for support in their pedagogical approaches when working with college students, especially in psychology.

#### **Research Questions**

- Q1 What is the class overall level of transformative engagement with the photovoice pedagogical intervention based on the self-reported ratings by students?
- Q2 What are the individual students' perspective of and experiences with the photovoice pedagogy as it relates to personal transformation?

Q3 Based on the qualitative and quantitative findings, what is the nature of the learning associated with the photovoice pedagogy?

#### CHAPTER II

#### LITERATURE REVIEW

Art is an adventure into an unknown world, which can be explored only by those willing to take risks.

--Mark Rothko, Manifesto, 1943

#### **Transformative Learning**

Transformative learning is an adult learning theory that is developed by Jack Mezirow (1978a, 1978b). The theory emerged from a qualitative investigation he conducted a study with returning women to college who were enrolled in a specific college re-entry program at a community college. Emerging themes from the data indicated these women experienced a transformational aspect of their academic learning. Upon their return to college, being nontraditional students presented them with a disorienting dilemma that triggered an acute personal and internal crisis (Mezirow, 1978a, 1978b). These women discovered they had to revisit their beliefs about themselves and the world around them. Based on this finding, Mezirow concluded such a crisis urged the individual to go through a process of critical examination and reflection on their beliefs, views, and assumptions about the world. This examination usually enabled the individual to recognize their restrictive and limiting beliefs and thinking patterns that needed to be changed and transformed to be able to engage with the world more authentically. Therefore, the individuals' engagement in self-critical reflection on their own experiences allowed room for transformation and expansion of one's own thoughts, feelings, and actions or as Mezirow stated, critical self-reflection could bring about the transformation of a frame of reference that reorients the habit of minds and subsequently the points of view (Calleja, 2014). Transformative learning

theory is about developing self-awareness through engagement in critical self-reflection on one's own values and beliefs to expand their perception and form a deeper meaning of life experiences. Mezirow (1991) then identified 10 phases for the transformation to happen that start with a disorienting dilemma and end with a perspective transformation and in between the person has to go through a process of critical self-examination of their own beliefs and values to identify the beliefs that hindered their engagement with the world in a meaningful way. According to Mezirow (1978a, 1978b, 1996), the transformative process happens in a linear but not always sequential manner and the 10 phases represent the detailed explanation of this process. The linearity and non-sequential aspects of the theory became central to the first wave of empirical studies that investigated in-depth how transformative learning might occur in the various learning environments for adults both formal and informal (Taylor, 1997).

# **Empirical Research on Transformative Learning Overview**

One of the early and most in-depth studies that shed light on the process of transformative learning was a study conducted by Coffman (1990) who qualitatively explored the use of inclusive language in a theology seminar at the graduate level to foster personal transformation. She conducted in-depth interviews with students in the program in the first, second, and third years of their theology master's degree. Coffman's goal of the study was to find evidence of perspective transformation and to explore the emergence of the 10 phases of transformation identified by Mezirow (1978a, 1978b). Her findings brought to light two important points that were different from Mezirow's conceptualization of the transformative learning process. First, according to her participants, in the early phases, they experienced feelings that were not restricted to shame and guilt as they realized their faulty assumptions in their belief system; rather, it was one of intense surprise as the participants engaged in critical

reflection. Second, the process of transformation was not as linear as Mezirow indicated; it was a spiral journey where participants continuously reflected on their own cultural roles and assumptions as they progressed in the program and hence, they kept spiraling around the 10 phases and not necessarily in sequence. Like Coffman's investigation, a study by Morgan (1987) examined the personal transformation of displaced homemakers and concluded that the most common feeling in the shared experience by the participants was anger and not shame or guilt. Participants could move forward in the transformation process when they were able to resolve this anger and resentment of their self-image in the past. These two main findings paved the way for future research endeavors that needed to recognize and expand on the role of emotions in transformative learning and the recursive nature of the process and phases as it seemed less linear than what Mezirow indicated.

The second wave of transformative learning studies focused more on how to foster and promote transformative learning within the classroom. These studies mainly focused on instructional activities and pedagogical practices that could be implemented within the classroom to create an environment that was more conducive to transformative learning. Taylor (2000) critically reviewed 23 empirical studies that focused solely on examining and exploring different instructional strategies to foster transformative learning in higher education classrooms and the outcome of these studies. The main undergraduate programs where these studies took place were health education, teacher education, and management. The findings of this paper revealed certain elements, although not all at once, should exist first in the environment to foster perspective transformation. The elements listed in Taylor were (a) the necessity of teachers to be trusting, empathetic, and caring; (b) an emphasis on personal self-disclosure; (c) the necessity of discussing and working through emotions and feelings before critical reflection; (d) the importance of storytelling and the use of narrative; (e) the importance of feedback and selfassessment; (f) solitude; and (g) self-dialogue (p. 10). He then identified six main instructional strategies that were used in these studies: (a) promoting group ownership and individual agency, (b) using intense shared experiential activities, (c) developing an awareness of personal and social contextual influences, (d) promoting value laden course content, (e) recognizing the interrelationship of critical reflection and affective learning, and (f) the need for time for change to happen. However, methodologically, this review identified several issues with the existing literature on transformative learning that needed to be addressed in future research: (a) the lack of quantitative evidence of transformative learning as the dominant mode of inquiry is qualitative and (b) the inadequately developed criteria of defining what practices foster transformative learning. Taylor concluded the paper with a general note highlighting that teaching toward transformative learning should be deliberate in terms of instructional and pedagogical planning and implementation within the classroom.

Similar efforts to explore and define what constitutes a transformative pedagogy were performed by Ukpokodu (2009a, 2009b) who qualitatively investigated fostering transformative learning. She utilized online discussion boards, reflective journaling, and reflective project summaries among 45 graduate students in the education program and among 26 pre-service teachers in pedagogical courses. Ukpokodu followed the same course design and implementation in both studies and collected data from the course assignments, informal qualitative course evaluations, and interviewing six participants to explore their experiences with transformative learning. Based on the results of the two studies, Ukpokodu (2009a) defined transformative pedagogy as an activist pedagogy combining the elements of constructivist and critical pedagogy that empowers students to examine critically their beliefs, values, and knowledge with the goal of developing a reflective knowledge base, an appreciation for multiple perspectives, and a sense of critical consciousness and agency (p. 43). Further, she identified specific pedagogical elements and practices to reinforce transformative learning that were very similar to the learning environment elements identified by Taylor (2000): (a) dialogic relationships in a learning community, (b) writing pre-post narrative inquiries, (c) engagement in structured discussions, (d) critical textual discourse, (e) experiential activities, and (f) experiencing a humanizing pedagogy. Although, Ukpokodu (2009a) presented a detailed model of transformative pedagogy, the model focused mainly on the cognitive aspect of transformative learning. Several scholars critiqued how the sole focus on cognitive factors only in transformative learning was not enough to understand the full experience of transformative learning (Taylor, 2000). In the following section, I discuss the holistic movement and approaches existing in the literature of transformative learning.

# Holistic Approaches to Transformative Learning

A recent wave of transformative learning studies focused on exploring more innovative approaches that are art-based to foster transformative learning. These art-based, focused interventions resulted from theoretical arguments made by devoted transformative learning scholars such as Patricia Cranton (2006a, 2006b), Beth Fisher-Yoshida et al. (2009) and John Dirkx (2001) whose scholarly endeavors focused on exploring the emotional and spiritual aspects of transformative learning as well. To clarify, spiritual aspect within the transformative learning paradigm focuses on the learner's increased connectedness to self, others, nature, and or the life force. A common argument in these scholars' works and others who followed their steps emphasized the provocative nature of art as it offers a modality for self-exploration and selfexpression that facilitates making meaning as a result of the individual's engagement with art (Fisher-Yoshida et al., 2009). Further, art is universal and as a means of communication, it surpasses linguistic barriers individuals in multicultural contexts could face when they engage in the processes of critical self-reflection, meaning making, and self-expression (Lawrence, 2008, 2012). In this case, art is considered a means to promote equity and embrace other ways of knowing that recognize one's thoughts and feelings as a valid way of constructing and reconstructing knowledge (Dirkx, 2001; Lawrence, 2008).

A study conducted by Hoggan and Cranton (2015) explored the use of reading fiction to promote transformative learning among 131 undergraduate and graduate students. The authors aimed to explore the influence of reading literary texts rich in metaphors to stimulate critical reflection and perspective transformation. The participants needed to provide a reflective narrative in response to reading the literary texts that were mainly short stories. The participants engaged in two reflective activities after reading the short story: small group and whole-class discussions and individual reflective essays. The reflective essays that were the source of data for this study were analyzed qualitatively. The researchers conducted multiple cycles of coding after which they elucidated two major themes: promoting change and new perspective. The in-depth explanation of these two major themes highlighted the significant role of personal connection the participants established with the literacy text that consequently stimulated an emotional response from the participants that varied among cynicism, anger, frustration, and amazement in fostering transformative learning. Hoggan and Cranton concluded the use of literary texts acted as an emotional and intellectual catalyst to engage participants in critical reflection and adapting new perspectives.

Similar findings were reported by Gallo (2001) who conducted a study utilizing photography that was accompanied by an oral or written personal narrative to foster

transformative learning among 23 immigrant workers in English as a second language (ESL) classes to accelerate the process of their acculturation. The qualitative analysis of the photos and the narratives of these participants as part of the course activities revealed their engagement in critical reflection and increase in their awareness of their new roles and identity in a new country. Through the act of sharing their photos and personal stories, they were able to explore the new changes in their lives and go through personal transformations to adapt to the new culture they had become a part of.

My pedagogical views on how to foster transformative learning aligned with the third wave that advocated for using artistic and holistic instructional practices to foster transformative learning. Art is powerful and transformative. I aligned with Fisher-Yoshida et al. (2009), Lawrence (2012), and Hoggan et al. (2009) who argued that engaging in the creation of an artistic expression increased one's connectedness to nature and to people. Further, it allowed learners to tap into their emotions and thoughts as they searched for elements to use in the artistic creation. One has to stay connected to their surrounding world and rediscover it through art. Hence, this daily engagement resulted in the individuals experiencing perspective transformation. Hence, learning becomes a life altering and enriching experience.

#### **Transformative Experience**

Pugh (2011) defined transformative experience as a learning experience in which students use in-school learning to see and experience the outside of the school world differently. A transformative experience is described by three interrelated characteristics: (a) motivated use (application of in-school learning without being asked to), (b) expansion of perception (re-seeing surrounding environment through the lens of school-learned content), and (c) experiential value (i.e., appreciating the content as it expands one's perception and ability to experience everyday life differently). Pugh's theory was grounded in Dewey's (1934/1980) philosophical views about education, who stated that education should enrich life experience.

To bring this theory to application, Pugh and colleagues (Pugh, 2020; Pugh et al., 2010, 2017) developed an instructional model that aimed at fostering transformative experiences in the science classrooms. The teaching for transformative experiences in science (TTES) model focused on utilizing metaphors to teach the content and scaffolding opportunities to re-see the world through a science content lens. Pugh and collogues investigated the effectiveness of this intervention across different educational stages at fostering transformative experiences (TE) among students. For example, Pugh et al. (2017) applied the TTES intervention for two years among sixth graders to apply science concepts outside of school. During the first year, the intervention was applied to one group of students to assess the model. Issues with the model were identified by the teacher and the model was refined by the researchers. In the second year of the project, the design included a comparison group. To assess the effectiveness of the intervention, the transformative experience questionnaire, a measure developed by Pugh et al. (2010), was administered to both groups and analyzed. The results of the study revealed that students in the experimental group demonstrated greater learning and transformative experiences than students in the comparison group.

One remarkable overlap between the instructional strategies that could foster transformative learning or transformative experience was the use of an artistic method to teach the content. The use of linguistic metaphors in TTES was meant to enhance the connection between content ideas and everyday life, while in transformative learning, the use of metaphors was not limited to language only as other artistic expressions were used as well. Therefore, the use of art-based pedagogy to foster transformative learning, like photovoice, would likely result in learners experiencing transformative experiences as the use of metaphors in different forms gave rise to expansion of perception.

## Differences Between Transformative Learning and Transformative Experience

Both transformative learning and transformative theories aim at enriching the learners' life experience. However, several differences between the two views on how transformation could happen need to be acknowledged. In this section, I list these differences to assist the reader in distinguishing between the two approaches. First, transformative learning is an adult learning theory that focuses on learning in adulthood only. On the other hand, transformative experience theory is not limited to any age group as the theory could be applied at any educational stage from K-16. Second, transformative learning theory does not limit the trigger to critical reflection through academic learning, i.e., adult learners could experience transformative learning in different contexts such as the workplace, international travel, as well as the classroom. Contrastingly, Pugh's (2020) theory focused on academic content as the primary component to engage with transformative experience.

#### **Photovoice Pedagogy**

Photovoice pedagogy is an instructional method that utilizes both photography and narrative writing to reflect on a given prompt or question. Predominantly, photovoice has been a visual qualitative research method that made its way to the classroom as a pedagogy due to its educational potential (Latz, 2017). Through the utilization of documentary photography, students engage with academic activities that reinforce the process of reflection and engagement with the content outside the classroom to explore the surrounding world through a critical lens. In a typical photovoice assignment, students are given prompts or themes to explore through taking photos (photo) by providing narratives to these photos (voice) to interpret what these photos mean according to their personal experience (Latz, 2017). The use of photovoice pedagogy has been mainly to foster educational values like inclusion, diversity (Chio & Fandt, 2007), and appreciation for science (Cook & Quigley, 2013; Stroud, 2014). Common reported outcomes of these studies indicated photovoice pedagogy increased students' critical self-awareness (Harkness & Stallworth, 2013; Lichty, 2013) and increased sense of autonomy and empowerment as they became more active and more responsible for their own learning (Massengale et al., 2016; Pérez et al., 2016). Moreover, several of the students reported their enjoyment with the artistic nature photovoice assignments had and how it gave them an opportunity to explore their creative abilities.

An example of how photovoice increased appreciation for science and fostered critical reflection was found in a study conducted by Cook and Quigley (2013). The authors utilized photovoice to enhance college students' engagement with science and increase their scientific literacy. The students were asked to explore and photographically document environmental issues on their campus. The study concluded that the use of photovoice connected the students more to science as it made science more relevant to their surrounding environment. Further, the students' participation in photovoice activities empowered them as they were able to recognize environmental issues that needed to be addressed in their environment and photovoice allowed them to document these issues and have an open dialogue with community stakeholders about possible change. Similar results were reported by Stroud (2014) who explored the use of photovoice in college-level introductory chemistry courses to increase engagement of non-science major students. The students were required to complete three tasks that varied between group and individual assignments. To complete these assignments, students needed to provide original photos accompanied by a reflective narrative on exploring one of their chemistry course

topics in their everyday life. The results were based on the students' evaluations in which they reported their appreciation of photovoice as it increased their connection to their surrounding environment and made learning chemistry more meaningful.

These reported results revealed the potential photovoice pedagogy has to foster both transformative learning and transformative experience. As reported by the students in aforementioned example studies, the students had to engage in a process of critical reflection, which is one of the core elements of transformative learning: to be able to identify an issue within their environment to explore through a scientific lens. Further, their ability to create connections between the content learned in a specific course to their everyday lives pertains to experiencing an expansion of perception, which is a main characteristic in transformative experience.

Despite the promising outcome of implementing photovoice as a pedagogy within the classroom, there were methodological concerns about the empirical methods used to explore the effectiveness of photovoice. First, most of the studies relied mainly on using students' evaluations as part of the course or the assignment design to report the effectiveness of the intervention. Most of these evaluations adapted open-ended surveys or group class discussion. This raised issues of rigor and trustworthiness as most of these studies did not report the use of any strategies to enhance the rigor of the reported studies such as member checking or peer debriefing given the qualitative nature of the data collected. The need for more rigorous methods of evaluating the pedagogy are still an effort to be addressed by future research endeavors. Second, there was no consensus among photovoice researchers whether assignments should be considered as photovoice data or should be analyzed as artifacts (Latz, 2017). When I stepped into this research endeavor, I aimed to address these methodological issues in the research design

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and utilize different strategies to maximize the research rigor I discuss in both Chapter III and Chapter V.

## **Summary**

In this chapter, I presented aspects of transformative learning theory, transformative experience theory, and photovoice pedagogy including the development, implementation, and effectiveness of photovoice pedagogy and how the existing literature of photovoice pedagogical practices could be advanced by framing photovoice as a transformative pedagogy. In Chapter III, I describe the methodology in terms of participants and types of methods I used for the research procedures in terms of data collection and analysis.

## CHAPTER III

## METHODOLOGY

Suit the action to the word and the word to the action.

--William Shakespeare, Hamlet

## Overview

In this chapter, I discuss the broader methodology and methodological framework utilized in this study. I provide a detailed account of the specific methods in the article comprising Chapter V. The primary purpose of this study was to explore and understand-college students' experiences with photovoice pedagogy in fostering transformative learning as defined by Mezirow (1978a, 1978b) as well as exploring the affordances photovoice has as a transformative pedagogy. To answer the research questions, I used photovoice (Wang & Burris, 1997), a visual qualitative approach, dovetailed with an embedded case study, a complex mixedmethods approach (Creswell & Plano Clark, 2018). Both approaches are grounded in the transformative mixed methods paradigm. Explanation and justification for this choice is expanded on in the methodological framework section. Also, I explain in detail the theoretical framework in terms of axiology, ontology, epistemology, and methodology. Further, I detail the research process procedures in terms of data collection, analysis, interpretation, and discuss their relevance to the research topic of choice. Steps taken to increase research rigor and trustworthiness are also addressed.

#### **Transformative-Emancipatory Paradigm**

In mixed methods research, paradigms are the transcendental frameworks that guide the researcher in the self-examination process. This process of self-examination is meant to clarify and articulate the researcher's epistemological (knowledge), ontological (structure), ethical, and methodological stances in the research process (Mertens, 2010). Each of these elements should be identified and understood to comprehend how each constituent informs the researcher's choice of methodology. The transformative paradigm in mixed methods research recognizes the complexity of human society and the prevalence of complex issues such as dominance, exclusion, and power differential. Hence, it is centered on social justice and human rights. The transformative theory encompasses several paradigmatic perspectives such as emancipatory (Lather, 1992), action-participatory, and Freirean approaches (Wang & Burris, 1994). Focusing on empowering participants and encouraging critical reflection on one's own viewpoints and beliefs were common themes across these different perspectives.

To situate this study in the realm of transformative theory, it was essential to understand how photovoice as a pedagogy could be rooted in both the Freirean approach and emancipatory education. One of the main theoretical underpinnings for photovoice was rooted heavily in Freire's (1970) theory of critical education. For Freire, education was an act of empowerment where the students engaged in dialogue with their teachers and peers to identify issues within their personal and social realities that needed to change. These dialogues were meant to develop the students' critical reflection skills and advancing the outcome of this reflective process to action. As such, I used photovoice to foster critical reflection among the undergraduate students, hoping that through the act of taking photos, producing critically reflective narratives, and having continuous conversations within the classroom as a learning community, students would be able to transform their uncritically acquired personal beliefs and thus experience the world differently.

From an emancipatory perspective, emancipatory educational practices are mainly focused on liberating learning from oppression, specifically political oppression. Emancipation, in this case, views education as a political act. However, Mezirow (1991) expanded this perspective of emancipation to include personal transformation as detailed in his theory of transformative learning. For Mezirow, the moment the individual was able to change their limited beliefs and views about the world, even if this change was contradictory for the individual social or cultural norms, perspective transformation enabled the individual to discover their authentic self. This discovery becomes a force of liberation and emancipation (Inglis, 1997). Mezirow's view of emancipation aligned with the main reason I used utilizing photovoice as a pedagogical practice fostering personal transformation.

In the following subsections, I elaborate on the four elements—axiology (the nature of ethics), ontology (the nature of reality), epistemology (the nature of knowledge and the relationship between the knower and that which would be known), and methodology (the appropriate approach to systematic inquiry)—and how each component of this paradigm was addressed or relevant to this study.

#### Axiology

In the transformative paradigm, axiology is concerned with the ethical decisions the researcher makes regarding how to approach complex issues of power differential, especially if the sought-out population for the study is a marginalized or a minority group or groups that have less power than the researcher does (Mertens, 2010). In this study, issues of power stemmed from the fact that I, the primary researcher, was the instructor of the course that was the site of

inquiry. Consequently, I had power over the potential participants in this study as my academic and social position in the teacher-student dynamic entailed. Being aware of this ethical challenge based on my emancipatory beliefs, I took several steps to avoid causing potential harm to the participants (Emmison et al., 2012) and also established trust with my student/participants as the further collaboration to create the photovoice exhibit was a collaboration between the participants and myself, the researcher.

To start, I transparently shared with my students the professional rationale behind the implementation of photovoice as a pedagogical approach as well as my academic interest in researching the photovoice activity as my doctoral dissertation project. Secondly, I provided the students with full choice to decide if they wished to participate in the study; either way, their decision did not negatively impact them academically or socially. Thirdly, I appointed research assistants to collect data that entailed administering surveys and conducting interviews with the students who elected to become participants in this study. Finally, I started the data analysis process after I officially submitted the course grades to the institution.

## Ontology

The underlying ontological assumption in the transformative-emancipatory paradigm holds that there are multiple realities and this diversity of multiple interpretations is granted as in the constructivist paradigm. However, these views needed to be placed within political, social, cultural, and historical contexts to understand and examine the differences between these multiple realities. It is the role of researchers working with this paradigm to strive to reveal these differences and put extra emphasis on the viewpoints held by the less powerful individuals or the marginalized groups (Mertens, 2003). In the context of this study, the potential participants were undergraduate students. While this population is not marginalized per se, in the relationship between faculty and students, it is usually implied that students are in a less powerful position. It was then my role as a researcher to highlight and honestly communicate the multiple viewpoints existing in the data with emphasis on the views that might contradict with my personal views as the power person within this context.

### Epistemology

The relationship between the researcher and the participant is acknowledged and recognized in the researcher's epistemological beliefs (Ponterotto, 2005). The epistemological assumptions of this framework were utilized for this study and guided the underlying principles of this research. The transformative-emancipatory paradigm posits that the individual's construction of knowledge is shaped by the way they act and interact with and within the world. Thus, knowledge is not neutral and is influenced by human interests (Mertens, 2003). Knowledge reflects the power and social relationships within society, and the purpose of knowledge construction is to aid people in improving their communities. Issues such as domination and exclusion found in transformative-emancipatory as well as critical theory perspectives become essential to be researched and understood (Crotty, 1998; Mertens, 2003). The primary outcome of the research endeavor is not only to identify issues of imbalance but also to empower individuals and, in the case of research, research participants. These epistemological assumptions of the transformative-emancipatory paradigm aligned with my emancipatory beliefs about education and academic research. I considered both teaching and conducting research as acts of activism. Both were the circles of impact where I could initiate and pursue change-making processes.

