# THE EXPERIENCE OF OLDER ADULTS WITH PHYSICAL DISABILITIES IN A PHYSICAL ACTIVITY UNIVERSITY SERVICE-LEARNING PROGRAM

A Thesis

by

Gardenia Juarez

Spring 2019

APPROVED BY THE INTERIM DEAN OF GRADUATE STUDIES:

APPROVED BY THE GRADUATE ADVISORY COMMITTEE:

ChengTu Hsieh, Ph.D.

**Graduate Coordinator** 

A. Josephine