As an educator, I believe the classroom environment should be designed to provide learners with opportunities to critically examine the social structures in their surrounding environment and question their uncritically acquired cultural beliefs and assumptions. Through this self-quest and rediscovery processes, learners are able to better function and interact with the world around them. This belief aligned with what hooks (1994) proposed in her book, *Teaching to Transgress: Education as the Practice of Freedom*, that teaching could be an act of resistance, stimulates\d changes, and motivated students to take on a more active role in the teaching and learning process.

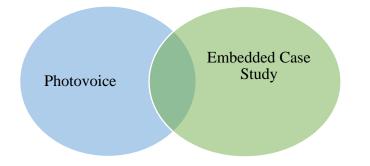
As a researcher, I believe educational research should be utilized as space to critically examine the current practices and create change in actual educational settings to improve the educational outcomes of these settings for students. Since photovoice theoretical foundations are rooted in critical education theory by Freire (1970), feminist theory (Maguire, 1987), and documentary photography, I gravitated toward the approach for both activities (teaching and conducting research) as it aligned with my critical and action-oriented philosophy as an academic.

#### Methodology

To explain and justify my choice of methodology, it was vital to note that transformative learning is a complex process. To better understand the complexity of this process, there was a need to utilize a complex research design that enabled a better understanding of this phenomenon. Therefore, I chose to combine the photovoice approach with an embedded case study approach to develop a deep understanding of contextual factors contributing to transformative learning occurrence (see Figure 3.1). Another goal of this study was to initiate a dialogue within the academic community, focusing on presenting students' voices about their academic experiences when taught using innovative methods. To achieve both goals, I chose two methodological approaches: photovoice and embedded case study.

## Figure 3.1

Overall Study Design: Merging Photovoice with Embedded Case Study



## **Photovoice Approach**

Photovoice is a visual qualitative research method developed by Wang and Burris (1994) that is also classified as participatory action research. The theoretical underpinning of this method is rooted in critical education by Freire (1970), feminist theory (Maguire, 1987) and documentary photography. Wang and Burris (1994) utilized documentary photography to study critical issues with reproductive health among rural Chinese women. Originally, this method began to work with marginalized groups (especially in the public health field) to give voice to underrepresented groups and to empower them through the research process. The act of empowerment in photovoice as a visual qualitative method comes from the fact that the photo data are generated by the participants and not the researchers as in other visual qualitative methods. Wang and Burris (1994, 1997) stated that participants are the experts on issues in their lives and, therefore, the photo data should be generated by them to document their experiences.

Another characteristic that distinguishes photovoice from other methods is its flexibility and adaptability as a research design. However, Wang et al. (2000) identified three essential elements that characterize the photovoice method: (a) the research project goals, (b) the mode of participants' involvement in the research process, and (c) the possible ways to share the project outcome with the community. Usually, the nature of the project and its objective(s) guide the decisions the researcher has to make to implement the project. Despite the flexibility, Wang and Burris (1994) identified a general framework that included steps that needed to be followed in a photovoice study:

- 1. Set the research project goals and objectives.
- 2. Recruit participants.
- 3. Introduce the photovoice methodology to participants and facilitate discussion.
- 4. Obtain informed consent.
- 5. Pose an initial theme/prompts for taking pictures.
- 6. Provide photography training for participants.
- 7. Provide time for participants to take pictures.
- 8. Meet to discuss photographs (focus groups or interviews).
- 9. Plan with participants a format to share photographs and stories with community.

Due to its flexibility, the method expanded beyond working with marginalized groups or in the field of public health. The use of the model in various fields and across different populations ad age groups resulted in modifying the method according to the needs of every project to suit the research project goals/objectives as well as the target population (Catalani & Minkler, 2010). An example of this flexibility would be the need to provide photography training; originally, Wang and Burris (1994) worked with rural women who did not know how to use a camera. Hence, they needed to provide that training but several studies that researched issues in education did not need to provide this training per se as participants knew their way around a camera; rather, the training focused more on aesthetics and ethics of photography. (Budig et al., 2018; Emmison et al., 2012; Gallo, 2001).

As a transformative-emancipatory method, photovoice projects encourage participants' involvement in several stages of the research process as this participation is an act of empowerment. The concept of power and empowerment of participants in photovoice research was elaborated on by Wang and Burris (1997) as they identified three different types of power that stemmed from participants' engagement in taking photos: (a) power to: this type refers to the participants' ability to accomplish a task, (b) power with: this type refers to the participants' ability to work with others (either researchers or other participants as a community), (c) power over: this type refers to the ability to influence others through the participation in a photo exhibit. Taking photos of certain aspects, activities, and daily details of their lives becomes an act of doing and being. Photographs in this context become a tool that enables participants to communicate their realities, feelings, and facilitates critical dialogues and critical reflection. Further, the act of taking photos increases the participants' immersion in their surrounding environment and gives them the opportunity to pause and consider different aspects of their lives in relation to this environment. This process often leads to personal growth, critical reflection, a sense of belonging, and a sense of empowerment (Budig et al., 2018; Emmison et al., 2012; Gallo, 2001; Latz, 2017). The concept of empowerment is furthered by the participants' collaboration with the researcher to create the photo exhibition. The photography exhibit component is what characterizes photovoice as transformative-emancipatory research. Through the exhibit, the participants' experiences are shared with the participants' larger community to spread awareness or initiated conversations for social change needed in their environment (Agarwal et al., 2015; Seitz et al., 2014).

My interest in employing photovoice for this study was supported by several reasons. First, one of the main goals of this study was to explore in depth the students' experiences with using photovoice as a pedagogical practice to foster transformative learning. Having participating students in this study use photography to respond to several of the interview questions facilitated the participants' engagement in a reflective process to make meaning of their learning experience in the human development and growth course. Further, the use of participants' generated photos was meant to shed light on the uniqueness of the learning trajectory of each participant and provide a means of a creative tool for self-expression in this learning journey. Understanding the uniqueness of such an experience for each participant unveiled how transformative learning might occur within the same classroom environment.

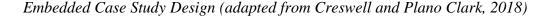
My reasoning was supported by previous photovoice studies in the field of counseling psychology. Most of these studies concluded that the use of photos to guide the conversations with clients enriched the participants' self-revelations and they were able to express certain aspects of their self-concept in a non-verbal way. Further, the participants were able to become more active in the counseling process (Combs & Ziller, 1977; Johnsen et al., 2008; Stinson, 2010). Second, the nature of the participants' involvement in the research process could be described as contractual and collaborative as participants were actively involved in organizing and holding the photo exhibit to share their experiences with the community, which was the institution where this study took place. Third, the photo exhibit held in collaboration with participants was the medium through which dialogue with the academic community was initiated to shed light on the students'/participants' experiences when taught in innovative ways.

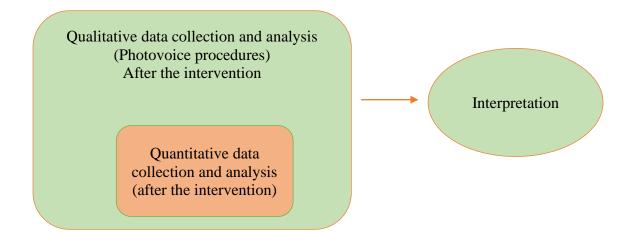
#### An Embedded Case Study

I chose the embedded case study, which is a complex mixed methods design (Creswell & Plano Clark, 2018), to combine with the photovoice approach to be able to develop a deep understanding of the role of photovoice as transformative pedagogy in fostering personal

transformation among undergraduate students and to empirically verify my theoretical conceptualization of photovoice as a transformative pedagogy. Prototypically in this design, the researcher decides on a primary mode of inquiry, which is a qualitative approach in the case of this study, and augments this approach with a secondary investigation to gain a more comprehensive understanding of the phenomenon studied. As outlined by Creswell and Plano Clark (2018), in this mixed-methods framework, the study follows the primary mode of inquiry in terms of formal procedures, data collection, analysis, and interpretation (see Figure 3.2). In this study, the quantitative component entailed administering surveys after the intervention to gather data from a larger sample to gain more information regarding the intervention.

## Figure 3.2





According to Onghena et al. (2018), this case study design fit the transformativeemancipatory paradigm in mixed methods research if the case study was grounded in critical approaches aiming at questioning assumptions and accepting multiple realties. Since the undergirding theoretical framework in this study was the transformative learning theory by Mezirow (1978a, 1978b), which dictated that personal transformations happened when the person went through a process of critical reflection on one's own assumption and uncritically acquired values, the embedded case study suited the framework of the study.

Stake's (1995) views informed my decision on utilizing a case study as a research design: "In a qualitative case study, we seek a greater understanding of the case. We want to appreciate the uniqueness and the complexity of the case, its embeddedness, and interaction with its contexts" (p. 16). Yin (2015) described the case study method: "A case study is an empirical inquiry that investigates a contemporary phenomenon (the case) within its real-life context, especially when the boundaries between the phenomenon and context may not be clearly evident" (p. 16). The identification of the bounded system of the case is an essential characteristic of a case study design (Merriam & Tisdell, 2016). In the case of this study, the case was bounded by the developmental psychology course and the student population undergraduates. A case study design seemed compatible with my research goals since I sought a deep understanding of the contextual factors that might lead to transformative learning within this specific context. Further, I aimed to explore the unique individual experience of each participant that would add to the complexity and the uniqueness of this overall experience, which fit well within the case study framework.

#### Context

The critical nature of this study imposed the need to understand and define the several layers of this context that went beyond the immediate classroom environment and which were of potent influence on the learning environment. It is essential to mention the study took place during a unique semester, Fall 2020. The year 2020 has been a very transformative one in human history. Earlier that year, on March 11, the World Health Organization (2020) declared the COVID-19 virus as a pandemic and the whole world realized it had to operate differently. Consequently, all the learning environments across the globe shifted to the online format. Virtual reality became the only reality available for educational endeavors to continue. This abrupt change puzzled the majority of both students and faculty. Although many pedagogical issues and questions arose regarding the current educational scene that were beyond the scope of this dissertation, it is vital to acknowledge the uncertainty present in this scene as it might have been a potential factor impacting students' attitudes in the academic setting. A few months later, the United States of America witnessed the second wave of Black Lives Matter movement protests due to a brutal police violence incident that went viral on social media. In spite of a pandemic and quarantined lifestyle, thousands of people protested police violence across the country for weeks.

As I aimed to foster transformative learning in a developmental psychology course in a course that aimed at developing students' self-awareness, examining diverse perspectives, and addressing diversity, these two global events were of high significance to this study as they presented a unique opportunity for students to critically reflect on issues related to public health, social justice, diversity and inclusion, and self-awareness. I used these events as examples to present and explain the meaning of disorienting dilemmas as I presented what transformative learning theory was. I also anticipated these impactful events to influence learners' attitudes toward the course content or the overall engagement with the learning given the change in overall educational policies.

The course is foundational in psychology, nursing, and education undergraduate programs; it is also offered as a liberal arts core course in social sciences university-wide. Building self-awareness, examining diverse perspectives, and addressing diversity were the three main objectives of this course as identified by university liberal arts core outcomes. The course covered the different aspects of human development such as biological, social, emotional, personal, and behavioral dimensions across the life span in different cultures.

At the time of the study implementation, the course was delivered in a hybrid format over 16 weeks (a mix between face to face and online). Further details about the implementation process were provided in the study description as part of Chapter V.

#### **Procedures**

## **Participants**

In a case study design, participants are recruited purposefully; thus, a purposeful sampling technique was utilized (Palinkas et al., 2015). However, Merriam and Tisdell (2016) listed different types of purposeful sampling. In this study, a convenience sample was utilized due to the access I have as a researcher and graduate teaching assistant to the location and the potential participants in this study. The inclusion criteria for participants in this study were defined as students in my human growth and development course who attempted at least 70% of the course assignment at the time of the recruitment (assignments, participation, etc.)

Since I collected both qualitative and quantitative data, the sample size for each of these components differed to match the purpose of each component. For the quantitative aspect of the study, I recruited 46 participants out of 55 students enrolled in the course. The participants completed survey measures toward the end of the photovoice intervention. For the qualppen semester has ended.

Upon obtaining the approval of the Institutional Review Board (see Appendix A), the students were invited to participate in the study. The same announcement was posted on the learning management system, Canvas, to ensure all the students enrolled in the course had access to the study information. Only the research assistants were in touch with the participants to maximize the ethical conduct of the research process as discussed in the ethical consideration section.

## **Photovoice Intervention**

The course took place in a hybrid format for 16 weeks. The course plan consisted of 15 modules; each module covered a specific developmental psychology topic. One of the course components was the weekly reflective activity to foster critical reflection via photovoice. The general idea of the activity was introduced in the course syllabus and further training to familiarize the students with photovoice was part of the classroom instruction during the first two weeks of the semester. This training module included discussions about elements of photography, ethics of photography, and establishing connections between photos and critical reflection narratives. Furthermore, I created a training module that consisted of PowerPoint slides explaining the purpose of the activity, its relevance to the course, and detailed photography ethics. Further, I provided a separate document including detailed steps for completing the activity, the grading scheme, and an example of how to complete the assignment.

This activity was called "A Photo for Change" and was completed as an online discussion board activity via the university learning management system, Canvas. The students were given weekly prompts that explicitly encouraged them to critically reflect on their beliefs based on the learning acquired. Table 3.1 provides examples of those prompts.

## Table 3.1

Examples of the Weekly Discussion Prompts for "A Photo for Change" Activity

## Example Prompt

1. This week, we covered different views of intelligence and different biological and environmental factors that contribute to its development. What are some new pieces of information that you have learned about this topic? How does it change your views about intelligence in general? How does this information change your views about yourself as a student and as a person in day-to-day life?

Respond to this prompt in your own words and accompany that with an original photo (s) that will represent your reflective thoughts. By original photo, I mean a photo you take personally after reading the prompt. Remember to respond to at least two other posts of your classmates.

2. This week, we covered the negative impact of stereotyping and microaggression. What are some new pieces of information that you have learned about this topic? How does it change your views about social interactions in general? How does this information change your views about yourself as a student and as a person in day to day life? What actions ae you going to take based on your new realizations to become more inclusive and culturally responsive in your social interactions?

Respond to this prompt in your own words and accompany that with an original photo (s) that will represent your reflective thoughts. By original photo, I mean a photo you take personally after reading the prompt. Remember to respond to at least two other posts of your classmates.

These prompts were crafted to guide the students to critically examine their current beliefs, behaviors, and assumptions about human development. To respond to these prompts, they needed to take an original photo that represented the core idea of their reflection along with a narrative connecting the picture to this reflection and then post these photos along with the reflection to the online discussion board. Students were given four days to complete this activity. Each student was required to respond to at least two other classmates' original posts and engage with them in a dialogue about how their photos and reflections overlapped or differed from one another. The purpose of this aspect of the activity was to enrich and expand the student's perception of the diverse and complex nature of the human experience.

## **Data Collection Procedures**

Data collected for the study consisted of both qualitative and quantitative data. The qualitative data included individual photovoice interviews conducted after the intervention was completed. Quantitative data were collected via close-ended surveys nearing the end of the intervention: a transformative experience questionnaire (TEQ) measure and a transformative incident student survey (TISS). The timeline for collecting both qualitative and quantitative data is shown in Figure 3.3.

## Figure 3.3

"A Photo for Change" Research Project Data Collection Timeline

Weeks 12-16 (four weeks)Announcing the study and create a sign up sheet.

- Administering transformative experience measure, and transformative incident student survey measure via qualtrics
- Weeks 16 and Winter Break (five weeks)
- Photovoice Interviews via Zoom
- Participants were given the interview
- questions one week prior to the interview.

## **Qualitative Data Collection**

The consenting participants completed 60-minute, semi-structured, virtual interviews via Zoom meetings. The purpose of these one-on-one interviews was to explore participants' experiences with photovoice as an educational pedagogy to foster transformative learning. The reason to hold these interviews virtually was to be able to record these interviews to access to the photos along with the participants' narratives for the purpose of data analysis. Since I utilized photovoice as a research methodology, the participants were provided with the interview questions a week before the actual interview date along with guidelines on how to take photos for the interview questions that required photos as part of the photovoice procedures (see Appendix B). This information was communicated via e-mail by the research assistants. The photos produced by the participants were sent to the research assistant a day prior to the interview meeting for preparation purposes.

I utilized the PHOTO model (Hussey, 2006) to initiate the interaction with participants regarding their photos. PHOTO stands for the model's five main elements: (a) Describe your **P**icture, (b) What is *happening in your picture*? (c) why did you take a picture of this? (d) *what does this photo tell us about your life*? and (e) *how can this picture provide opportunities for us to improve life*? Mainly, the model was used to facilitate the discussion around the participants' photos; yet, the interviewers had the option to probe participants with other questions when needed to gain a deeper understanding of the connection between the photos and the stories being shared by the participants.

## Quantitative Data Collection

Students who elected to participate in the study completed the transformative experience questionnaire, the transformative incident student survey, and demographic information measures distributed online via Qualtrics. The estimated time for completing these surveys was between 30-45 minutes.

**Demographic Survey.** This survey included questions about the participant's age, gender, ethnicity, major, previous experience in studying psychology and photography, and their level of appreciation to photography

**Transformative Experience Measure.** This adapted version of the transformative experience questionnaire (TEQ) was developed and validated by Koskey et al. (2018) in the

context of science classrooms. The measure was designed to assess a particular form of transformative learning termed transformative experience. Pugh (2011) summarized transformative experience as "a learning episode in which a student acts on the subject matter by using it in everyday experience to more fully perceive some aspect of the world and finds meaning in doing so" (p. 111). Moreover, he defined three characteristics of transformative experience: (a) motivated use (refers to applying the content to everyday situations), (b) expansion of perception (refers to seeing everyday details through content lens), and (c) experiential value (refers to valuing content as it enriches everyday life). For the purpose of this study, TEQ items were modified to reflect the human development and growth course content. The survey contained 27 items with responses on a 4-point Likert scale, 1 = Strongly Disagree to 4 = *Strongly Agree*. Items targeted the three characteristics of transformative experience: motivated use (e.g., Outside of school, I apply the knowledge I've learned about human development), expansion of perception (e.g., The concepts I learned in my human development class changed the way I see the world), and experiential value (e.g., Human development concepts make everyday life much more interesting). In addition, the measure was based on the Pugh et al. (2010) premise that transformative experience exists as a continuum ranging from inschool, to out-of-school, to active/purposeful out-of-school engagement. Hence, items targeting students' engagement in the class were included to represent the lower end of the transformative experience continuum. In prior use of the TEQ, Rasch analysis (Rasch, 1980) was used to develop a composite score for the measure of the transformative experience using WINSTEPS software. Following Wright and Linacre (1994), the authors used infit MNSQ > 1.4 as a cutoff for misfitting items (i.e., items not holding together with the others in the Rasch model). No items were found to be misfitting. Person reliability (0.95) and separation (4.46) were strong,

indicating a reliable ordering of participants along a continuum of low to high transformative engagement and the measure distinguished between different groups of participants. Item reliability (0.98) and separation (8.08) were also strong.

This scale was used for the current study as it measured the students' engagement with the academic content outside of school and expansion of perception due to this engagement. The out-of-school engagement was a potential outcome of implementing photovoice pedagogy as the photovoice pilot project data indicated. The expansion of perception component was germane to TE theory, another transformative learning theory developed by Pugh (2011) that intersected with perspective transformation as defined by Mezirow (1978a, 1978b) in his theory of transformative learning.

**Transformative Incident Students Survey.** This adapted version of TISS was developed by Jost (2018) to measure the impact of students' experiences with a transformative learning experience due to a specific trigger or incident. This newly created multidimensional scale included 122 items on a 5-point Likert scale from 1 = Definitely Disagree to 5 = Definitely *Agree*. The original survey covered four factors related to transformative learning: triggers, reflection, emotions, and dialogue. I decided to use the subscales that focused on triggers and reflection as the items in both subscales (18 items) pertained to the role of photovoice pedagogy as a trigger in fostering perspective transformation and critical reflection. The Cronbach alpha for the critical reflection subscale was 0.86 and the trigger's subscale was 0.76.

The participants might have benefited from engaging in a reflective process that could result in changing their mindset and perspective about their own educational experiences. In this case, their experience of making meaning became a lifelong learning opportunity that made life more meaningful as well as sharing their experiences and having those experiences valued and shared with future students. The participants might have experienced the indirect benefits of having their experiences shared with me and the community through the photovoice exhibit. Aside from the cost of time, students did not experience any cost. As for compensation, students who participated in the quantitative surveys received extra credit. Students who chose to participate in the qualitative interviews received a \$10 Amazon gift card.

# Inference Quality and Transferability

The soundness of research results relies on the procedures the researcher follows to ensure the quality of the research design and hence the research outcome. In the qualitative paradigm, this is referred to as rigor and trustworthiness, and in the quantitative paradigm, it is referred to as validity and reliability. In a mixed-methods paradigm, no one unified term was used; rather, there were different models a researcher could select from that suited the type of study design to produce a rigorous outcome. For this study, I chose the model proposed by Teddlie and Tashakkori (2009), which the authors referred to as inference quality (referring to creditability and internal validity) and inference transferability (referring to transferability and generalizability). In this section, I provide an overview of the steps I implemented in the research process to increase both inference quality and transferability in this study.

## Inference Quality

According to Teddlie and Tashakkori (2009), inference quality refers to the creditability and internal validity of the research design. The authors identified two main aspects to ensure the inference quality of a mixed-methods study: design quality and interpretive rigor. The design quality refers to the standards used to evaluate the methodological rigor of both the qualitative and quantitative aspects of the study, whereas interpretive rigor refers to the accuracy of the conclusion based on the quality of integrating and interpreting both qualitative and quantitative data in light of the theoretical framework. In the following subsequent sections I discuss the steps I implemented to maximize the study's creditability and internal validity.

**Creditability**. Merriam and Tisdell (2016) pointed out that in qualitative inquiry, reality is assumed to be flux and multifaceted. Thus, the criterion of creditability refers to the level of congruency between the data presentation and reality as co-constructed by the participants and the researcher. To maximize credibility, I utilized triangulation, thick description, member checking, and peer debriefing strategies. The definitions and explanations for these strategies were borrowed from Merriam and Tisdell.

*Triangulation.* In this strategy, the researcher utilizes multiple sources of data or methods of data collection to confirm emerging themes. In this study, I collected data from participants, mainly qualitatively but quantitatively as well, to support the emerging themes and enrich the thick description of the case study.

*Thick Description.* This strategy focuses on the researcher giving a detailed description of the context of the study so the reader is be able to determine the authenticity of the researcher's interpretations and the extent to which the case is transferable to other contexts. As such, I provided a thick description of the classroom environment, the photovoice intervention and its implementation, and any other details pertaining to the learning environment.

*Member Checking.* In this strategy, the researcher shares the tentative interpretation or findings with the participants to verify the accuracy of the data interpretation. I sent a summary

of the results to the participants to seek feedback and verification of emerging themes to ensure the result represented the experiences of the participants. They confirmed their agreement with the interpretation and endorsed the model as a representation of their experiences.

*Peer Debriefing.* Peer debriefing is a strategy that emphasizes the importance of discussing with colleagues the research process, the congruency between the emerging themes and raw data, as well as the tentative interpretations of the themes. As a member of a research team led by two experts in transformative learning and transformative experiences, I shared the emerging themes and sought feedback on the research process from the beginning of the study.

## Inference Transferability

Teddlie and Tashakkori (2009) defined inference transferability as the process both qualitative and quantitative researchers use "to determine whether our conclusions may be extrapolated beyond the particular conditions of the research study" (p. 311). Several of the strategies I utilized to optimize the qualitative credibility criterion were also employed to increase transferability such as thick description and member checking. The thick description in particular is what helps the reader to determine the similarities between their context and the reported study context.

#### **Data Analysis**

The ultimate goal of this investigation was to gain an in-depth understanding of how transformative learning happened in college classrooms and the role of photovoice as a transformative pedagogy in fostering this learning experience. The primary design of this study was qualitative. Thus, data from both qualitative and quantitative components were analyzed qualitatively. To answer the research questions, I utilized thematic content analysis (Merriam, 1998) to analyze the interview data. Mainly, I employed thematic content analysis to elucidate emerging themes from the interview data. My focus was to construct, in collaboration with participants, the meaning of their experiences with photovoice and distill themes that reflected the essence of the students' experience with photovoice pedagogy as a transformative instructional tool.

Oliveira et al. (2013) stated that "thematic content analysis may use quantitative and qualitative procedures. This choice influences the definition of the coding rules" (p. 75). I chose to conduct qualitative analysis since my goal was to make meaning of the participants' experienced. According to Oliveira et al. (2013), qualitative thematic content analysis consists of three phases: open coding, axial coding, and selective coding; the interview data were comprised of photos and word data (narratives). In photovoice research, the images are considered an integral part of the narrative as they represent another layer of the meaning. Therefore, the photos that represented a specific element or pattern were coded under the same category in which the word data were coded. All the video-recorded interviews were transcribed using the voice meeting notes software, Otter (Crumley, 2018), and checked for accuracy. The transcripts were imported to Nvivo software (QSR International Pty Ltd., 2020) to start the inductive coding process during which I completed three cycles of coding: open, axial, and selective. Theme identification and exploration were considered through the lens of the transformative learning theory by Mezirow (1978a, 1978b) and transformative experience theory by Pugh (2011). The results are thoroughly discussed in Chapter V. As for the quantitatively collected data, the two instruments used were analyzed separately using two different types of statistical software packages. For the TEQ, the data were analyzed using WINSTEPS (Linacre, 2009) to conduct Rasch analysis to situate participants on a continuum of transformative experience as measured by the items. Further, logit scores were calculated and these logit scores were categorized based

on the levels of engagement in a transformative experience. The TISS survey data were entered and analyzed using SPSS software to produce a total score for each of the subscales, triggers, and critical reflection, as well as an overall rating of the survey score. The participants' overall scores were categorized into high, medium, and low levels of engagement in critical reflection and transformative learning.

An essential step of a photovoice research project is to disseminate results to community members and stakeholders through a photography exhibition or another form of creative and accessible data display to the public consumption (i.e., short films, websites). The creative presentation is built of the photos produced by the participants accompanied by extracts from their voices. The purpose of the presentation is to share the stories of community members that could inspire and inform future practices of faculty members and educators who elect to attend the exhibit. Since the focus of this project was to explore unique methods to foster transformative learning, stakeholders were faculty members, educators involved with teacher education, administrators, and other community members (i.e., graduate and undergraduate students) at a university in the Rocky Mountain region where the intervention took place. By the time of ending the dissertation endeavor, the public health restrictions due to COVID-19 were still in place and holding a physical photo exhibit was not feasible. However, a set of recommendations based on the study findings is discussed and presented in Chapter VI.

As the university's plan is to return for a full in-person functioning campus as of Fall 2021, the photo exhibit will be held then. The photos shared in the exhibition will be presented in a manner similar to disseminating the project results in conference presentations and/or publications. In other words, participants' identities will be protected by using their pseudonyms.

### **Summary**

This chapter introduced the theoretical and methodological frameworks of this study. My axiological and epistemological stances were described to acknowledge the influence of my own assumptions, experiences, possible biases, and perspectives on this research. Methods were discussed that included participants' recruitment and inclusion criteria. The primary way of data collection was through in-depth, semi-structured photovoice interviews and surveys. Photovoice and embedded case study data analysis procedures were presented as well as steps taken to increase the study rigor and validity. In Chapters IV and V, I present the two articles proposed for this dissertation. Chapter IV, the theoretical paper, frames photovoice as a transformative pedagogical model. Chapter V, the empirical paper, presents the results of the empirical investigation where the main goal was to explore how personal transformation was supported by the photovoice pedagogical intervention.

# CHAPTER IV

# FRAMING PHOTOVOICE AS A TRANSFORMATIVE PEDAGOGY TO FOSTER TRANSFORMATIVE LEARNING AMONG ADULT LEARNERS

This chapter has been prepared for submission to the Journal of Transformative Learning Contribution of Authors and Co-Authors Manuscript in Chapter III

Author: Maaly Younis Contributions: Conceived the manuscript topic, developed and wrote this theoretical article.

Co-Author: Kevin Pugh, Ph.D. Contributions: Helped conceive the manuscript topic, provided feedback and guidance on the writing and structure of the manuscript.

Co-Author: Cassendra Bergstrom, Ph.D.

Contributions: Helped conceive the manuscript topic, provided feedback and guidance on the writing and structure of the manuscript.

#### Abstract

Photovoice pedagogy is an instructional strategy that relies on participatory photography and storytelling to engage learners with personalized learning experiences. As there is a growing interest in this approach due to its potency to increase authentic academic engagement, there is a need to understand the affordances this teaching method could offer. In this theoretical article, we discuss the transformative dimensions of the approach and how it has high potency to foster transformative learning within classrooms. Specifically, we situate photovoice as a transformative pedagogy and discuss a proposed model for such a framing. We identify four components for this model: (a) the use of photo prompts to elicit provocative learning, (b) the use of photography to integrate both academic learning and cultural and personal experiences, (c) the use of artistic expression to engage with critical reflection, and (b) a brave learning space. Further we discuss transformative outcomes aligned with this model.

Key Words: transformative pedagogy, transformative learning, photovoice, art-based pedagogy.

Not I, not anyone else can travel that road for you, you must travel it for yourself.

--Walt Whitman, Song of Myself

#### Overview

Mezirow's theory (1978a, 1978b) of transformative learning in adult education highlighted the pivotal role of the experience to make education a more meaningful experience in adulthood. Transformative learning allows adult learners to make meaning of their lived experiences if they engage in a critically reflective process. Central to transformative learning theory are the goals of giving rise to lasting personal change, shaping learners' views on their world, and creating a shift in perspective (Mezirow, 1991). As adults, learners develop and acquire knowledge through their life experiences that are situated within their sociocultural context which they interact with and within. Mezirow referred to this knowledge that shapes one's values as the "frame of reference." He argued that adult learners rarely have the opportunity to question and evaluate this frame of refence until they go through paradigm shifting experiences such as experiencing international travel, loss of a loved one, or any similar dramatic experience that brings about a shift in one's views on life. Rather than waiting on a dramatic experience for transformation, Mezirow (1978a, 1978b, 1990, 1991) believed education could foster transformative by prompting critical reflection. Indeed, His theory was rooted in Paulo Freire's (1970) emancipatory critical theory that puts emphasis on the role of critical reflection as a key component of the educational process (Freire, 2000; Mezirow, 1997).

Although Mezirow's (1978a, 1978b) theory is very widely used in adult education, the theory conceptualization has been critiqued for focusing primarily on the cognitive aspect of transformation and less on other factors that contribute to the transformation process such as emotions and spiritual factors (Cranton, 2006b; Dirkx, 2000, 2012; Lawrence, 2012; Taylor,

2000). Consequently, evolution of transformative learning theory emphasized exploring holistic approaches that encompass other non-cognitive dimensions such as imagination, intuition, culture, and spirituality (Cranton ,1994, 2006a, 2006b; King, 2005, 2009a, 2009b; O'Sullivan, 2003; Tisdell, 2000, 2003). Lawrence (2012) referred to these non-cognitive factors as extrarational factors in transformative learning. To distinguish between these two views of how to approach transformative learning, recently there has been a distinction between the use of the terms *critical* and *transformative*. The term "critical" is used to refer to cognitive or rational views only while the term "transformative" is used to refer to holistic approaches that include both rational and extrarational ways of thinking and knowing (Fujino et al., 2018; Lawrence, 2012).

Over the years, several adult educators aimed at cultivating transformative learning within classroom spaces by adapting both critical and transformative approaches. Unique among these transformative pedagogical approaches was art-based pedagogies. These approaches focused on exploring the potential of the different modalities of art such as storytelling, analyzing literary texts, participatory theater, or utilizing participatory photography (Clover, 2006; Lipson Lawrence & Cranton, 2009; McGregor, 2007, 2012; Fisher-Yoshida et al., 2009). Such pedagogies drew on the philosophy that art is both thought provocative and transformative as it could change lives and create agency among people (Boal, 2000; Dewey, 1934/1980; O'Brien, 2019). One such art-based pedagogy was photovoice, which utilizes both photography and storytelling as tools for learning, empowerment, awareness, and agency (Clover, 2006; Latz, 2017).

Similar to transformative learning, photovoice is rooted in Paulo Freire's (1970) emancipatory critical theory of education that puts emphasis on raising the individual's critical awareness as a key to both personal and social transformation. Nonetheless, the unique integration of both photography and storytelling as artistic expressions that tap into both rational and extrarational processes of awareness disposed this pedagogical approach as a holistic transformative pedagogy. To date, no explicit framing of photovoice pedagogy as a holistic transformative pedagogy to foster transformative learning as defined by Mezirow (1978a, 1978b) could be found in the extant literature. Further, theorizing that contextualizes photovoice pedagogy in the aesthetic education literature was generally lacking.

#### Purpose

The main goal of this article is to frame and describe photovoice pedagogy as a holistic transformative pedagogy. In this article, we propose a definition of photovoice as a transformative pedagogy that builds on the definition of transformative pedagogy as defined by Ukpokodu (2009a, 2009b). However, we expand on this definition to encompass the holistic transformative pedagogy as a pedagogy that we are argue for. Thus, we define photovoice transformative pedagogy as a pedagogy that uses photography as a central educational practice to integrate both cognitive and non-cognitive processes that foster both critical reflection and aesthetic. It enables learners to use artistic expression to construct their knowledge and make meaning of their holistic personal experience. Mainly, we unpack the artistic nature of the pedagogy to demonstrate its potential to foster personal transformations. To establish such a connection, first, we present the prominent current models of transformative pedagogy in the literature and discuss their strengths and limitations. Then, we present the photovoice pedagogy. Finally, we present the photovoice transformative pedagogy model as a holistic pedagogical approach. The proposed model expands on the current models of transformative pedagogy while

emphasizing the unique affordances that photovoice provides as a pedagogy that combines artistic expression to foster transformation and aesthetic.

## **Transformative Pedagogy**

Mezirow's (1978a, 1978b) framework of transformative learning presents a model that explains how transformative learning happens in both formal educational settings and other venues outside of the classrooms. In this section, we present the two main models of transformative pedagogies that aimed to expand and elaborate on Mezirow's framework from the pedagogical perspective; these models aimed to define and explain what constitutes a transformative pedagogy. First is transformative pedagogy established by Ukpokodu (2009a, 2009b) and second is the transformative pedagogy project (Fujino et al., 2018). In this section, we present these models and highlight the strength of each model in terms of fostering transformative learning.

# The Transformative Pedagogy Model

Ukpokodu (2009a) defined transformative pedagogy as

an activist pedagogy combining the elements of constructivist and critical pedagogy that empowers students to examine critically their beliefs, values, and knowledge with the goal of developing a reflective knowledge base, an appreciation for multiple perspectives, and a sense of critical consciousness and agency. (p. 43)

Further, she established a transformative pedagogy model with six components: (a) dialogic relationships in a learning community (learning within a community where learners support each other and engage in an ongoing dialogue); (b) writing pre-post narrative inquiries (the use of reflective written narratives for learners to develop self-reflection); (c) engaging in structured discussions (the use of online threaded discussions to support the ongoing dialogue between learners); (d) using critical textual discourse (learners' engagement with different reading and

instructional materials that contribute to their perspective transformation); (e) utilizing experiential activities such as role play activities, take a stand or the privilege to engage learners in critical reflection; and (f) experiencing a humanizing pedagogy (the role of humanistic interaction between teachers and students as an impactful element to the transformative learning environment).

A strength to this model was it emerged from empirical data based on the actual implementation to specific teaching strategies within the classrooms. The model provides a defined framing of what transformative pedagogy is in connection to transformative learning. Further, it acknowledges the diversity of learners' personal experiences and thus includes elements of the constructivist approach, which is of great importance in multicultural classrooms. However, it puts a lot of emphasis on textual and written discourse and lacks the inclusion of other expressive modalities for learners to construct their revised perspectives.

# The Transformative Pedagogy Project

The second model is the transformative pedagogy project (TPP) developed by Fujino et al. (2018) at the University of California Santa Barbara. According to Fujino et al., the project "is an interdisciplinary and intergenerational learning community seeking to develop ways of knowing and ways of being" (p. 69) to develop a decolonial pedagogical approach that advocates for personal and social transformation. The main goal of this project was to develop a pedagogical model grounded in Freire's (1970) critical consciousness theory to abolish the different forms of oppression and discrimination existing in multicultural contexts but also extend the process of knowledge construction to integrate expressive ways of knowing. To develop this approach, the researchers held a weekly story-circle that included both academic and non-academic members who engaged with a wide array of materials that varied between scholarly readings and theories with personal experience and intuitive knowledge. The outcome of these meetings was a model that relied mainly on creating vulnerable learning spaces where students could share personal experiences and the use of storytelling as a means to facilitate the act of sharing these experiences and creating a brave and vulnerable space.

Photovoice pedagogy has elements that intersect with these two models such as storytelling, humanized pedagogy, and vulnerability that if explicated frames photovoice as a transformative pedagogy. Nonetheless, photovoice pedagogy has a visual artistic nature to it through photography that does not exist in the two models presented in this section. Therefore, the photovoice transformative pedagogy model we are proposing was built on these two models. In other words, we used these two models as a foundation that we would extend and expand on to present our proposed model which frames photovoice as a transformative pedagogy.

#### **Photovoice: A Pedagogical Approach**

Photovoice is a pedagogical approach that utilizes both documentary photography and narrative as responses to guiding prompts (Wang & Burris, 1994, 1997). Historically, photovoice started as a visual qualitative research method developed by Wang and Burris (1994, 1997) to investigate reproductive health issues among rural women in China and raise awareness within the community regarding these issues. The theoretical underpinnings of photovoice pedagogy were rooted in Freire's (1970) critical consciousness theory, feminist theory, and participatory approach to documentary photography (Wang et al., 2000). The Freirean aspect of the approach that relies on dialogic interaction between the researcher and the participants encouraged several teacher-scholars to explore its potential inside the classroom (Latz, 2017). Thus far, photovoice

students' engagement with academic learning (Cook & Quigley, 2013), critical awareness, and inclusion (Emmison et al., 2012; Mulder & Dull, 2014; Stroud, 2014).

To date, photovoice pedagogy has been framed as a Freirean critical pedagogy by Brydon-Miller (2006) due to its explicit theoretical connection to Freire's (1970) critical consciousness theory. Brydon-Miller focused on the dialogic aspect of the approach through linguistic discourse as a means to develop a more democratic process of teaching and learning rather than the artistic aspect of the approach. However, the artistic nature of photovoice through the use of documentary photography carries the potential to facilitate fostering transformative learning as suggested by Cranton (2006a, 2006b) and Fisher-Yoshida et al. (2009) who argued for the use of art-based pedagogy to facilitate the engagement with transformative learning.

## Photovoice Transformative Pedagogy Model

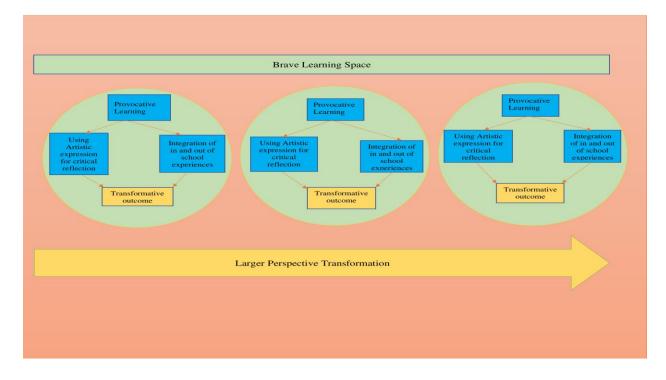
As we discussed earlier, although photovoice pedagogy has several elements and components that intersect with the two transformative pedagogy models existing in the current literature, this intersection was not clearly explicated. Photovoice is a powerful pedagogy that has high likelihood to foster holistic transformative learning. Hence, our goal in this article is to propose an integrated model. We first propose a definition for photovoice as a transformative pedagogy. Second, we highlight the intersectionality between photovoice pedagogy and the two aforementioned transformative pedagogy models. Third, we list and describe four essential components of the integrated model.

We define photovoice transformative pedagogy as a pedagogy that uses photography as a central educational practice to integrate both cognitive and noncognitive processes that foster critical reflection and aesthetic experience. It enables learners to use creative expression to construct their knowledge and make meaning of their holistic personal experience. For our proposed model, we acknowledge that photovoice shared the following with the two transformative pedagogy models presented earlier in the article. Similar to the transformative pedagogy model by Ukpokodu (2009a), photovoice utilizes dialogic learning and critical discourse as learners engage in group discussions around their responses (both photos and narratives). Further, photovoice pedagogical activities require a lot of courage and vulnerability, which are components that draw upon the transformative pedagogy model developed by Fujino et al. (2018). We include these components in the model and expand on them by including other factors that are unique to photovoice to foster a holistic and integrated model of fostering transformative learning. Along the following line, we introduce the proposed four components of the photovoice pedagogical model to create an environment conducive to transformational learning (see Figure 4.1):

- The of use photo prompts to elicit provocative learning
- The use of photography to integrate both academic learning and personal experiences
- The use of artistic expression to engage learners with critical reflection
- Brave Learning Space

We believe that when the photovoice assignments are established on a weekly basis or shorter and consistent time intervals, they provide opportunities for small transformative experiences to occur as explained by Heddy and Pugh (2015). We argue that each time the learner engages in completing a photovoice assignment, they go through a full but small cycle of experiencing a transformative learning process. Each photovoice prompt presents leaners with a smaller challenge of how to capture the core of their learning and changing perceptions in photos and build a narrative around their photo. This challenge leads to two main learning processes. First is increased engagement with the course content outside the classrooms as learners seek opportunities to find photo elements and frame responses based on their personal experiences. Second, the photography aspect as an artistic expression promotes learners' holistic engagement with the learning; when learners engage with creating art to make meaning out of their experience, the art creation process facilities both cognitive and non-cognitive processes (i.e., emotions and imagination) in the learning experience as argued by Lawrence (2012) and Hoggan et al. (2009). If the learner goes through these phases with an open attitude toward unconventional ways of learning, a small transformative outcome becomes the result. As learners accumulate these experiences, smaller transformative outcomes combine into a larger transformation in perspective transformation (represented in the large bottom arrow) as described by Mezirow (1978a, 1978b, 1990, 1991). In other words, we believe that within every large transformative learning experience, there exist multiple small transformative experiences. The larger transformative learning process as described is likely to happen if the educator creates a brave learning space where learners are encouraged to embrace authentic relationships and embrace vulnerability as essential components of the transformative learning journey. In the following sections, we expand on each of the proposed components and how they apply to create a classroom environment that promotes both transformative experiences and transformative learning among adult learners.

## Figure 4.1



## Photovoice Transformative Pedagogy Model

# The Use of Photo Prompts to Elicit Provocative Learning

Mezirow (1978a, 1978b) specified the need for a disorienting dilemma to stimulate the learners' involvement in experiencing the first step of the transformative learning process. The role of the dilemma is essential for prompting the learners to realize a need to consider alternative ways of thinking to break out of habitual thinking. Mezirow (1991) argued that without these dilemmas, it is hard for adult learners to engage with the transformative learning process as they are firmly established in their ways of thinking and in their viewpoints. That said, within a classroom context, teachers should be intentional about creating multiple opportunities for students to challenge their habitual thinking patterns. The same need for deliberate cognitive

prompting to think differently about specific aspects of one's own experience is integral to photovoice.

As a transformative pedagogy, photovoice assignments rely mainly on crafting prompts that are thought provoking. These prompts explicitly encourage learners to question their reality and to re-explore their world in terms of strength, problems, and its impact on their being within this world (Wang & Burris, 1997). Although these prompts could come across as simple and broad (i.e., Who are you? And what could be a visual representation of your identity?), responding to such a prompt that seems simple invokes a process of self-examination of one's identity in connection to their own context. In their search of making meaning to craft photos, learners are provoked to see their realities differently (Lawrence, 2012). They are encouraged to re-explore common and ordinary elements, objects, and aspects of their everyday life and reframe their perceptions and values of these components of their daily lives. Freedman (2003) stated that visual content relating to social, political and cultural issues could shake identities, beliefs, and ideologies. The same notion was shared by Lawrence (2012) who wrote, "Sometimes arts are meant to provoke, to disrupt our notions of reality, shake us out of complacency and call us to action." (p. 475). These notions explain the powerful impact of engaging with a simple act of responding to a prompt with taking photos on the learner's early engagement with the transformative learning process. Further, beside the artistic nature that is provocative on and of itself, the non-conventional nature of photovoice assignments in academic settings presents learners with a dilemma they need to work around (McGregor, 2012).

## The Use of Photography to Integrate Both Academic Learning and Personal Experiences

Transformative learning does not happen in isolation. Educators who aim to teach toward transformative learning need instructional strategies that connect learners' personal experiences to the curricula content and creates a potent transformative learning environment. In her book *Evolving Research of Transformative Learning*, King (2009a) stated:

Transformative learning and change are not an experience that happens in isolated classrooms. Instead the classroom experience, dialogue, and transformation are deeply interwoven with the learner's entire life, and therein lays simultaneously some of the greatest possibilities and the greatest difficulties they will encounter as they progress through transformative learning journeys. (p. 8)

Photovoice assignments offer the opportunity for this connection between the two worlds through one simple tool: a camera! As learners engage with photo prompts, they constantly search for opportunities to create and generate photos. This process of photo creation is in and of itself a guiding force for learners to make meaning of one's own experience within their own sociocultural contexts (Latz, 2017). This deliberate effort in selecting and putting photo elements together is the heart of how learners construct and integrate both of their worlds inside and outside of the school together.

Lipson Lawrence and Cranton (2009), who conducted an autoethnography to document their experience using photography as a tool for transformation, concluded the use of photography allowed for seeing day-to-day life through a metaphorical lens. It also allowed them to see their world in multiple perspectives. Hence, they developed a deeper appreciation for their everyday lives and deeper understanding of their relationship with themselves and their surroundings. In other words, the use of photography granted a shift in their perspective of their world. They no longer perceived the objects and photo elements they interacted with as ordinary or taken for granted. Correspondingly, from an aesthetic perspective, seeing everyday objects and events through an artistic lens, awakens our appreciation to life and enables us to see the beauty in the world around us (Kent & Stewart, 1992). Kent and Stewart (1992) further explained that this ongoing engagement with creating and experiencing art shifted one's judgmental attitudes about what defined the good and the bad.

As the photovoice assignments entailed, the step that follows producing photos is learners' engagement in group reflective discussions of the photos and their interpretations in relation to the photo prompts. Miao et al. (2020) confirmed this dynamic: "The collective reflection and discussion [in photovoice] also play an important role in shaping the individual perceptions" (p. 103). Further, these discussions centered the classroom interaction and instruction around the learners' personal experiences. Consequently, these collective reflections and discussions facilitated the transformative learning process as Mezirow (1991) communicated the importance of similar shared experiences when the learner is grappling with disorienting dilemmas and re-exploring their values.

Cook and Quigley (2013) employed photovoice as a pedagogical tool to increase college students' understanding and engagement in introductory science courses and to increase their awareness about the role of scientific concepts in their communities. Accordingly, the authors collected data out of the photovoice assignment that was a project-based assignment. In this assignment, students explored in depth one scientific concept in their communities through photos and reflective writing. The study findings concluded the students' completion of the photovoice projects increased their connection to the scientific understanding and application in their surrounding environment. Further, photos promoted the students' engagement with authentic scientific inquiry within their communities. Cook and Quigley's study demonstrated the strength photovoice pedagogy had to bridge the gap between the students' formal education and their day-to-day lives. This connection increased the likelihood of transformative learning to occur.

## The Use of Artistic Expression to Engage Learners with Critical Reflection

Critical reflection is the cornerstone of transformative learning. Mezirow (1990) defined critical reflection as "the ability to challenge presuppositions in prior learning... it is the ability to question the validity of a long taken-for-granted meaning perspectives" (p. 12). As this definition entailed, critical reflection is the process of purposefully questioning and re-examining one's previous experiences that are uncritically acquired. This explanation highlights the key role of cognitive aspect in this self-critical reflection process.

Critical reflection is mainly a cognitive process. Dirkx (2001), Hoggan et al. (2009), and Tisdell (2017) concluded that emotional, social, and spiritual dimensions of the transformative learning process are of equivalent importance. Therefore, the need for multimodalities of expression to facilitate the process of self-examination and making meaning was essential to teach toward fostering a holistic transformative learning. Non-linguistic modalities surpass the linguistic barriers individuals in multicultural contexts could face when going through this process as it provides an alternative for self-expression (Lawrence, 2008; Stanley, 2003). Further, a visual modality like photography facilitates conversation around emotionally challenging topics (Gil-Glazer, 2015). Cranton (2006a, 2006b, 2008), Fisher-Yoshida et al. (2009), and Lawrence (2008, 2012) emphasized the effective use of visual art as mediums that allow learners to tap into one's thoughts and feelings as a valid way of constructing and reconstructing knowledge. Accordingly, the visual photo component of photovoice prompts this process of critical self-reflection as argued by the aforementioned scholars. Originally, the photovoice approach was developed to instill critical reflection and critical awareness among marginalized social groups. Thus, the need for a tool that aided this process was the key to incorporate documentary photography as an integral part of the photovoice. The continuous act of taking photos allows learners to make meaning of their experiences in symbolic and metaphoric manners as most artwork entails. Further, the continuity of this semiotic thinking leads learners to dig deeper to explore their values and beliefs (McGregor, 2012).

The other component of photovoice is the narrative writing that mostly takes the form of storytelling. Storytelling is considered another form of artistic expression as stated by Fisher-Yoshida et al. (2009) and Lawrence (2008, 2012). The same view regarding photovoice was confirmed by McGregor (2012) who stated:

There is beauty and symmetry to this practice, weaving together images and meaning into a story that provokes for the artist and the viewer alike a sense of who they are, in new or altered ways, might know and imagine their world. It is a richly poetic endeavor--clearly and expressive, reflexive art. (p. 319)

Hence, this combination of two different forms of artistic expression makes photovoice a very powerful tool to utilize in educational setting to foster transformative learning. Further, this uniqueness of photovoice as explained by McGregor (2012) aligned with the TPP model on what defines transformative pedagogy. According to TPP authors (Fujino et al., 2018), what makes a pedagogy transformative rather than critical is embracing creative ways of knowing to construct and restructure knowledge. As such, photovoice is a transformative pedagogy since it embraces photography and storytelling as means of communication.

The positive impact of using photovoice pedagogy on promoting critical self-reflection was the main finding of Mulder and Dull's (2014) study that looked into using photovoice to cultivate critical self-reflection among graduate students in social work. Students in a social work course completed a photovoice project to reflect on their engagement with service learning. The authors' analysis of students' reflection revealed their engagement with the photovoice project allowed for a more profound process of self-reflection and enabled participants to visualize and envision their professional identity as future social workers. Similarly, a study by Pérez et al. (2016) examined using photovoice among pre-service teachers to foster critical awareness of diversity issues. The participants completed four reflective photovoice activities through which they explored their views and understanding of different forms of power structure within the society through a Black feminist theory lens. Participants reported that using photovoice to go through this examination process enabled a deeper and critical understanding of power and oppression. A third example of fostering critical reflection through photography was found in Gallo (2001) who used photovoice to facilitate transformative learning among ESL learners who came from an immigrant and refugee background. Gallo concluded that the use of photos enabled learners to overcome their limited linguistic abilities to explore their social connection to the people around them in workplaces. The photos were the main medium through which they were able to examine power dynamics.

The outcome of these studies exemplified the deliberate use of photovoice as an instructional activity that supported a deeper and more meaningful engagement with the critical reflection process for participants in different contexts to follow through with their transformative learning path. Further, photovoice strengthened the connection between the academic learning experience and learners' personal experiences. This connection was essential as it enabled learners to develop a more conscious awareness of their surrounding environment.

## **Brave Learning Spaces**

The term *Safe Space* was first coined by Arao and Clemens (2013) who advocated for creating genuinely deep and socially-just learning environments. The authors developed the concept of brave spaces to encounter the safe space concept they argued did not provide opportunities to question taken for granted assumptions and beliefs. For them, the authors, brave spaces were environments that cultivated the culture of candidacy, self-disclosure, vulnerability and most importantly genuine dialogic interactions among learning community members when tapping into difficult discussions. Consistent with Arao and Clemens' views on learning as an opportunity for change, Stanlick (2015) affirmed the need for creating brave spaces when aspiring to teach transformation as these spaces created the disorientation needed for transformation to happen:

Getting real about transformation is not easy, nor is it supposed to be. Transformation requires difficult, critical self-reflection and vulnerability. It requires fundamental shifts in how we think about disagreement and conflict. It requires reframing the tensions amongst individuals, communities, and systems so that transformation can occur within and across all of them. (p. 117)

The same assertion was stated by Winks (2018) who posited that "a truly transformative approach to higher education entails a deep questioning of the social and culturally manifested norms which reside within learners" (p. 100). Thus, the need for creating discomfort or disorienting learning space was indispensable to transformative pedagogical approaches.

Often, learners who engaged with photovoice educational activities were prompted to not only reflect on their personal experiences but to share them with both peers and teachers. In addition, they provided photos that usually contained personal and private details or elements from their everyday life. This act of sharing required both trust and vulnerability especially if photovoice assignments were used to discuss sensitive or challenging topics that pertained to race, culture, or socioeconomic status. Accordingly, cultivating brave spaces for learning when employing photovoice pedagogy is an indispensable component of the pedagogy that directly impacts the students' authentic engagement with the transformative process. In the following sub-sections, we discuss two essential factors for creating such spaces: building trust and embracing vulnerability.

### **Building Trust**

Creating brave learning spaces is almost impossible if trust is absent from the scene. Ukpokodu (2009a) identified humanized pedagogy as one of the six components of transformative pedagogy. In this component, she emphasized the key role of authentic personal connection between teachers and students. As evident in her qualitative data, students who experienced this personal connection with the teacher were more open about their experiences, especially the challenges they faced as part of their transformative journey. Further, this personal connection validated their active role in the learning process and increased their feelings of trust toward their instructor. Ukpokodu provided examples of how simple acts like asking students how they were doing or engaging with them in small talks could make a difference in their perception of their teachers. Brantmeier (2013) provided a different perspective on how to build this trust. He encouraged adult educators to be more open about their own personal experiences. He elaborated by stating that the more adult educators were willing to self-disclose, the more the learners were able to trust the learning space and engage with authentic co-construction of learning environments. The outcome of this trust changed the power dynamic of the learning environment where educators were no longer perceived as the solo provider of knowledge; rather, the educator was situated as a co-learner and the students became more empowered and able to voice their experiences within that learning space.

## **Embracing Vulnerability**

The journey of transformative learning is a journey of self-exploration and reconstruction of one's own reality and relationship with the self and the surrounding world (King, 2009a, 2009b). Often such a journey brings forward several emotional and cognitive challenges the learners experience when they are shifting their perception. As learners grapple with their changing perspective and exploring different ways of being in the world, the need for a learning space that is not only safe environment but rather a space that encourages openness and vulnerability is fundamental for an in-depth and meaningful self-exploration process (Fujino et al., 2018).

A key element for creating brave learning spaces within higher education context as described by Brantmeier (2013) is for teachers to model this vulnerability to students to increase their level of trust to the learning space. He called upon educators to become their authentic self: "Open yourself, contextualize that self in societal constructs and co-learn, admit you don't know, and be human" (p. 2). Authentic engagement in this vulnerable presence within a learning environment, for both educators and learners, is essential to identity exploration, which is a central process for perspective transformation to happen.

In this section, we discussed each of the components of the proposed photovoice transformative pedagogy. The successful implementation of the proposed model where the learners positively engaged with transformative learning process should result in transformative outcomes, i.e., learners who go through the process of self-exploration and re-evaluate of their beliefs and values as they move forward in their transformative learning experience are likely to experience a change in their ways of being in or interacting with the world. In the following section, we discuss three potential transformative outcomes that are directly related to both photovoice and transformative learning as frameworks.

## **Transformative Outcomes**

## **Perspective Transformation**

The end goal of the transformative learning is for the learners to reach a point where their views on the world become transformed. Mezirow (1991) referred to this outcome as perspective transformation—the newly formed viewpoints of the learners as a result of their engagement with the critical reflection process—as learners critically filter through their prior experiences. They are able to discard old beliefs that would not match their transformed ways of seeing their world. Often, this change in perception in one's ways of being in the world leads to a shift in their ways of taking action (Mezirow, 1991). To that end, perspective transformation is meant to empower learners to live a meaningful life where their actions are informed by views they have formed in a purposeful and meaningful manner. That said, it is important to mention that such changed and transformed perspective reveals itself differently from one person to the other as it reflects the unique transformative journey of each individual (Mezirow, 1991).

#### Connectedness

Integral to the holistic approaches of transformative learning is to foster a deeper change that goes beyond the cognitive change suggested by Mezirow (1978a, 1978b). One of the forms this holistic transformation reveals itself is through increased connectedness with oneself, other, and nature. Tolliver and Tisdell (2006) referred to this increased connectedness as transformation in the spiritual aspect of the human experience. Throughout the transformative journey, learners are directed to focus on themselves to examine their values and beliefs. Further, they are encouraged to engage with such a reflective process while they pay attention to their surrounding environment and how they relate to this world. The outcome of this process, if transformation happens, is to experience higher levels of self-awareness, appreciation of the surrounding environment, and developing a non-judgmental attitude towards others.

As discussed earlier, in photovoice academic assignments, the learners' ongoing practice of taking photos and capturing their realities through both a critical and aesthetic lens alters their perception of these realities. They become more aware of themselves and of others around them. Lipson Lawrence and Cranton (2009) concluded that photography allows the person to become less egocentric as they re-see things around them through a different lens. Akin to Lipson Lawrence and Cranton was the conclusion of Clover (2006) who used participatory photography that enabled homeless children and disadvantaged women to experience self-awareness and agency, and promoted resistance to the social injustice they are experiencing.

Several studies on photovoice pedagogy emphasized various outcomes that reflected perspective transformation. For example, in Cook and Quigley's study (2013) discussed earlier, the students reported higher levels of connectedness to their environment, which lined up with Fisher-Yoshida et al. (2009) that increased levels of connectedness to one's own self and others was an outcome of using art-based intervention to foster transformative learning. A similar outcome of increased self-awareness and change in professional identity and perspective was reported by Mulder and Dull's (2014) participants who were students in a social work graduate program. Lichty et al.'s (2019) study, which utilized photovoice pedagogy in a community psychology course at the graduate level, promoted the student participants' self-awareness of their own positionality within their communities. It also allowed for a development in their critical awareness as they became more aware of their community issues. All these examples highlight the strength photovoice has as a pedagogy to increase self-awareness and

connectedness as two forms of perspective transformation, which is the end goal of the transformative learning journey.

#### **Identity Formation**

Flum and Kaplan (2006) defined identity exploration as a "deliberate internal or external action of seeking and processing information in relation to the self" (p. 100). The authors further explained that identity exploration occurred when the learners engaged with dialogic interactions in their social and cultural contexts. It is a process of relating the acquired knowledge in these contexts to the self. In the context of transformative learning, learners immerse themselves in active process of self-exploration, self-examination, and the quest of how to exist and be within sociocultural contexts, especially when the transformative outcome contradicts with social-cultural norms.

The use of photovoice facilities this process of self-exploration and lessens the burden of these emotionally and socially taxing discoveries. Gallo (2001) used photovoice as a pedagogical tool with ESL learners from immigrant background to foster identity formation for this specific population while they were exploring identity changes due to the process of acculturation. Heffernan et al.'s (2017) suggestion of using triggering pedagogical strategies that cultivate an environment of self-quest and a safe and brace space for that exploration to happen aligned with our proposed model and seemed like a potent transformative outcome when using photovoice as a pedagogical approach to teach toward transformational learning.

#### Conclusion

In this article, we expanded the growing literature of photovoice pedagogy by framing this pedagogical approach as a transformative one. We argued that photovoice as a pedagogy that employed photography and storytelling as central ways of creative expression had the ability to elicit provocative learning experiences and, hence, enable deeper forms of transformational learning, especially among adult learners.

As the discussion above intimated, using visual and aesthetic to teach for personal change offer a powerful means of re-constructing how we see and know our world as individuals. They act as a camera lens into the perspectives or experiences others might be going through. They are a powerful lens through which participants can express and enact their visions for their future identities. However, the theory needs to be explored and investigated in practice. As such, for future endeavors, this proposed model needs to be explored in actual classrooms to test its efficacy in a real classroom environment.

## CHAPTER V

## A PHOTO FOR CHANGE: A MIXED METHODS CASE STUDY OF USING PHOTOVOICE PEDAGOGY TO FOSTER TRANSFORMATIVE LEARNING AMONG COLLEGE STUDENTS

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Contribution of Authors and Co-Authors Manuscript in Chapter IV

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#### Abstract

Motivated by exploring pedagogical approaches that promote transformational learning among college students, this mixed methods case study explored the transformative role of photovoice pedagogy in an undergraduate developmental psychology course. Photovoice pedagogy is an artbased pedagogy that utilizes both photography and storytelling as forms of creative expression to increase learners' academic engagement and critical awareness. To explore the role of photovoice pedagogy in fostering personal transformation, we collected both quantitative and qualitative data. A total of 46 participants completed a transformative experience and triggering incident survey. A subsequent sample of 11 participants completed a 60-minute, semi-structured interview. The quantitative data revealed that 83% of the participants experienced very high levels of personal transformation. The integration of the qualitative and quantitative data revealed that students displayed a high level of transformative learning in association with experiencing the photovoice pedagogy. Emerging from the qualitative data, we conceptualized the photovoice transformative pedagogy model, which mapped the processes and the outcomes of transformational learning in connection with the use of photovoice. The three main phases of the model were (a) a challenging way of learning, (b) transformative engagement, and (c) personal transformation.

*Keywords*: photovoice pedagogy, personal transformation, transformative experience, transformative learning, psychology, collage experience

You use a glass mirror to see your face; you use works of art to see your soul.

-George Bernard Shaw, Back to Methuselah

#### Overview

College can be a transformative and enlightening experience for both personal and intellectual growth. College years can be a once-in-a-lifetime opportunity for not only academic development but also personal and spiritual development (Plante, 2013, 2018, 2020). Plante (2020) further explained that most of the personal transformation and development happened outside of the classroom. Light (2004) confirmed the same idea based on interviewing over 1,000 senior students at Harvard University. Light's participants reported that most of their powerful and transformative experiences happened outside of the classroom. In other words, most college students dd not find their experience within college classroom as meaningful or stimulating to their personal growth or transformation. We find this disappointing as college classrooms certainly have the potential to be transformative (Biesta, 2009) and, arguably, a central goal of adult education should be to foster transformative learning (Boyd & Myers, 1988; Mezirow, 1978a, 1978b). As adult educators who teach college students, we can attest to this challenge of lacking ways to bridge the gap between the in and outside of school experiences and authentically engage college students with learning. Over their schooling years, college students master compartmentalizing their academic experiences from their own personal lives, especially when the two experiences contradict one another (Taylor, 2000). Moreover, they develop a mindset focused on grades and standardized learning experiences as a result of the current educational system (Biesta, 2009). We believe one approach to address this problem is to utilize pedagogical models aiming to bridge the gap between in and out of classroom experiences., i.e.,

providing learners with meaningful learning experiences that transcend the learners' views of themselves and their surrounding world.

Mezirow (1978a, 1978b) sought to address this gap in his theory of transformative learning. In his theory, he defined transformational learning as the process of deep, constructive, and meaningful learning experiences that cause a deep shift in the learners' knowledge structure. This deep shift is the outcome of the learner's engagement with the process of critical reflection on their existing beliefs and values as they go through a process of self-quest to make meanings of their life experiences. Overtime, several studies concluded that Mezirow's focus on cognitive factors only was a limitation to his theory as it ignored other dimensions of the transformative learning process that needed to be understood (Taylor, 2000).

A more integrative view of transformative learning expanded on Mezirow's (1978a, 1978b) original theory by exploring both cognitive factors (i.e., critical reflection) and noncognitive factors (i.e., emotions, imagination, intuition) to provide a holistic understanding of transformative learning (Lawrence, 2012). According to this integrative view of transformative learning, personal transformation could occur within classroom spaces if the learning environment cultivated and welcomed a whole person approach to teaching and learning. Instructional models that integrate different modalities of communicating knowledge through creative expressions (e.g., images, music, visual arts, imagination) have greater potential to entwine classroom experiences with learners' personal lives. This blend between the two worlds in and outside of the classroom setting increases the likelihood of personal transformation (Hoggan et al., 2009). King (2009a) stated that transformative learning does not happen in isolation. Instead, transformative learning usually happens when educators find instructional methods that entwine the learners' personal lives with their academic experiences. Photovoice is a unique instructional approach that utilizes both photography and storytelling as the main ways to engage learners with critical reflection. The unique use of creative and artistic expression like photography and storytelling enables students to engage with the academic learning outside of the school. Further, they are able to use these learning experiences as a lens to re-examine and reconstruct their realities. Inspired by integrative transformative learning views that advocate for adapting a holistic teaching approach that embraces a whole-person approach to learning, we implemented photovoice pedagogy in an undergraduate developmental psychology course taught university-wide to foster personal transformation as defined by Mezirow (1991).

#### **Theoretical Framework**

The main focus of this study was to explore how photovoice pedagogy could foster transformative learning in college classrooms. To understand and explore this learning process, we mainly drew on transformative learning by Mezirow (1978a, 1978b). In the following subsections, we provide a brief account of the theory, explain what photovoice pedagogy is, our rationale of choosing psychology as an undergraduate major, and conclude the section of how we planned to assess transformative learning in this study.

#### **Transformative Learning**

The end goal of transformative learning is to provide an opportunity for personal transformation to happen. Mezirow (1978a, 1978b), the father of transformative learning, developed his theory of transformative learning to provide a learning model in adult education. Mezirow (1991) posited that learning in adulthood should be a transformative process of allowing adult learners to critically question and reflect upon their current beliefs, assumptions, and views about how they interact with the world. Central to Mezirow's framework is the reliance on the learners' cognitive and rational abilities to engage with critical reflection as the

main process that leads to personal transformation. Through the process of critical reflection, learners are able to reconstruct their views about reality and form a new perspective and see their role in the world from a different lens. This process of critical reflection often is ignited by a disorienting dilemma that leads learners to face their limitations and break out of their habitual thinking. These orientations are what direct the learners' attention to the need for reevaluating and rediscovering their value system in hopes they would discover and meet their authentic self in the process.

The focus of Mezirow's (1978a, 1978b) theory on the cognitive dimension of the transformative learning process was critiqued over the years and Mezirow himself recognized this shortcoming of his theory (Illeris, 2014). Several scholars like Cranton (2006a, 2006b), Hoggan et al. (2009), and Lawrence (2012) concluded that transformative learning is better understood when a holistic orientation is taken into consideration, i.e., including emotional, social, and spiritual dimensions in addition to the cognitive one provide a holistic and deeper insight of how transformative learning happens (Hoggan et al., 2009; Taylor, 2009; Taylor & Cranton, 2012). Taylor (2009) further explained that involvement in expressive ways of knowing such as visual art, music, poetry, and participatory theater facilitates overcoming the resistance phase of transformative. Often times when learners are presented with disorienting dilemmas, they resist engaging with it. For example, a study by Cueva (2007), who explored the use of fictional theatre script with cancer patients, facilitated the patients' sharing of their own experiences. Before the use of this art-based intervention, patients resisted conversations around cancer and refused to discuss any topic related to this experience. However, after reading scripts that included fictional characters sharing their experiences with cancer, their attitudes shifted gradually. Similarly, Dirkx (1998, 2000, 2001) called for considering an alternative perspective

of fostering transformative learning. In his argument, Dirkx highlighted the important of using creative and expressive ways of knowing as it enabled adult learners to tap into their emotions to bring these to their awareness as an integral part of their personal transformation journey. He placed emphasis on the role of imagination and creating images that facilitated the engagement with transformative learning as these enabled learners to interpret their own experience.

In the current study, we were interested in exploring the potential of photovoice as a specific art-based pedagogy model to create a learning environment conducive to fostering a holistic transformative learning model. In line with Hoggan et al.'s (2009) suggestion of utilizing narrative and expressive art techniques to foster transformative learning, photovoice combines photography as a form of creative expression with narrative writing or storytelling as another form of creative expression. Further, the act of taking photos involves the body as well in this process of learning which, according to Bach et al. (2007), involves the learners' senses in the process and provides opportunities for alternative engagement with transformative learning. Therefore, photovoice seemed like an instructional model that provided opportunities for learners to engage with transformative learning.

#### Photovoice

Photovoice originated as a visual qualitative research methodology that was developed by Wang and Burris (1994, 1997). Photovoice relies mainly on the use of photography as the visual medium for collecting and presenting data. In this study, photovoice was used in both ways. First, it was used as a pedagogical intervention to potentially cultivate an environment conducive to transformative learning in a developmental psychology course. Second, it was used as the qualitative research method to explore and understand the participants' experiences with the pedagogical intervention in one-on-one interviews (the data presented in this article). In the following subsection, we provide a brief overview of photovoice as a pedagogy. In the methods section, we provide a detailed discussion of the research methodology aspect.

## **Photovoice Pedagogy**

Through the utilization of documentary photography and reflective narrative writing, photovoice pedagogy engages students with academic learning as they explore their surrounding world through the critical lens of a camera. Predominantly, photovoice has been a visual qualitative research method but eventually it made its way to the classroom as a pedagogy due to its educational potential (Latz, 2017). Usually, students are given prompts or themes to explore through taking photos (photo), providing narratives to these photos (voice) to interpret the photos and what they mean in connection their personal experience (Latz, 2017).

Photovoice pedagogy has been mainly used to foster educational values like inclusion, diversity (Chio & Fandt, 2007), and appreciation for science (Cook & Quigley, 2013; Stroud, 2014). Common reported outcomes of these studies indicated photovoice pedagogy increased the students' critical self-awareness (Harkness & Stallworth, 2013; Lichty, 2013) and their sense of autonomy and empowerment as they became more active and more responsible for their own learning (Massengale et al., 2016; Pérez et al., 2016). Moreover, several of the students reported their enjoyment with the artistic nature photovoice assignments had and how it gave them an opportunity to explore their creative abilities.

An example of how photovoice increased appreciation for science and foster critical reflection was found in a study conducted by Cook and Quigley (2013). The authors utilized photovoice to enhance college students' engagement with science and increase their scientific literacy. The students were asked to explore and photographically document environmental issues on their campus. The study concluded that the use of photovoice connected the students

more to science as it made science more relevant to their surrounding environment. Further, the students' participation in photovoice activities empowered them as they were able to recognize environmental issues that needed to be addressed in their environment and photovoice allowed them to document these issues and have an open dialogue with community stakeholders about possible change. Similar results were reported by Stroud (2014) who explored the use of photovoice in college-level introductory chemistry courses to increase engagement of non-science major students. The students were required to complete three tasks that varied between group and individual assignments. To complete these assignments, students needed to provide original photos accompanied by a reflective narrative on making to explore one of their chemistry course topics in their everyday life. The reported results were based on the students' evaluation in which they reported their appreciation to photovoice as it increased their connection to their surrounding environment and made learning chemistry more meaningful.

The aforementioned examples highlight the positive outcome of photovoice pedagogy due to its participatory-centered nature. The sense of agency over learning that participants get to experience through this approach is one of the key factors in the transformative process.

#### Why Psychology Courses?

Psychology as a discipline is one of the most prominent undergraduate disciplines that holds a strong potential for personal transformation. As a social science, psychology informs everyday life's action and interactions since it is concerned with examining and understanding the human experience. Generally, psychology has some of the highest enrollments among undergraduate courses or majors (Rask & Bailey, as cited in Green et al., 2015). Further, the rich content of psychology courses offers possibilities for learners to develop deeper understanding of their own personal experiences. This understanding potentially leads learners to develop higher levels of self-awareness and re-explore their personal experience and potential roles in life especially in developmental psychology courses that directly pertain to the multidimensions of the human experience. Thus, adapting pedagogies that deliberately cater for teaching toward personal transformation in undergraduate psychology courses increases the prospect of transformative learning to come about among college students. To date, investigating the impact of utilizing instructional models to foster transformative learning among undergraduate students in psychology courses has been overlooked. Therefore, a sub-goal of this study aimed to address this gap. Through implementing photovoice pedagogy in a developmental psychology undergraduate course, we aimed to explore how such a pedagogy could bring about personal transformation among college students when used to teach rich content that offers a potential for personal transformation.

#### **Assessing Transformative Learning**

To assess and evaluate the transformative learning process in this study, we drew mainly on Mezirow's (1978a, 1978b) transformative learning theory in collaboration with the transformative experience theory developed by Pugh (2011). Pugh's theory was grounded in Dewey's (1934/1980) philosophical ideas of art as an impactful educational experience. Central to his theory was using academic knowledge to re-see the world around us and turn the common everyday details into meaningful details that enrich our overall life experience. Pugh identified three main characteristics of transformative experience: (a) motivated use (refers to applying the content to everyday situations), (b) expansion of perception (refers to seeing everyday details through content lens), and (c) experiential value (refers to valuing content as it enriches everyday life). As such, Pugh's theory fell under the umbrella of aesthetic education as it encouraged seeing the beauty in the world around us through the lens of academic learning and turning the common into poetic! We decided to utilize Pugh's theory for two reasons. First, we used the psychology course content knowledge to foster transformative learning, which emulated the core of this theory. Second, we argued that the continuous engagement in small transformative experiences calumniated into a larger transformation, namely, perspective transformation as defined by Mezirow (1978a, 1978b). Hence, we used the theory to assess and evaluate the personal transformation for both quantitative and qualitative data components. A detailed discussion of the quantitative measure is provided in the methods section.

#### **Current Study**

The purpose of this study was to explore the nature of students' learning experiences in connection with photovoice pedagogy with a focus on the degree to which such experiences were transformative or not. We utilized an embedded case study design, which is a complex mixed methods design (Creswell & Plano Clark, 2018), to better understand the process and the outcome of personal transformation as a complex phenomenon. We collected both quantitative and qualitative data wherein the qualitative inquiry was the main method of inquiry and the quantitative inquiry was the subordinate data to answer the following research questions:

- Q1 What is the class overall level of transformative engagement with the photovoice pedagogical intervention based on the self-reported ratings by students?
- Q2 What are the individual students' perspective of and experiences with the photovoice pedagogy as it relates to personal transformation?
- Q3 Based on the qualitative and quantitative findings, what is the nature of the learning associated with the photovoice pedagogy?

#### Methods

## **Study Design**

We chose the embedded case study, which is a complex mixed methods design (Creswell and Plano Clark, 2018), to combine with the photovoice approach to be able to develop a deep understanding of the role of photovoice as transformative pedagogy in fostering personal transformation among undergraduate students and to empirically verify the theoretical conceptualization of photovoice as a transformative pedagogy. Prototypically in this design, the researcher decides on a primary mode of inquiry and augments this primary mode with another secondary one to collect more information pertaining to the case study focus. In this study, the primary mode of inquiry was qualitative as the main goal was to explore and understand in depth the role of photovoice pedagogy in fostering transformative learning. The secondary mode of inquiry was quantitative, which was employed to gather data from more students in the class to provide an overall picture of how photovoice pedagogical intervention played a role on fostering transformative learning in this particular case context. In other words, the quantitative component aimed at providing an overall understating of the role of photovoice pedagogical intervention in fostering personal transformation, while the qualitative component, which was the core of this study, aimed to provide in-depth understanding of that role. The qualitative data were the main source of detailed explanations of how participants experienced the intervention.

Yin (2015) described the case study method: "A case study is an empirical inquiry that investigates a contemporary phenomenon (the case) within its real-life context, especially when the boundaries between the phenomenon and context may not be clearly evident" (p. 16). The identification of the bounded system of the case is an essential characteristic of a case study design (Merriam & Tisdell, 2016). In the case of this study, the case was bounded by the developmental psychology course and the student population—undergraduates. A case study design seemed compatible with the research goals since we sought a deeper understanding of the contextual factors that might lead to transformative learning within this specific context. Further, we aimed to explore the unique individual experience of each participant that would add to the

complexity and the uniqueness of this overall experience, which fit well within the case study framework. In the following sub-section, we introduce how photovoice was used as a research methodology in this study to answer the second research question.

## Photovoice as a Research Method

Photovoice was developed by Wang and Burris (1994, 1997) as a participatory action research method aimed at increasing participants' presence in the research process. The theoretical underpinnings of this methodology were rooted in Paulo Freire's (1970) critical education, feminist theory (Maguire, 1987), and documentary photography. As a visual qualitative research methodology, photovoice is centered on using documentary photography as a main source of data. Photos are generated by the participants only and this approach characterizes photovoice as an empowering research method. As Thomas (2009) explained, "When participants take a photograph knowing that it is for research, they have made decisions about how they want to represent themselves in the visual scene they have created" (p. 2). Further, this active engagement as explained by Thomas (2009) allows participants to critically reflect on their communities' strength and issues that need improvements.

These qualities that make photovoice an empowering qualitative research method with the potential to foster transformative critical reflection are also what made it a desirable tool for fostering transformative learning in the classroom. As the main goal of this study was to use photovoice pedagogy to foster transformational learning, using photovoice as research method seemed consistent with our goal as we aimed to voice the participants' experiences with personal transformation in relation to photovoice pedagogical intervention. Although in a typical photovoice study participants engage in photovoice focus groups, several photovoice studies utilized an individual interview format to gather more in-depth data of the individuals' lived experiences in a particular context (Catalani & Minkler, 2010). In our study, we utilized individual interviews as we sought out in depth understanding of the participating students' individual experiences. We aimed to better understand the individual experiences of how transformational learning might happen within the same classroom environment.

## **Participants**

The target population for this study was undergraduate students enrolled in the developmental psychology section taught by the first author. To be included in this research effort, participants needed to have at least 70% of the course work completed at the time of the recruitment. A convenience sampling technique (Merriam & Tisdell, 2016) was utilized due to convenient access. After applying the selection criteria to all the students enrolled in the course, five students were excluded out of a total of 55 students enrolled in the course. We got a 92% response rate (n = 46) for the quantitative component. The sample consisted of 85% females (n = 39) and 14% males (n = 6) and 1% unreported with an average age of 21. The ethnic composition of the sample was as follows: 67.4% Caucasian, 17.4% Latinx, 4.3% African American, 6.5% self- described as (half Asian /half White, Nepalis), and 2.2 % Asian.

As for the previous background studying photography, 34% of the participants reported studying photography through their formal schooling prior to joining this course, 59% of the class did not receive any formal training in photography, and the remining 7% elected not to respond to this item. As for the previous experience studying psychology, about 67% of the participants had taken psychology courses prior to this course while 26% had no prior background of studying psychology before they joined the course. The remining 7% elected not to respond to this item. In terms of the different levels of photography appreciation, the

frequencies for low, medium, and high were less than 1%, 43.5%, 48%, respectively. Less than 3% of the participants elected not to respond to this item.

## Interview Participants' Profiles

A subsequent sample of 11 participants that consisted of 81.8% females (n = 9) and 18.2% males (n = 2) participated in the qualitative interviews. All participants self-selected pseudonyms reported in the study. The participants' detailed demographic characteristics are displayed in Table 5.1. The table provides data related to the participants' various experiences and background with psychology and photography, and their level of appreciation of photography. Further, it provides their individual survey scores for both the transformative experience questionnaire (TEQ) and the transformative incident student survey (TISS). Further, Figure 5.1, the transformative experience (TE) person map, displays how the interview participants were situated on the transformative engagement continuum compared to their peers in the class. Overall, all the interview participants were placed above the item mean, which indicated they had higher levels of engaging with transformative experiences outside the classroom.

## Table 5.1

Pseudonym	Age	Ethnicity	Gender	TEQ	TISS	Photography Apperception	Psychology Experience	Photography Experience
Natalie	19	Caucasian	Female	1.34	4	High	NA	NA
Cortana	20	Half Asian	Female	3.76	4	Medium	No	No
David	21	Caucasian	Male	1.51	3	Medium	Yes	No
EmptyEyes	32	Caucasian	Male	2.60	4	Low	Yes	Yes
Kaia	40	Latina	Female	4.42	5	High	Yes	Yes
Rose	22	Latina	Female	1.34	4	High	Yes	Yes
Laylin	19	Latina	Female	5.15	4	High	Yes	No
Victoria	27	Caucasian	Female	4.25	5	High	Yes	No
Maria	19	Latina	Female	4.25	4	Medium	No	Yes
Alisia	19	Nepali	Female	2.94	4	Medium	Yes	No
Jen	19	Caucasian	Female	0.66	3	Medium	Yes	No

Demographic and Outcome Variable Information from Interview Participants

*N* = 11

## Context

The transformative nature of this study imposed the need to understand and define the several layers of the study context that went beyond the immediate classroom environment and were a potent influence on the learning environment. It is essential to mention the study took place during a unique semester, Fall 2020. The year 2020 was a very transformative one in human history since the World Health Organization (2020) declared the COVID-19 virus as a pandemic. Consequently, all the learning environments across the globe shifted to an online format or included online learning as a major component as was the case in our study. Although the course had a face-to face component to it, classroom interactions were guided by public health restrictions (i.e., social distancing, wearing masks, and limiting large gatherings).

As we aimed to foster transformative learning in a developmental psychology course in a course that includes developing the students' self-awareness, examining diverse perspectives, and addressing diversity as major learning outcomes, discussing the global event of COVID-19 provided a unique opportunity for the students to critically reflect on issues related to public health, social justice, diversity, inclusion, and self-awareness. The developmental psychology course is foundational in psychology, nursing, and education undergraduate programs; it is also offered as a liberal arts core course in social sciences university-wide. Therefore, the students' value and interest in this course varied on the continuum of academic engagement.

#### **Photovoice Intervention**

The course took place in a hybrid format over 16 weeks. The course plan consisted of 15 modules; each module covered a specific developmental psychology topic. One of the course components was the weekly reflective activity to foster personal transformation via photovoice. The photovoice activity was called "A Photo for Change." The general idea of the activity was

introduced in the course syllabus and further training to familiarize the students with photovoice was part of the classroom instruction (i.e., using photo elicitation as technique when presenting a topic, using metaphors to explain concepts) during the semester. This instructional aspect included multiple discussions about photography elements (i.e., light, gaze, arranging elements in the photo), ethics of photography, and establishing connections between photos and written narratives. Furthermore, a training module that consisted of PowerPoint slides explaining the purpose of the activity, its relevance to the course, and detailed photography ethics was provided. Finally, students were provided with a guideline document that included detailed steps for completing the activity, the grading scheme, and examples of how to complete the assignment.

The "A Photo for Change" activity was completed as an online discussion activity via the university learning management system, Canvas. The students were assigned weekly prompts that explicitly encouraged the process of critical reflection. Examples of these prompts are displayed in Table 5.2 (a full list of the prompts is provided in Appendix B). These prompts were crafted to guide the students' engagement with reflection on their own personal experience. To respond to these prompts, they needed to take an original photo that represented the core idea of their reflection along with a narrative connecting the picture to this reflection and then post these photos along with the reflection to the online discussion board. Students were required to respond to at least two other classmates' original posts. The purpose of this interaction was to enrich and expand the student's perception of the diverse and complex nature of the human experience.

#### Table 5.2

An Example of the Weekly Discussion Prompts for "A Photo for Change" Activity

## **Example Prompt**

1. This week, we covered different views of intelligence and different biological and environmental factors that contribute to its development. What are some new pieces of information that you have learned about this topic? How does it change your views about intelligence in general? How does this information change your views about yourself as a student and as a person in day to day life?

Respond to this prompt in your own words and accompany that with an original photo (s) that will represent your reflective thoughts. By original photo, I mean a photo you take personally after reading the prompt. Remember to respond to at least two other posts of your classmates.

## **Data Collection Procedures**

Upon Institutional Review Board approval (see Appendix A), the study was announced in the class. The data collection process started toward the end of the semester (weeks 12-16). The data collected for the study consisted of both qualitative and quantitative data. The qualitative data included photovoice individual interview data. The interviews were conducted during the last week of the semester and afterward. The quantitative data were collected via close-ended surveys during the last four weeks of the semester: a transformative experience measure and a transformative incident student survey. To ensure ethical conduct of research, the first author was excluded from the data collection process due to a power differential as the instructor of the course.

#### Quantitative Data Collection

To reiterate, the purpose of the quantitative data was to (a) provide an overall picture of the transformative engagement of the class and (b) serve as a reference for contextualizing the engagement of the interview participants. Students who volunteered to participate in the quantitative part of the study completed three surveys: transformative experience questionnaire, transformative incident students survey, and a demographic survey. All the surveys were distributed electronically via Qualtrics for students to complete during a 30-45-minute asynchronous session. The students who elected to participate in the quantitative component of the study received extra credit for completing surveys. The following is a description of each measure indicating each measure's reliability score per the collected data parameters.

**Demographic Surve**y. This survey included questions about the participant's age, gender, ethnicity, previous experiences studying psychology and photography, and photography appreciation (see Appendix C).

**Transformative Experience Questionnaire.** This adapted version of the transformative experience questionnaire (TEQ) was developed by Koskey et al. (2018) to measure learners' transformative experiences in science classrooms (see Appendix D). For the purpose of this study, items were modified to reflect the human development and growth course content. The survey contained 27-items with responses on a 4-point Likert scale, 1 = *Strongly Disagree* to 4 = *Strongly Agree*. Items targeted the three characteristics of transformative experience: motivated use (e.g., Outside of school, I apply the knowledge I've learned about human development), expansion of perception (e.g., The concepts I learned in my human development class changed the way I see the world), and experiential value (e.g., human development concepts make everyday life much more interesting). The survey items were developed to represent a continuum of transformative experience where the items targeting students' engagement in the class were included to represent the lower end of the transformative experience continuum and items targeting students' engagement outside the classroom represented the higher end of the transformative experience continuum and items targeting students' engagement outside the classroom represented the higher end of the

(1980) model for survey analysis. In the context of this study, Rasch analysis was used to evaluate the measure and develop a composite score. Two items were misfitting as their infit MS was higher than 1.4 (Wright & Linacre, 1994). Only one of these items was dropped and the other was retained because it was only slightly misfitting and contributed to the item and person separation. Person reliability (.89) and separation (2.91) were strong, indicating the measure reliably ordered participants along the transformative engagement continuum and distinguished between different levels of transformative engagement. Item reliability (.85) and separation (2.41) were also strong.

Transformative Incident Students Survey. This modified version of the survey was developed by Jost (2018). The survey measures the impact of specific triggers on the students' engagement with transformative learning (see Appendix E). This multidimensional scale included 122 items on a 5-point Likert scale from 1 = *Definitely Disagree* to 5 = *Definitely* Agree. We included two subscales that focused on triggers and reflection as the items in both subscales (18 items) pertained to the role of the photovoice pedagogy as a trigger in fostering perspective transformation ("A Photo for Change" activity affected me as a student and has challenged some of my firmly held ideas about learning) and critical reflection-(I realized that I had to think about things differently). However, the exploratory factor analysis results revealed that only one factor had an eigenvalue > 1 and explained 44% of the variance, which indicated the survey was perceived by the respondents as a unidimensional scale rather two different subscales. Our decision based on the exploratory factor analysis was to keep all 18 items and consider it unidimensional. We believed it was very likely participants perceived the survey in such a manner since the items mainly pertained to their experience with the photovoice intervention ("A Photo for Change" activity). In other words, participants perceived items of the survey related to the triggering event and critical reflection as one construct since both constructs were linked to the name of the intervention activity. The data were relatively positively skewed with skewness of -0.80 (SE = 0.35) and kurtosis of 0.60 (SE = 0.69). The overall mean for the survey was 4 (SE = 0.78) on 5-point scale. However, we decided to include the survey in our results as a unidimensional scale as it provided valuable information regarding the participants' experience with the photovoice intervention fostering transformative learning. The Cronbach alpha for overall scale was 0.92, indicating a high level of consistency.

#### Qualitative Data Collection

Two members of the research team virtually interviewed 11 consenting participants. The interviews were 60-minutes long and semi-structured in nature. The purpose of these one-on-one interviews was to explore in depth the participants' experiences with the photovoice pedagogical intervention. It is important to highlight that the interview protocol followed the photovoice research methodology as well. This meant the participants were required to provide photos as part of their response to about 50% of the interview questions. Therefore, participants were provided with the interview questions via e-mail a week in advance to the actual interview date along with guidelines on how to take photos for the interview questions (see Appendix F). The photos produced by the participants were sent to the interviewers the day before the interview for preparation purposes along with signed copies of informed consent (see Appendix G) and photo release forms (see Appendix H). Consistent with the photovoice methodology, the interviewers utilized the PHOTO model (Hussey, 2006) that initiated the interaction with participants regarding their photos. The PHOTO acronym stands for the model's five main elements:: (a) Describe your **P**icture (b) What is *happening in your picture*? (c) why did you take a picture of this? (d) what does this photo tell us about your life? (e) how can this picture provide

opportunities for us to improve life? Upon the completion of the interview, each participant received a \$10 Amazon gift card as a compensation for their participation.

### **Inference Quality and Transferability**

According to Teddlie and Tashakkori (2009), inference quality refers to the creditability and internal validity of the research design. To establish credibility, we utilized four strategies: triangulation, thick description, member checking, and peer debriefing strategies. For triangulation, we collected both quantitative and qualitative data. While qualitative data were the main source of data, the quantitative aspect was meant to support the emerging themes and enrich the descriptive profiles of participants. For thick description, we provided a detailed account of the case study in terms of the classroom environment, the photovoice intervention implementation to maximize the richness of this description. For member checking, we shared the tentative interpretation or findings with the participants to verify the accuracy of the data interpretation via email exchange and participants who responded to this communication concurred with our analysis. Finally, we employed peer debriefing since the first author along with two other research team members engaged with intercoder process to code the interview data. After the three cycles of coding, a team of experts in transformative learning provided feedback on the written model to refine the themes and their description as well as the data used to represent the themes.

#### **Data Analysis**

Data collected for this case study consisted of qualitative data (interviews) and quantitative data (close-ended surveys). The data analysis for both types of data started concurrently; however, the interviewing process took longer time due to logistical reasons. The results were integrated to provide a holistic understanding of the phenomenon explored in this study—the role of photovoice pedagogy in fostering personal transformation among college students. In this section, we detail the process of qualitative data analysis and then highlight the integration process of both quantitative and qualitative data.

To analyze the qualitative data, we used thematic content analysis (Oliveira et al., 2013) to elucidate emerging themes from the interview data. We aimed to construct, in collaboration with participants, the meaning of their experiences with photovoice pedagogy and distill themes that reflected the essence of college students' perceptions of this specific experience. Qualitative thematic content analysis consisted of three phases: (a) open coding, which entailed exploring data and creating codes; (b) axial coding, which entailed aggregating categories or codes to create themes; and (c) selective coding, which entailed refining the themes resulting from the second cycle of coding and naming themes (Merriam, 1998). The interview data were comprised of photos and word data (narratives). In photovoice research, the images are considered an integral part of the narrative as they represent another layer of the meaning. Therefore, the photos that represented a specific element or pattern were coded under the same category the word data were coded in. For the coding process, the transcribed interviews were imported to Nvivo software to start the inductive coding process during which we completed three cycles of coding that resulted in the photovoice transformative pedagogy model. The model consisted of three major phases, which are discussed in detail in the finding section. It is worth mentioning that after cycle one was completed, we noticed how certain categories could be grouped to explain the process and outcome of transformative learning through the lens of both Mezirow's theory (1978a, 1978b) and Pugh's (2011) theory of transformative experience.

#### Results

We sought to explore the nature of learning experiences associated with the implementation of photovoice pedagogy in a college classroom. Specifically, we aimed to measure the overall transformative engagement with this pedagogical intervention (Research Question 1) as well as gaining in-depth understanding of the participants perception of the intervention and how it was associated with their personal transformation (Research Question 2). To address the first aim, we provide an overall picture of the transformative engagement in this particular case study by presenting the quantitative survey results. To address the second aim, we present the qualitative data from the photovoice interviews. To address the overall aim of exploring the nature of learning associated with photovoice (Research Question 3), we provide an integrated interpretation of both the quantitative and the qualitative data to discuss the (potentially transformative) learning and engagement outcomes associated with photovoice pedagogy.

#### **Quantitative Results**

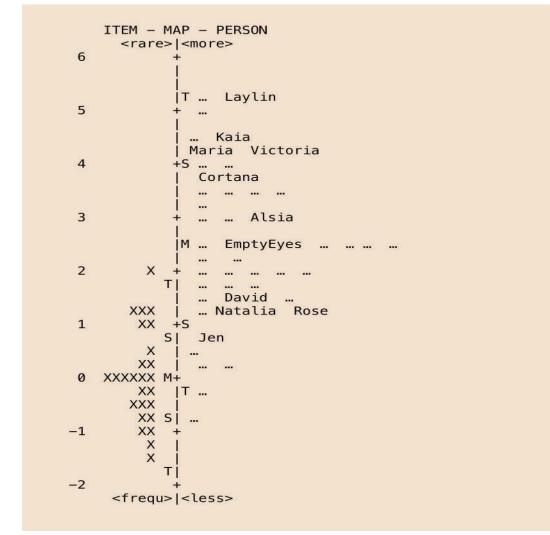
Data from both surveys were collected and analyzed to partially answer the first research question:

Q1 What is the overall transformative experience of the students with the photovoice intervention?

Figure 5.1 illustrates the results from the TEQ. In the map, people are represented by dashed lines on the right side of the figure. Pseudonyms for the interview participants are substituted for dashes. Items are represented by an "X" on the left side of the figure.

99

Transformative Experience Questionnaire Person-Item Map



*Note.* X = survey item, dashed lines = other students in the course

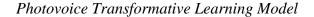
To understand the map, we can look at the position of people relative to items. In general, items located below a particular individual were likely to have been endorsed by that individual. Items located above the individual were unlikely to have been endorsed by that individual. Those items proximal to the individual were as likely as not to have been endorsed by that individual. The person mean Rasch score for the current sample was 2.41 (SE = .03) as indicated by the M on the right side of the map. As all items are located below the mean, indicating that on average,

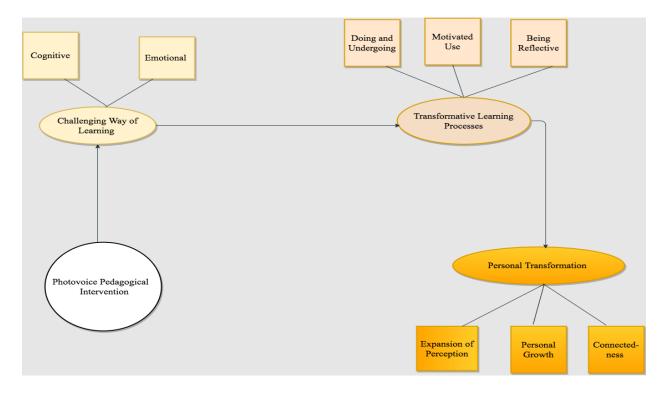
all items were endorsed by the current sample. Thus, we can describe the sample as one of very high levels of transformative engagement as the average student was likely to endorse even those items targeting active/purposeful transformative experience. Specifically, participants, on average, indicated they were seeking opportunities to apply the human growth and development concepts in their day-to-day life, were actively seeing the world through the lens of the course content, and believed the course concepts make their current, out-of-school experience more meaningful and interesting. It was challenging to differentiate between different levels of transformative engagement as the participants reported higher levels of engagement with the course content, especially outside the classroom

Concerning the TISS survey, as discussed in the data analysis section, the survey was perceived as a unidimensional scale by the participants. The overall mean was 4 on a 5-point scale, M = 4.0, and SD = 0.78, indicating that on average, 83% of the participants agreed or strongly agreed with the items. That meant most of the participating students reported higher levels of engagement with transformative learning as defined by Mezirow's (1978a, 1978b) transformative learning theory. To elaborate, participants reported they perceived the photovoice weekly activity as a stimulating element in their transformative learning experience that elicited provocative learning. Further, this engagement with the learning led the participants to engage with critical reflection. Participants sought to revisit their thinking habits and be open to change, i.e., the photovoice activity engaged participants with perspective transformation as they had to re-evaluate their ways of thinking and doing things.

#### **Qualitative Findings**

To answer the second research question that aimed to explore the students' perceptions of the photovoice pedagogy intervention and its transformative implications, a total of 11 semistructured photovoice interviews were analyzed using the thematic content analysis method (Merriam, 2008). The data analysis of both interview narratives and photo data provided by participants revealed how photovoice as a teaching method facilitated fostering both transformative learning as established by Mezirow (1978a, 1978b) and transformative experience theory as established by Pugh (2011). As the thematic content analysis entailed, the first cycle of coding focused on open coding of the interview data, the second cycle of coding focused on aggregating the similar codes into themes, and the third cycle of coding focused on selective coding. The immersion in the qualitative data analysis unpacked how the participants' perceived "A Photo for Change" as a unique educational experience that had them engage with learning differently. To elaborate, participants shared and highlighted that the use of photography prompted them to think about the course content differently. Further, it elicited different learning processes that pertained to the process of transformational learning. We chose to represent this process of transformational learning as the photovoice transformative learning model (see Figure 5.2).





The photovoice transformative learning model explains the transformative learning journey as a result of the photovoice pedagogical intervention. As we ended the coding process, three main themes emerged: a challenging way of learning, processes of transformative learning, and personal transformation. Moreover, the data suggested relations between these main themes. The three main themes detailed the process of the transformative learning as well as the outcome of that experience. Hence, we created a model illustrating these themes, subthemes, and their relations (see Figure 4.2). To clarify, all the data reported in this section came directly from the Photovoice interviews where the students were asked about their experience with the photovoice pedagogical intervention. These data were different from what the students shared on the weekly photovoice discussion board assignment since the class assignments were not part of the data

collected in this study. Hence, as the following explanation of the model includes voices of the participants, whenever a photo datum was part of the quote, it was included as part of the voice being quoted.

This section explains the three main phases of the model in terms of the emotional and cognitive disorientation, transformative learning processes, and personal transformations as an outcome of the photovoice pedagogical intervention. It is worth highlighting that the transformative journey explained by this model was an interconnected process rather than explained as separate steps. There was an overlap between sub-themes in the data presented, which explained the complexity and the interdependence of the transformative learning processes.

# Phase One: A Challenging Way of Learning

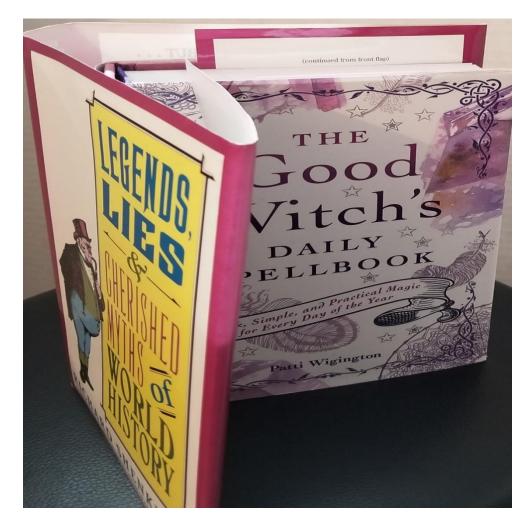
This theme represented the participants' early experiences with "A Photo for Change" as a challenge on both the cognitive and emotional levels. All 11 participants experienced the activity as a dilemma at the beginning of the semester. Cognitively, the activity was challenging as they were required to take photos that would represent their thought process and establish a connection between their photos and the reflective narrative they provided for the weekly prompts. This dynamic was well explained by David who said, "Having to take a picture that correlates to a certain prompt or theme was definitely a challenge to me at first." For David, going through the mental process of creating photos that concertized or figuratively expressed his thoughts and ideas was a cognitive challenge at the early phase of completing this assignment. Laylin shared a similar experience to David's. She also went through the cognitive challenge of how to create a photo that communicated her understanding of the material visually as she said: I wasn't sure what to connect a certain material with. For example, I recall one of the first materials from class, being over parental development and birth experience. I found the topic very intriguing. But when it came to the pictures, I wasn't sure what I was going to connect it to.

As the activity was completed in a group discussion format, several participants found themselves being challenged emotionally as well since they had to share their photos and responses to the prompt with other students. That emotional challenge manifested itself differently from one personal experience to the other. For example, Maria illustrated this process as being "self-conscious" about the quality of her photos and how they would be perceived by her classmates. A similar experience was highlighted by Alisia who indicated that stepping into this experience was "scary" as she was not sure about her performance. The same experience was reported by Rose: "I was kind of scared, I guess you could say. I never knew how to, what to take pictures of. So, I didn't know what would be okay for me to take a picture of." Similarly, David expressed his emotional experience:" I was definitely hesitant at first, because I'm not the most creative individual." The fear of being judged or perceived negatively was the experience of Kaia as well who shared this visually (see Figure 5.3) and verbally in response to being asked about what was challenging about completing the photovoice activity:

I took this photo this way to represent judging a book by its cover. I used to be particular. Because we also cover says legends lies myths of world history and the inside cover says the good witches. It wasn't so much the spell book but just the Good Witch. Because of my own fear to begin with. And I guess the discussion board was probably one of the harder things for me to do. And the fear of judgment and those types of things.

Kaia figuratively used the "witch" analogy to express that judging others without knowing the story behind them was her biggest fear stepping into this experience as she was afraid of being judged for her values and beliefs.

Kaia's Photo: Good Witches



As all of these voices highlighted that being part of a collective experience of sharing narratives and photos, participants were mainly concerned about their social desirability and perceived image. This theme representing the first phase of the model aligned with Mezirow's (1978a, 1978b) theory of transformative learning and emphasized the need for a disorienting dilemma to initiate the learners' engagement with questioning their existing patters of thinking and learning. The dilemma was meant to challenge the learners as they were presented with a trigger that initiated the beginning of the transformative path.

## Phase Two: Transformative Learning Processes

In this phase of the model, the focus was on the different ways the photovoice intervention elicited transformative learning processes from learners. Further, the sub-themes in this phase demonstrated how learners' immersion in the photovoice activity shifted their early experienced trepidation gradually into an attitude of openness and active participation in the transformative learning process. The more the participants trusted the process and the space created for this learning experience to happen, they realized to gain the most out of it one had to continue moving forward even if the outcome seemed vague and uncertain. The four processes presented in this phase were (a) doing and undergoing, (b) motivated use, (c) openness, and (d) being reflective.

**Doing and Undergoing.** Looming from the data, this sub-theme showed the importance of moving from cognitive and emotional resistance to openness and immersion in the experience. This sub-theme was directly related to Dewey's (1934/1980) concept of doing and undergoing. Dewey believed our most meaningful experiences involved both doing and undergoing, i.e., both acting and an openness to being acted upon (Pugh, 2020, p. 95). Nine participants endorsed that theme. Participants shared that being open to the experience was a key to not only move in this journey but also become more aware of their own personal interactions with their surrounding environments. In other words, when participants adapted an open mindset about the unique nature of the photovoice activity as a space for creative self-expression and exploring learning differently, they were able to deeply immerse in the learning. They recognized how they were being different from others who refused to engage in questioning, exploring, and re-examining their habits of mind. This was well explained by Natalie who expressed this thought verbally and

visually (see Figure 5.4) in response to being asked about what was challenging about

completing the photovoice activity:

This specific painting. I had no idea where it was going, to be honest. I don't know, I kind of just like trust the process is like a big thing, and that was like a big thing that I needed to use throughout the "photo for change" was to kind of dig deeper and not worry too much about like what the end result is going to look like.

# Figure 5.4

Natalie's Photo: Challenge



As this quote from Natalie showed, she realized that part of the transformative path was to develop trust without knowing what the outcome would look like. However, she was also aware that deeper engagement with the art creation was another key to this process as it was a key to make progress on this journey. The same process was described by Alasia verbally and visually (Figure 5.5) in response to being asked about what was unique about completing the photovoice activity:

I did choose a picture of a log of wood from a tree. I was at Boulder Creek. There was a wall of just small wood log of woods attached to a wall. I thought that each spiral expanding out represented the innermost the outer outermost how one small idea can eventually lead you to your final destination. And yeah, so connecting to nature again. I also thought like how rocks are everywhere so but within those rocks, like the soil so connected to the branches to each tree we have in this earth so just like spiraling from one idea to another just helps expand my imagining in a way

## Figure 5.5

Alasia's Photo: Spiral



For Alasia, the doing and undergoing was a spiral process where taking small steps built upon one another to form the bigger picture and they were instrumental in expanding imaginative skills needed to engage with the activity. Going through the same realization was expressed by Laylin regarding her experience completing the "Photo for Change" activity visually and verbally (Figure 5.6) in response to being asked about what was unique about completing the

photovoice activity:

When I was deciding what picture to connect this question, to me, I wanted to do something that had an opening, as a way to express the fact that there are going to be times where you have like a certain thought that can lead to another, which is what I really encountered with doing this activity. For the pole, I thought of it like, oh, you can have an idea that can just go all the way straight, but then there's gonna be moments I thought the holes were going to be like, ways that ideas can just pop out of nowhere. I thought it was the same as with the Pentagon makes think of what my mind was going about during this activity. So, it basically explains my brain at the time.... I also tried to include like a shadow behind it, because there's always going to be that one thought that just sticks to you and like it grabs your attention

# Figure 5.6

Laylin's Photo: Gold Pentagon



This quote by Laylin explained how the doing and undergoing process for her was one of going through the unfolding of the experience as one main idea led to other thoughts that eventually came to light as a result of going with the flow.

These quotes and photos showed that the students' involvement in the process of doing and undergoing led them to realize that being in the moment and going with the flow of the experience was part of their transformative journey and eventually they would reach a destination. although it was not clearly defined yet. Maria, another participant, shared her perspective figuratively in her photo (see Figure 5.7) in response to being asked about what was unique about completing the photovoice activity and said: "I guess, by me having my windows open, like to see the light, and I think it's always like really bright in my room compared to my other roommates. They always have their blinds shut." As this quote showed, Maria compared her openness to new experiences as similar to an open window that allowed light to be in the room. Unlike her roommates who were "shutting their blinds," she made a deliberate effort to be open to new and changing experiences.

Maria's Photo: Openness



Similarly, David expressed a very close experience to Maria's through a photo (see Figure 5.8) and a quote expressing his thoughts in response to being asked about what was unique about completing the photovoice activity.

In the picture I took for this, I thought of as kind of like a symbol. So, I took a picture of a window with curtains that were open. And so, I thought of, I thought of the open window, sort of like an open mind. Whereas an open window can let sunlight in, I thought that an open mind can let creative ideas in. And I thought that this activity was unique. Just due to its ability to allow the participant to be thoughtful, and creative with their responses. And I, I just kind of thought that anyone who does this activity is kind of allowed to have an open mind.

## David's Photo: Openness



David's analogy was very similar to Maria's as both participants saw the mindset as the portal to bring about the change in their ways of thinking and learning as they became open to go through experiences that could bring about a shift in their perception of their life experience. Another example of openness was detected in Victoria's story who also confirmed similar views to both David and Maria as she said in her voice and photo (see Figure 5.9) in response to being asked about what was unique about completing the photovoice activity:

You gotta give in to any transformative experience. And you know, you gotta be openminded to really let change occur. So, the Photo for Change, was an assignment I definitely had never done. And it was new to me to think of like taking a picture and relating it to the material we were learning. So, it took me through a lot of different transformative experiences, and you just got to be open minded and allow it to happen. And then you can learn so much.

## Victoria's Photo: Allow the Unfolding



For Victoria, being open minded to explore new ways of learning, the course content had led her to live multiple transformative experiences within the course period. As these voices and photos by participants indicated, being open to explore non-traditional ways of learning was an essential part of being able to unleash their creativity and experience transformative learning.

This emerging theme reflected Dewey's (1934/1980) argument regarding the interaction with art, whether through making it or experiencing it, as a powerful experience that entailed both surrender to the process of art creation that takes over one's thoughts and emotions. As learners continued to engage in taking photos and sharing them with their classmates, even without being assertive about their work, they were able to move forward and made progress with their involvement in this learning experience.'

Being Reflective. Central to perspective transformation and perceiving the world

differently is to become a critically reflective person (Mezirow, 1991). Four participants

endorsed this process clearly when sharing their experience. An example of this endorsement

was clear in Natalie's quote:

I just think about what was happening around me.... I guess reflection can be like how does this apply to you? How can you use it in your life? And then use that out in public or like with friends and family. How can you reflect that course material out into the world? Because it's kind of useful like knowing how people interact or like, it's kind of important to know how to interact with other people.

For her, the photovoice activity made her more reflective on her personal and social interactions.

She became more aware of how the content knowledge had a strong potential to transform her

personal life in ways that went beyond the classroom.

A similar experience was reported by Kaia:

It [ A Photo for Change] really makes you step outside of the material, and just really have to think it through. So, I'm a non-traditional student so I'm, you know I'm a little bit older than some of the other students, so I've lived a lot of that book. But even having to look back, and then reflect on the things that I went through in that book already like giving birth and those types of things and really reflecting on it and rethinking some of those things that I went through at it from a different perspective and taking pictures of that. So, it was, it was different way of looking at things.

Kaia's experience provided an example of how critical reflection enabled learners to become

introspective of their past experiences to frame a new perspective and understanding of their

views on life.

Maria, another participant, shared the same sentiment by saying, "It [A Photo for

Change] gives you time to reflect on what you learned, the information you got and what other

people shared. So, like, a little bit of time to reflect on that, and see how it could impact you or

does affect you." As evident in this quote, her experience with the activity being in a group format expanded her views since she included others' thoughts in her reflection as well as her own thoughts. Through the dialogue and interaction with peers as an integral part of the photovoice activity, she became more deliberately reflective.

Rose shared the same experience as she said,

It [A Photo for Change] allowed me to, like think about like, my own life. It just, like, allowed me to take a step back and look at what I want for myself. not only me, but I feel like those around me like what they go through and like, the truth is that they go through stuff.

For Rose, "A Photo for Change" allowed her to re-evaluate her life and become more empathetic toward others as well. Her process of reflection became the vehicle through which she was stepping into the personal transformation phase.

**Motivated Use.** This sub-theme illuminated a vital process in the model that was for true transformative engagement to happen, the learners needed to dig deeper when learning the content to connect the material to their everyday life. This connection between the in-school and out-of-school life was central to Pugh's (2011) conceptualization of transformative experience theory. Pugh used the term "motivated use" to refer to such learning experiences. Hence, this sub-name came from Pugh's theory of transformative experience. As participants needed to find photo elements in their surrounding environment, they became more aware of their personal interactions with their everyday life. They sought out opportunities to apply the course content to these interactions within different contexts. This is clear in Natalie's words:

The activity, I guess, helped me kind of understand the material a little bit better and like be able to apply it to my life where, while other courses or classwork, not so much. Yeah, so like I was able to apply it a little bit better and have a deeper understanding when we were using photos or to relate to the material. Natalie's narrative clarified the role of photography in facilitating the connection between the inschool and out-of-school connection. For her to be able to connect photos to the material, she had to first develop a deeper understanding of the content and then apply this understanding to her personal context as she searched for photo ideas.

Another example of this connection between out of school to the course content was

## expressed by Maria:

I didn't just go to class and paid attention, or just like going to class and learn, and then forget about it. I would really have to think about it again. it was pretty cool because I look back and I'm like that topic was really interesting to me. I really enjoyed learning about this, or that was really interesting. I would see connections between, my life and things that I was doing, I just notice things around me now.

This quote from Maria highlighted how learning in this course became a source of joy as it was

applicable to her own life. Further, this deep engagement with the learning led her to become

more mindful of what happened around her as a result of this engagement.

Similarly, Victoria expressed that experience by saying:

I feel like when you put your own, like creative expression into something you remember it a lot better than just having like a multiple choice, 20 question, good luck, we'll never talk about this again till the test.....I think that just being able to express our creativity, as I've mentioned quite a bit. But I really do think that was the most unique aspect of this activity and being able to relate it to your own life and things that you see. I remember just walking through the store and seeing kids looking at toys in the store. I'm thinking about where they're at in child development and things like that. I guess I was able to take it outside of the classroom a lot more, considering, like, maybe just being out and thinking about what I would want to post for the discussion board coming up, um, helped it, like, teach you outside of the classroom as well, which I loved.

Similarly, Rose said, "I was able to connect what was around me to what I was learning."

The same thought was shared by Laylin: "I think the big piece I would like say about it [A Photo

for Change Activity] is the fact that it allows you to take notice of the little things around you."

She further explained how the impact of the activity was not just limited to the course content

but it also impacted her study skills in general:

I would say...what's really unique about this activity was that I kind of found a passion for drawing. It wasn't only for just drawing, but it was also for like, my, one of my classes. I didn't really know how to study for it. And now that I like, I'm more used to being exposed to visual stuff I like, did my studying through visuals, like writing my notes, but more of a picture-wise, so, I would draw images of it.

Laylin's account of this theme called attention to the influence this learning experience had on her academic experience. She recognized the power of using visuals, either drawing or taking photos, to expand on her understanding and retention of the content knowledge. Along with the narrative, she conveyed this experience through a photo of one of her paintings (see Figure 5.10) in response to being asked about what was unique about completing the photovoice activity.

## Figure 5.10

Laylin's Photo: Brushes



Kaia talked about this process in her experience by elaborating on the activity role having her study the material in a manner that encouraged deep learning through applying the content to her life and making sense of her world through the lens of the content: So, it [A photo for Change Activity] made me not just go into the material to memorize; it made me have to understand the material and kind of make it more organic if that makes sense. It made me look at the material as more of just words on a page. Because I knew I would have to incorporate it into something that was more living so I would have to make it make sense in a way that would reflect the world around me.

This sub theme lined up with the transformative experience theory concept of enriching out-ofschool life experiences. As learners start seeing the world through the lens of their academic learning, the connection between in school and out of school makes the learning both enduring and enjoyable (Pugh, 2011). In other words, learning becomes a source of enriching learners' life experiences rather than detached from the learners' personal experience.

## Phase Three: Personal Transformation

Personal transformation is defined as a change in one's perspective on life. It is an expected outcome of the individual's active involvement in the processes described earlier as part of the transformative journey. Although the learners' engagement with photovoice resulted in personal transformation, the transformation manifested itself in three different ways: personal growth, expansion of perception, and connectedness.

**Personal Growth.** This form of personal transformation highlighted the change the participants experienced as a tangible outcome of practicing critical reflection and creating art. Their engagement resulted in a growth in their mindset and becoming more self-aware. EmptyEyes shared his thoughts on this growth:

Integrating new information or ideas or concepts into one's mindset, by definition transforms that mindset. So, I think that learning new skills or methods of action or ways of thinking changes the person who learns them. I in that regard, Yeah, I think the class was transformative.

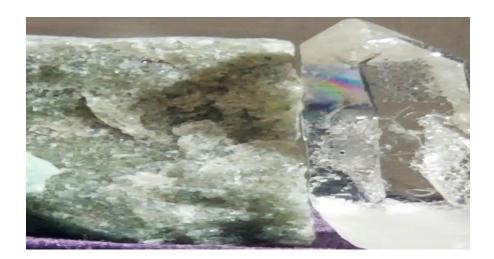
Natalie expressed this saying, "I was definitely more aware of personal experiences or things I was doing outside of class" Also Kaia said, "It definitely had an influence. And it's kind of it's

kind of about my transformative experience." A shared experience was expressed by Alasia: "An eye opener to the rest of my life. Because every day we have interactions, working with others. And in the long term as well, if I were to have kids, I will definitely reevaluate the concepts that has stuck on to me during this activity."

Similarly, Kaia shared her personal growth through accepting others' differences regardless of the disagreement with her own beliefs and values. She expressed that through her photo (see Figure 5.11) and words. Kaia provided this response when she was asked how the photovoice activity helped her change her perception about the human development.

#### Figure 5.11

Kaia's Photo: Rainbow



That is my fairy crystal, and not everybody will see her, and I'm a weirdo but that's okay. But obviously everybody sees things differently ... it is just kind of reminded me that all the different thing that are seen or shared as I was reading through the discussion it was aa just beautiful I mean nothing this semester that I saw was ... how people were writing it and it was just coming from their heart. It is just kind of reminded me of that even though I did not see some of the things that they were seeing it allowed me to set back and say I might not agree with it and I am not see it the way they seeing it but they were seeing the beauty in what they were seeing I might only see the rainbow or I might only see the courts, but they're seeing their fairy. And, and I respect that and i and i have to love that. And so, and so yeah and so that's what that represents.

Maria expressed her experience with growth by saying:

I just came to the conclusion that, that that was okay. Like, having so much change and having to go through certain situations and having to grow from them. That, that was like a natural thing, like it should be happening. You should be growing and changing from those hard situations.

For Maria, the topics covered in the course and her ongoing engagement with the learning, she

became more accepting of how difficulties and challenges were what brough about growth and

change.

Expansion of Perception. Expansion of perception was one of the components of

Pugh's (2011) theory of transformative experience. When learners seek opportunities to

create connections between the learning and their everyday life, eventually they often see

the world through this new lens and their perspective becomes a more evolved one. This

experience was expressed by EmptyEyes:

Some of the activities specifically required me or asked me to look into how cultures view things like grief, or mourning periods, or religious practices with death, or how they view transitions or rituals into adulthood and things like that. So, in that sense, yes, I, I'm in a lot of science-based classes and they don't really necessarily ask those questions. It's not a psychological perspective it's more like, oh, well, what are the anatomical structures behind you know, being alive or being dead?"

EmptyEyes' growth experience was manifested in becoming more culturally literate. Further, he had to shift his ways of thinking to be able to form a different understanding and make meaning of the human experience. A parallel experience was expressed by Natalie who said:

I guess growing up in like a Christian household I didn't really know. I just kind of like, "Oh this is a part of me, this is just how I'm supposed to like develop and grow," I guess but seeing my classmates talk about it, um, kind of made me like. See, I don't know, see the differences and people who don't, I guess have religion and believe in those kinds of things. So, it brought like a different perspective or a different awareness for religion, or for like a belief system.

Natalie's experience with personal growth shifted her perspective on the role of religion or spirituality in her identity formation and also realizing there are multiple belief systems that vary from one person to the other. She realized through the stories of her peers that even people who shared the same belief system experienced it differently and it impacted their developmental trajectory in diverse ways.

**Connectedness.** Fisher-Yoshida et al. (2009) argued that the use of art as a medium to foster transformative learning has a powerful impact on increasing one's connection to self, nature, and others. This status of interconnectedness was defined and viewed by Tisdell (2010) as spiritual transformation. Tisdell defined spirituality as a "life force" and being able to connect to this force was a form of personal transformation on the spiritual level. Through the use of photovoice, particularly the participants' immersion in the photography aspect of the activity, seven participants shared the different ways they encountered this experience of connectedness as a form of personal transformation. For example, Maria said, "We got to see how people connected their pictures to the reflections and also got to see a little bit more in depth to what they were saying, and they would share a little part of themselves."

Alisia also expressed how the activity increased her connection to herself and nature at the same time both verbally and visually (see Figure 5.12):

So, this activity [A Photo for Change] made me like, go away from my brain and just be in my own element and connect to my thoughts. So also, the mountains are like, my happy place. And so being isolated from the city life. And me being a nature person, I know, the mountains are always gonna be there, like from the chaos of the world, and just makes me realize that you have to be in your own element to think clearly of your thoughts, and just be your unique self.

## Figure 5.12

Alasia's Photo: Mountains



For Alisia, the "A Photo for Change" activity became a personal space where she could turn inward and become more connected with her authentic self. The photo she used to represent this experience compared the way she perceived the activity similarly to how she perceived her experience in the mountains: solitude. Alasia provided this visual response when she was asked if the photovoice activity made her see the world around her differently.

Another form of connectedness was shared by Jen who expressed this through a photo and narrative (see Figure. 5.13) in response to being asked about what was unique about completing the photovoice activity:

I took a photo of that, because I felt something that was unique about this activity was it was, I connected to people of all different walks in life. And I thought it was interesting how, even when we were so different, there were still some similarities that connected back to each other. And I was unique, because it had, it gave you the opportunity to see those similarities in between people, and how everyone's different walk of life is different. But those photos can be similar those experiences can be similar to each other.

so, each of the shade is kind of a different perspective, a different experience that the students had, but also kind of fitting together in this in similar patterns right there.

### Figure 5.13

Jen's Photo: Makeup Palette



Jen's experience was a representation how photovoice created a space of genuine human interaction where learners were able to share their vulnerable and unique stories with one another. This experience enlightened Jen's personal transformation as she became more aware of the commonalities of the human experience, yet recognized the uniqueness of each person in the learning community.

Kaia's thoughts on this theme were related to self-connectedness. As a non-traditional student who was in a different phase in life and also had difficult personal experiences, she lost connection with her authentic self. However, being a student in this course and completing this activity provided her with an experience to rekindle this connection with who she truly was as she stepped back into her academic experience. Through completing this course and engaging

with the weekly visual reflections, Kia was able to embrace this self-connectedness. She elaborated on this realization through a photo (see Figure 5.14) and narrative as a response when she was asked how the photovoice activity helped her change her perception about the human development:

I just kind of went into my shell and now I'm just like, you know what, I need to not do that anymore and so the transformation for me, the class itself was just kind of an avenue for me to see that that's what was happening, and I need to do that. So, it's kind of weird that this is the first semester and I ended up in this class. It is weird, because everything happens for a reason.

Kaia's Photo: Transformation



Being in the class and immersing herself in a different learning experience allowed Kaia to realize her needs of becoming more connected to herself and to others as well. It was an eyeopening experience for her as she was taking her first step back to continue her educational journey.

EmptyEyes expressed the same thought related to self-connection by saying, "I was engaging through needing to understand myself in relation to the week's topic and needing to understand the material well enough to write something insightful, and to find or take a photograph of something to represent that visual." He further expressed the connectedness to others in relation to self through a photo of his drawing (see Figure 5.15). EmptyEyes provided this response when he was asked if the photovoice activity helped him see his world differently:

It was both the necessity of interpreting my thoughts into visual mediums and the insight into other peers' thoughts through their own interpretations. Okay, this was something of a deeper dive into multiple cultures than a lot of the other classes that I'm in right now. I think it shows a little bit that people have much more to them than we necessarily see on the surface, again, with that kind of idea of like I always draw these stereotypical creepy or weird sci-fi things. I can also do a weird rabbit; you know under a smiling sun. But it also was one of those things that provoked a lot of reflection about where I am now versus where I was then.

## Figure 5.15

EmptyEyes: Weird Rabbit



Similar to Kaia's experience and being a non-traditional student, EmptyEyes indicated the process of using photography as a visual medium to represent the thoughts and ideas he formed regarding the week's learning material provoked the process of introspection and self-connection for him. Further, learning in a community and interacting with his peers informed these reflection as he became more aware of the depth of the human experience through these interactions.

As for Natalie, her experience with connectedness was related to the surrounding environments: "Instead of always rush to get something done or rush to get on to the next thing. I'd like slow down and take my time. I noticed a lot more this semester, and kind of just like absorbed like everything like in my surroundings that was going on." It was through the activity, Natalie learned to slow down and become more in tuned with her surrounding environment. She became more aware of her interaction with the world and her ways of being in it.

All of these voices and experiences of the participants affirmed the arguments made by Hoggan et al. (2009) and Fisher-Yoshida et al. (2009) regarding connectedness. Through the lens of their cameras, they were able to adapt a different perspective to become more connected to themselves authentically, to their fellow human beings, and to their surrounding environment.

#### **Integrated Interpretation**

The main goal of this case study aimed at exploring the nature of learning associated with using photovoice pedagogy in a developmental psychology course context with a focus on the degree to which the learning reflected qualities of transformative learning. For that purpose, we collected visual qualitative data as interview participants responded to their interview questions providing both photos and narrative accounts. The purpose of these interviews was to explore in depth students' experiences with the photovoice pedagogical intervention and how it might have played a role in cultivating a learning environment conducive to personal transformation. To further explore the overall case study context, we collected quantitative survey data from 92% of the students enrolled in the course where the study took place to gain a better understanding of the photovoice associations with transformative learning as shared by the students enrolled in the overall study context. In other words, the purpose of the quantitative data was to support the qualitative finding and provide more detailed context for its findings.

The overall results from both the qualitative and the quantitative data were consistent in revealing that students displayed a high level of transformative learning in association with experiencing the photovoice pedagogy. Approximately 83% of the students participating in the

study experienced high levels of personal transformation, i.e., this group of participants perceived the photovoice intervention as a positive learning experience since it played a role in helping them associate the course content with their everyday life. The interview data collected from 11 participants provided a more in-depth understanding of the transformative engagement process associated with the participants' self-reported personal transformations. Through the qualitative analysis, we were able to conceptualize a model for how the photovoice intervention might have been associated with fostering transformational learning in the classroom. For example, out of the qualitative data, the first phase of the model explained the challenging nature of the photovoice activity that encouraged the students to approach their academic learning differently. This finding was consistent with the higher mean scores of the transformative, M = 4.14 for TISS items: "A Photo for Change' activity affected me as a student and has challenged some of my firmly held ideas about learning" or "I realized that I had to think about things differently".

Similarly, the second phase of the model revealed the transformative engagement aspect of the intervention as students became more immersed in an enduring learning experience. This qualitative finding was supported by the quantitative finding of TEQ respondents as they endorsed the items that targeted engagement with the learning outside the classroom. These items mostly targeted the expansion of perception and engagement with the course topics and learning outside of the classroom, particularly the items that referred to a shift on their perception and their social interactions: "I can't help but see other children and adults in terms of human development concepts now."

Another way the quantitative data were beneficial in better understanding factors that potentially could have facilitated the students' engagement with the intervention was their

appreciation to photography as a communication modality. Within the case context, close to 50% of the participants reported high levels of appreciation to photography and about 43% reported a medium level of appreciation to photography. However, individual differences should be considered when weighing the impact of the photography appreciation on the learners' positive involvement with photovoice. For example, EmptyEyes reported a low level of photography appreciation that made the activity more challenging at the beginning of the semester. However, he shared how he moved forward with the process of learning and eventually experienced personal transformation. On the other hand, Laylin, who reported a higher level of photography appreciation, equally found the photovoice activity difficult at the beginning of the semester. In general, we did not experience any conflict in the information gathered from both the quantitative and the qualitative data. Rather, the results from both data sets were consistent.

#### Discussion

The main purpose of this mixed methods case study was to explore the nature of learning experiences associated with using photovoice as an art-based pedagogy. The findings were considered through the theoretical lenses of Mezirow's (1978a, 1978b) transformative learning theory and Pugh's (2011) theory of transformative experience. The findings mapped out the process and product of personal transformation for participants in this particular case study. The participants in this study who shared their experiences referred to their overall experience as an out-of-the-box educational experience. They elaborated on how this activity was associated with changing their ways of being in the world. They indicated that completing the activity was associated with their personal growth and increased their connectedness to themselves and to their surrounding world. Moreover, they developed a deeper appreciation of the content as they were able to see the world through the lens of this new learning experience. This finding

supported Pugh's (2004, 2020) argument regarding how going through transformative experiences increased the potential for enduring learning. Further, this finding lined up with previous research conducted on using photovoice as a pedagogy, which affirmed the positive associative role of the pedagogy on increasing critical self-awareness (Budig et al., 2018; Gallo, 2001). We argue here that using photovoice as a pedagogical tool in college-level classrooms similar to the focus of this case study could be associated with the potential of cultivating a learning environment conducive to personal transformation. Unique to photovoice was the photography component as a creative expression, which was consistent with Cranton (2006a, 2006b), Hoggan et al. (2009), Lawrence (2012), and Lipson Lawrence and Cranton (2009) who stated that the use of artistic or creative expression increased the potency of fostering personal transformation. Throughout the whole course, learners utilized photography as an artistic expression to construct knowledge and re-explore their surrounding world through the lens of their academic learning. The use of photography enabled the participants to use their imaginations and unpack layers of meaning and develop a deep understanding of themselves and others. The photography component of the photovoice activity played a major role in their engagement with making meaning and digging deeper to unlearn the old ways of thinking and form new ones. These findings aligned with previous photovoice studies that concluded that participants' engagement with photography was the primary vehicle to construct meaning and form new perspectives (Harkness & Stallworth, 2013; Schell et al., 2009).

#### Implications

The findings of this study entailed several implications for teaching toward transformational learning within college classrooms similar to the classroom environment explored in this study. First, according to the interview participants, the photovoice activity played an important role in creating an interactive and personable classroom environment. Most of the interview participants agreed on the positive role this activity had in their personal transformation process as the activity provided a space for the students to share personal experiences through their visual narratives every week. The interactions between the students and their peers created a sense of community. Within this community, the ongoing dialogue encouraged the participants to become open to learn about each other's experiences and gain a deeper insight of the human experience as well as their own. This finding was consistent with Freire's (1970) argument regarding the important role of dialogic interactions within the classroom setting as an emancipatory practice for learners to construct their knowledge.

Second, the interview participants expressed their increased appreciation for the course content that was developed due to the use of photovoice as a unique method to learn and apply the content to their personal life experience. The artistic nature of the activity provided the participants with opportunities to unleash their creativity and think outside the box to create expressive photos that were related to the content. This finding was compatible with Hoggan et al. (2009), Lawrence (2012), and Lipson Lawrence and Cranton (2009) who called for the use of artistic modalities to teach transformative learning. This view was consistent with Dewey's (1934/1980) ideas of the potency of art as a transformative medium. Dewey argued that the deep engagement with art enhanced deeper understanding of one's experiences through the internalization of experiencing the world in artful manners. A similar argument was made by Dirkx (2001) in his article "Images, Transformative Learning and the Work of Soul." In this article, he stressed the importance of integrating art-based activities in adult education to foster transformative learning. Dirkx further explained that the process of making meaning in

adulthood is complex and the use of images and photos support the internal aspect of this experience:

The process of "meaning-making" in adulthood reflects a complex and dynamic interaction between the learners' unconscious inner selves and their conscious selves. Consciousness becomes populated with various emotionally laden images evoked by the learner's context. They serve as vehicles for powerful energies arising from the unconscious and are connected in some way to the learners' conscious worlds and can manifest itself in images evoked by the text. They can potentially help learners connect the knowable world to the unknowable or the unconscious. (p. 16)

#### Limitations

Inherent to any research design are limitations. Although the present study contributed to the existing literature of both transformative learning and photovoice (as both methodology and a pedagogy), it presented several limitations. First, the course content of developmental psychology is naturally relevant given its focus on human experience. Thus, the content itself might play a role in fostering transformative learning or might provide unique affordances for the implementation of photovoice pedagogy. Future research is needed to understand the functioning of photovoice pedagogy with other content. Second, given the overall qualitative and quantitative results of the study, the participants reported and shared positive experiences of the photovoice pedagogical intervention supporting their personal transformation. There is still a need to investigate why this intervention might not work for students who did not experience or report a higher level of personal transformation.

#### **Future Directions**

Since our results revealed only the positive outcome of photovoice pedagogy, the reasons why this pedagogy worked for some students over others could be the focus of future research endeavors. To date, most of the published studies on both photovoice and transformative learning have adapted qualitative approaches. While our study included a quantitative component, a fully quantitative experimental or quasi experimental design could be pursued to examine the effectiveness of the photovoice pedagogy in fostering transformative learning in comparison to other transformative pedagogical models. Further, future studies could look into the impact of using different types of cameras on students' engagement with the photovoice intervention (i.e., disposal versus digital or phone cameras). Lastly, it would be beneficial to examine the effectiveness of the photovoice transformative pedagogy model in various disciplines to compare and contrast learners' experiences in different learning contexts at the college level.

### Conclusion

Through this embedded case study, we aimed to explore how implementing photovoice as a pedagogical approach might foster transformative learning among college students. The primary method of inquiry in this case study was qualitative. Data collected from individual photovoice interviews were analyzed by using thematic content analysis to explain how transformative learning might happen in a college-level classroom. The quantitative data collected by surveys provided an overall picture of the level of transformative engagement with the photovoice pedagogical intervention. An integration of both the qualitative and the quantitative data indicated the use of such a pedagogy had a great potential to foster transformative learning among college students.

#### CHAPTER VI

#### CONCLUSION AND SUMMARY

I speak here of an inner transformation in which extending love outward is our predominant disposition.

--Wayne Dyer, The Power of Intention, 2004

#### Overview

Photovoice pedagogy is a powerful pedagogical tool that could be used to cultivate transformational learning in college classrooms. The pedagogy has been around for over 15 years but to date, framing photovoice as a transformative pedagogy and explicitly discussing its aesthetic nature has been lacking in extant literature. Therefore, the purpose of this dissertation was twofold: first was to theoretically propose a pedagogical model that framed photovoice as a transformative pedagogy and second was to empirically explore the transformative affordances of photovoice pedagogy in an actual college-level classroom setting in terms of fostering personal transformation among students. Thus, I aimed to answer the following three research questions:

- Q1 What is the class overall level of transformative engagement with the photovoice pedagogical intervention based on the self-reported ratings by students?
- Q2 What are the individual students' perspective of and experiences with the photovoice pedagogy as it relates to personal transformation?
- Q3 Based on the qualitative and quantitative findings, what is the nature of the learning associated with the photovoice pedagogy?

To provide answers for these questions, I conducted a mixed methods case study to explore the transformative affordances of photovoice pedagogy in an actual classroom setting, which was discussed in detail in Chapter V. Further, I explored students' perceptions of how such a pedagogy could bring about personal transformation. The results of the empirical investigation detailed the process and the outcome of personal transformation as a result of using photovoice pedagogy to facilitate the transformation process. In this empirical quest, I was both the researcher and the instructor of the course. I implemented the photovoice pedagogy intervention in my own classroom which I explored as transformative potential using photovoice as a research methodology in a mixed methods case study. An integral part of photovoice research is to provide an account of the research outcome that could take place in different forms such as recommendations and/or a photography exhibit to raise awareness regarding the issue examined in the study.

In the case of "A Photo for Change" project, at the time of ending this dissertation work, holding a photography exhibit was not still feasible as COVID-19 public health restrictions were still in place. However, I plan to hold the exhibit during Fall 2021 as public health restrictions ease. Another outcome of this project is providing recommendations to educators in higher education who wish to embrace a transformative learning approach in their classrooms. The following recommendations are based on the study findings, classroom observations when the intervention took place, and the participants' voices.

#### Recommendations

#### **Be a Transformative Educator**

Teaching toward transformative learning necessitates that the teacher revisits their views of their role in the teaching learning process, i.e., teachers who aspire to take on the role of being transformative educators need to be aware of the qualities and behaviors a transformative educator should have and demonstrate in their relationship with the students. A central quality of a transformative educator is authenticity as I discussed in Chapter IV. Authenticity in this context refers to the educator's efforts to become self-aware as well as developing a genuine awareness of the similarities and differences between themselves and their students. Following Cranton's (2006a) recommendations on how to build authentic and transformative relationships with students, educators could elect to utilize any of the following strategies:

- Develop a deeper sense of the self as an educator and create an artistic expression to represent who you are as a whole-person and share it with your students to further humanize the relationship (for example, I created a collage of multiple photos of myself in different settings aside from the classroom to introduce myself during the first meeting with the students).
- Gather information about your students' personal lives, interests, and background and get to know them on a deeper level. (i.e., I distributed an open-ended survey that included questions about the students' personal backgrounds).
- Engage in critical self-reflection to allow the teaching experience to transform you as well. (i.e., I kept a reflective journal to reflect on this experience. In multiple occasions, I had to reflect on how my identity and experiences were impacting the way I delivered the content or interact with the students).

Imperative to this process of establishing authenticity was to make any changes deemed necessary to reflect the use of the knowledge acquired from the students. When students feel their voices are heard and incorporated in the teaching and learning process, they become more involved and open to the learning.

#### **Transforming the Learning Space**

Taylor (2006) stated that "fostering transformative learning is about teaching for change...it is not an approach to be taken lightly, arbitrarily, or without much thought" (p. 1).

This quote highlights the importance of the planning aspect that is an essential part of setting the learning environment for transformative learning. Teaching for transformation is a deliberate effort that entails exploring new boundaries for both the teacher and the students. As I discussed in Chapter IV, the importance of creating brave learning spaces becomes a necessity for laying the groundwork for transformation to happen. The following recommendations are based on strategies I utilized as part of my intervention:

- Create an environment that focuses on genuine interest in learning rather than focusing on grades and achievement. For example, I provided opportunities for students to re-do assignments and included open book and open notes quizzes.
- Utilize activities that build a sense of community even though these activities do not pertain directly to the academic content. For example, I used several activities and games to provide opportunities for students to know each other on a more personal level.
- Make a deliberate effort to situate yourself as an educator and a member of the learning community who is open to personal growth and learning. My common strategy was to vocalize this concept from the beginning. Further, I provided multiple opportunities for feedback and suggestions on how to improve the teaching and learning process.
- Be mindful of the power differentials between you and your students and ensure you are using this power to support them.
- Provide multimodalities of expression and communication for your learners to construct their knowledge and share their personal narratives.

- Demonstrate genuine interest in the students' well-being as an integral part of their learning. For example, I incorporated self-care activities as part of the course assignments that reflected how I cared about them as whole persons.
- Demonstrate respect and appreciation to all values, ideas, and identities presented in your classroom. Embrace diversity as an asset to the transformative process.
- Make an ongoing effort to explain the process and the stages of transformative learning to your students and highlight where they are at in their process, collectively and individually.
- Acknowledge the cognitive and emotional challenging aspects of the transformative process to encourage learners to move forward. That is, share this potential transparently with them and frame one as one step of the process.

It is important to note that when implementing these recommendations or any of them that educators share explicitly the meaning behind these actions to students. Embracing transparency as part of the process increases the trust between both the educator and the learner and prompts learners to follow the same behavioral pattern with their teacher and others as well.

## Ethical Considerations in Transformative Learning Spaces

Teaching for transformation is centered on creating disorienting dilemma for learners to grapple with and engage in a process of self-quest. An important aspect of this transformative process is for educators to understand the ethical boundaries concerning their role in this process. Freire (1970) contended that educators should never impose their opinions or views on learners when they wrestle with conflicting issues; however, they should not stay silent on issues of social importance. Ettling (2006) raised similar concerns regarding the ethical boundaries in transformative learning spaces and the role of educators in such a process. The following are suggestions based on my personal experience setting these boundaries in my own context:

- Work collaboratively with your students to define ethics in your learning environment and what it entails in terms of academic learning and relational connections. I engaged with my students in a discussion to highlight the ethical issues related to photovoice)
- Bring to attention the complexity of ethical dilemmas and how they present opportunities to examine the underlying cultural assumptions. (For example, when teaching the module related to mora development, I presented the students with multiple and realistic ethical challenges and framed them as opportunities for examining the underlying cultural assumptions)
- Emphasize the importance of being non-judgmental when disagreeing with others' ethical and moral values, especially when this disagreement is a result of personal transformation and the learner develops views and values different from those in their social context (i.e. family and friends).
- Accept that some learners will resist change and will not engage in the process of transformation.

Part of the transformative journey for learners is to explore new roles and identities as they form new perspectives and views on their world. I believe part of the ethical consideration is to provide both moral and practical support to learners in this phase and provide resources and venues learners can utilize to facilitate this phase for them.

#### **Concluding Thoughts**

The journey of completing this dissertation project was as transformative for me as much as it was for my students. I embarked on this journey knowing I was exploring uncharted territories in my own teaching experience. Uncertainty and fear were part of the process but I dared for the first time to bring myself as a whole person to the classroom environment. In order to present my full human experience, I had to deeply engage with a process of self-quest and develop an awareness of my own experience as an international scholar in the United States of America. This examination process allowed me to explore my identities, question my cultural values, and decide on how I wanted to show up in this learning environment for my students.

Being part of this journey, I realized it is our responsibility as educators to create the space for learners to have a meaningful educational experience. Students gravitate toward a learning environment that honors their voices, embraces their experiences, and honors their ways of knowing and being in the world. By creating brave learning spaces, we help our learners become their authentic selves and encourage them to have meaningful personal experiences. I conclude this dissertation with a quote from Palmer (as cited in Cranton, 2006a) that summarizes the essence of this transformative journey:

What a long time it takes to become the person one always has been! How often in the process we mask ourselves in faces that are not our own? How much dissolving and shaking of ego we must endure before we discover our deep identity-the true self within every human being that is the seed of authentic vocation. (p. 9)

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# APPENDIX A

# INSTITUTIONAL REVIEW BOARD APPROVAL



Institutional Review Board

Date:	11/03/2020
Principal Investigator:	Maaly Younis
Committee Action:	IRB EXEMPT DETERMINATION – New Protocol
Action Date:	11/03/2020
Protocol Number:	2008008967
Protocol Title:	A Photo for Change: A Mixed Methods Study to Foster Transformative Learning Among College Students Using Photoxoice Pedagogy
Expiration Date:	

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CER 46.104(d)(701) (702) for research involving

Category 1 (2018): RESEARCH CONDUCTED IN EDUCATIONAL SETTINGS. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity or through identifiers linked to the subjects or through identifiers linked to the subjects or through in a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

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## **APPENDIX B**

# WEEKLY DISCUSSION PROMPTS

Weekly Discussion Prompts for "A Photo for Change" Activity

**Prompt # 1:** This week, chapter two foci was parental development and birth experiences. What is the new knowledge that you gained out of this chapter? How does this new learning make you think about approaching pregnancy and giving birth differently if you wish to have children if you are to work in the health care field? How does this knowledge change your perspective of women you may know in your social context and their life experiences?

**Prompt# 2**: This week, chapter three was about the newborn early experience in life and their ways of exploring the world. What is the new knowledge that you gained out of this chapter? How does it compare to any previous knowledge you may have had about newborns? How does this new learning make you think about approaching or dealing with newborn babies differently if you wish to have children or if you are to give advice to anyone in your social circle new to parenting?

**Prompt# 3:** This week, chapter four covered the early development of cognition, language and memory. What are the possible connections between these three concepts? What is new and intriguing to you on how these concepts are connected and how they develop? How this new information would inform your future decisions if you wish to have children or if you are to give advice to anyone in your social circle new to parenting or if you were to work with children in the future?

Prompt #4: This week, chapter five covered the early development of emotions, social behaviors, and gender identity. What are some of the misconceptions you may have had about these ideas before studying this chapter? What is new and intriguing to you on how these concepts are connected and how they develop? How this new information would inform your future decisions if you wish to have children or if you are to give advice to anyone in your social circle new to parenting or also if you were to work with children in the future?
Prompt# 5: This week, we covered different views of intelligence and different biological and environmental factors that contribute to its development. What are some new pieces of information that you have learned about this topic? How does it change your views about intelligence in general? How does this information change your views about yourself as a student and as a person in day-to-day life?

**Prompt# 6:** This week, we are exploring the role different self-care activities play in impacting emotional regulation and overall well-being in stressful times. How was your experience this week trying at least 3 self-care activities? How did you feel about doing these activities during a very busy time in the semester? how did it impact your performance and social engagement with family, friends, or others in your social circle? what do you think needs to change in your habits and coping strategies during stressful times?

**Prompt# 7:** This week, we are continuing to explore the ways self-care and emotional regulation impact our well-being in stressful times. We are also doing one act of kindness. How was your experience this week trying activities combined? How continuing to practice self-care purposefully is impacting you this week compared to last week? What do you think needs to change in your habits and coping strategies around socioemotional engagement with yourself and

others around you? How these practices are informing your developmental process in terms of self-awareness?

**Prompt# 8:** This week, we covered the identity development and its different aspects. What is some information that you have learned this week you wish you knew earlier when you stepped in your teenage years? How does it help you move forward in your developmental path (if you are still in this phase)? if not, what difference could this information have made to your identity development experience? How this new understanding informs your self-perception and interactions with other in your social circle?

Prompt# 9: This week, we are covered the different aspects of emerging adulthood. Given what you know about the identity development, what are certain values or beliefs you grow up with you now as an emerging adult, think it does not suit you and the way you are shaping your identity. What are some values or beliefs you are going to keep and see how valuable they are to you as an adult? What are some of the challenges you are facing due to holding these values?
Prompt# 10: This week, we covered the assessment role in education and its different types and formats. What are the misconceptions you have been holding before assessing the educational process? How does this new knowledge make you conclude about your own educational experience? How does this new knowledge inspire your views as a future teacher?
Prompt# 11: we covered the negative impact of stereotyping and microaggression. What are some new pieces of information that you have learned about this topic? How does it change your views about social interactions in general? How does this information change your views about yourself as a student and as a person in day to day life? What actions ae you going to take based on your new realizations to become more inclusive and culturally responsive in your social interactions?

**Prompt# 12:** This week, we have learned about midlife experience. What are some of the misconceptions you may have ha about this phase in life before studying this unit? What is some new information that you found intriguing or interesting? How does this information inform your relationship with your parents or other middle adults in your social circle? How does it make you think about your future as a person who will eventually go through this phase?

**Prompt# 13:** This week, we learned about the end of life and grief. What is some new information that you found intriguing or interesting? How does this information inform your views of this phase of life? How does it make you think about your future as a person who will eventually go through this phase?

**Prompt# 14:** Throughout the semester we studied various aspects and phases of the human development. How do you think this course changed your perspective on the human experience? How did it change your perception of yourself in relation to your sociocultural context?

## **APPENDIX C**

## **DEMOGRAPHIC SURVEY**

- 1. Age
- 2. Gender
- 3. Ethnicity
- 4. Appreciation for photography: On a scale of 1to 10 where one is the lowest and ten is the highest, how much do you appreciate photography.
- 5. Number of photos taken per week
- 6. Social media platforms used to share photos
- 7. Previous experience studying psychology (list all the classes you have taken before)
- 8. Previous experience studying photography (list all the classes you have taken before)

# APPENDIX D

# TRANSFORMATIVE EXPERIENCE QUESTIONNAIRE

## TEQ (adapted from Pugh et al., 2010)

Instructions: Think about the developmental ideas you've learned in Human Growth and

Development this semester. For each question, select the response that best matches the extent

to which you agree or disagree. "Outside of school" refers to your everyday life and experience

when you are not in class or working on school assignments.

# [Responses will be on 4 points Likert scale, Strongly Disagree to Strongly Agree]

- 1. I talk with others about human development concepts during my courses.
- 2. Outside of school, I talk with others about human development concepts.
- 3. I talk with others about human development concepts just for the fun of it.
- 4. During classwork, I think about how human development concepts apply to real-world objects and events.
- 5. Outside of school, I think about human development concepts.
- 6. I find myself thinking about human development concepts in everyday situations.
- 7. I apply the knowledge I've learned about human development during classwork.
- 8. Outside of school, I apply the knowledge I've learned about human development.
- 9. I apply the stuff I've learned about human development even when I don't have to.
- 10. I look for chances to apply my knowledge of human development in my everyday life.
- 11. I think about humans differently now that I have learned about human development concepts.
- 12. During classwork, I notice examples of human development concepts.
- 13. If I see a really interesting behavior in a child or adult (either in real life, in a magazine, or on TV), then I think about it in terms of human development concepts.
- 14. The concepts I learned in my human development class changed the way I see children and adults.
- 15. I can't help but see other children and adults in terms of human development concepts now.
- 16. I notice examples of human development in my everyday life that I would not have noticed before taking the Human Growth and Development course.
- 17. Outside of school, I look for examples of human development concepts.
- 18. Learning about human development concepts is useful for my future studies or work.
- 19. Human development concepts help me to better understand the world around me.
- 20. Knowledge of human development concepts is useful in my current everyday life.
- 21. I find that human development concepts make my current, out-of-school experience more meaningful and interesting.
- 22. Human development concepts make the world much more interesting.
- 23. In class, I find it interesting to learn about human development concepts.

- 24. I think human development is an interesting subject.
- 25. I find it interesting in class when we talk about children and adults in terms of human development concepts.
- 26. I am interested when I hear things about human development concepts outside of school.
- 27. Outside of school, I find it exciting to think about human development concepts.

# **APPENDIX E**

## TRANSFORMATIVE INCIDENT STUDENT SURVEY

## TISS (Adapted from Jost, 2018)

Instructions: Think about your experience with the "A photo for change" Activity in Human

Growth and Development this semester. For each question, select the response that best

matches the extent to which you agree or disagree. [Responses will be on a 5- point Likert scale,

Strongly Disagree to Strongly Agree]

- 1 I realized that I had to think about things differently
- 2 A photo for change" activity was spiritual
- 3 I have thought about "A photo for change" more than once since it happened
- 4 I have spoken to my friends about this "*A photo for change*" Activity
- 5 I have spoken to my family about this "A photo for change" activity
- 6 I have spoken to my fellow students about "A photo for change" Activity
- 7 The discussions I had with friends, family and/or fellow students were meaningful
- 8 I am not alone in my thinking and my feelings
- 9 I am more aware of the importance of being able to solve problems
- 10 Going through "*A photo for change*" activity experience has given me the skills to solve problems
- 11 As a result of "A photo for change" activity, I changed the way I look at myself as a student
- 12 "A photo for change" activity affected me as a student and has challenged some of my firmly held ideas about learning.
- 13 As a result of "*A photo for change*" activity, I have changed my normal ways of approaching studies
- 14 "A photo for change" activity has led me to discover faults in my learning that I previously believed to be right.
- 15 A photo for change" activity has challenged some of my firmly held ideas
- 16 As a result of "A photo for change" activity, I changed my normal way of doing things
- 17 During this course, I discovered faults in what I previously believed to be right.
- 18 As a result of "A photo for change" activity, I changed the way I look at myself.

# APPENDIX F INTERVIEW QUESTIONS



# A Photo for Change Research Project Interview Guidelines

## Overview

Thank you for choosing to participate in our research project. This study focuses on exploring the students' experience with photovoice as part of their academic learning, which is the case for you in PSY 230 as you complete the "*A Photo for Change*" weekly activity. The unique aspect about this study is that it is utilizing photovoice as both a teaching method and as a research method. Photovoice as a research method is centered around participants and consider them collaborates rather than being a data source only. At this stage of the project, you will be asked to take photos to respond to some of the interview questions and based on these photos, the interviewer will engage with you in a conversation that will be the connection between the photos and the story behind it from your own point of view.

After all the interviews are completed and the research team finish data analysis, the results of a Photovoice research project will be shared with UNCO community, via holding a photography exhibition! This exhibition is mainly photos you will produce to answer some of the interview questions. Further, you will be invited to take part in arranging this exhibition if you wish to and take part in the decision-making process and arranging logistics of the event! You will also have the chance to invite your family, friends, and whoever you wish to! Participating in a Photovoice study is a unique and a rewarding experience that will give you the opportunity to witness closely how educational research happens and be part of it!

#### **Producing Photos Guidelines**

- 1- Only questions 3,4,6&8 are the ones that require you to take photos as a representation of your own potential answers to these questions. While your answers do not to be in writing, you need to think about them as the interviewer will ask questions that are related to the photos and what they mean to you regarding the question.
- 2- For each of these questions, you will need to produce 1-3 photos as representation to your answer.
- 3- For naming these photos you need to remember the fictional name that you will decide on and name the photo files as this example; if you choose a fictional name like Carmen each photo should be named as in this example (i.e. Carmen\_ Q3) if you have more than one photo for the same question consider this (i.e. Carmen\_ Q3.1, Carmen\_ Q3. 2.. etc.)
- 4- You will be given 5-7 days prior to the actual interview date to think about your answers and send these photos to the researcher the night before the interview.
- 5- It is imperative that these photos DO NOT INCLUDE ANY HUMAN BEINGS IN THEM, EVEN YOURSELF. This rule is part of the research ethics that we CANNOT break as researchers. Also, NO PHOTOS FROM THE INTERNET, please. This will not be valid data as well.
- 6- Produce good quality photos as much as you can so that if you consider participating in the exhibition, we can print them on a large scale!
- 7- Produce New photos between the time you receive this document and the time of the interview. YOU CANNOT USE OLD PHOTOS! This is an essential aspect of this method and we appreciate that you follow that rule so our data is sound and we could also use it in the analysis as well as the exhibition!
- 8- Enjoy the photo taking and the interview!!!!

## **Interview Questions**

- 1. If you had to describe this activity to someone who was not in this class, how would you describe it?
- 2. When you took photos for the weekly reflections, what inspired you with the photo ideas? How did this aspect of the activity engage you with your academic learning experience?
- **3.** What was good or unique about this activity (*A photo for change*)? **What photo(s)** represent your opinion?
- 4. What was challenging about this activity (A *photo for change*)? What photo(s) represent your opinion?
- 5. Did participating in this activity (A *photo for change*) get you to think about the course content outside of class? If yes, can you give me an example? Why did the activity help you think about course content outside of class in this way? If no, why not?
- 6. Did this activity (A *photo for change*) help you change any previous ideas you had about human development and growth? If so, can you give an example? What photo(s) represent that change?
- 7. Did this activity make you think about your personal life experience differently? In other words, did it change your awareness of your own personal experience? If yes, how. if no, why?
- 8. Did this activity (A *photo for change*) make you see the world differently? For example, did the activity help you see something or an issue in your daily life through the lens of the course content? What photo(s) represent your opinion?
- 9. Would you describe your learning experience in PSY 230 as transformative? Why or why not?
- 10. Do you have any suggestions to help improve this activity?
- 11. Are there any other thoughts or comments you want to share?

## **APPENDIX G**

## **INFORMED CONSENT**



## CONSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH

University of Northern Colorado

# PROJECT TITLE: A Photo for Change: A Mixed Methods Study of Using Photovoice To Foster Transformative Learning Among College Students.

Researcher: Maaly Younis, M.A. Email: maaly.younis@unco.edu Research advisor: Dr. Cassendra Bergstrom Email: cassendra.bergstrom@unco.edu Phone: 970-351-2587, Dr. Kevin Pugh Email: kevin. pugh@unco.edu Phone: 970-351-2989

The primary purpose of this study is to explore the impact of utilizing Photovoice (a participatory-centered photography technique) as a pedagogical approach in developmental psychology courses, on college students' engagement in critical reflection to reframe their beliefs and views about their personal life experience.

This study will follow the methodological steps to implementing photovoice into developmental psychology courses, highlighting the benefits and barriers throughout a semester. This research includes the analysis of survey data and interview data to improve teaching practices for college students.

All of your information will be kept confidential by having the option of not using real names and keeping all media in an encrypted account. Only the lead investigator and research team will know the names associated with your code. Data collected and analyzed for this study will be kept in an office in a locked cabinet in the School of Psychological Science, which is only accessible by the researchers. Only minimal risk and discomfort is anticipated for participants. This risk is the same as an individual would experience in having an in-depth conversation with a friend or colleague about prior learning experiences. The participants may benefit from sharing their experiences and having those experiences valued and shared for future students

For this part of the research study, you are invited to participate in a 60-75-minute virtual interview via Zoom meetings. The meeting will be video recorded for the photo sharing and

discussing the photos with your interviewer. However, you might elect not to open your camera and just share your screen.

If you choose to participate in the interview process, you will be asked to choose a fictional name before the interview, and it will be used throughout the recording and other phases of the research to protect your identity. As a compensation to your time and effort, you will receive a \$10 Amazon gift card immediately after you complete the interview.

Also, Choosing or electing not to participate in this study will in no way impact your grade in the course. Since the researcher is also the instructor of this course, a research assistant will conduct the interview with consenting participants to avoid any discomfort. Furthermore, the researcher will start the data analysis process after the final grades of this class have been submitted to the university to avoid any conflict of interest.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Office of Research, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1910.

Participant Full Name (please print)

Date

**Researcher Signature** 

Date

# **APPENDIX H**

# PHOTO RELEASE FROM



## **Photography Release Form**

## A Photo for Change Research Project

Photovoice is a method for collecting qualitative data using photography to address a specific research topic. This photovoice project focuses on exploring how photography could foster transformative learning among college students to raise awareness and promote discussions surrounding the topic. I, \_\_(Participant's name \_\_\_\_\_\_)\_, understand that photos I produced and/or my likeness may be used in a public setting and displayed in a photography exhibition only with my pseudonyms (fictional name ). I give permission to the research team and the University of Northern Colorado to use my photos for research, display, and other similar activities surrounding this project.

Signature:	Date:	
U		

Printed Name: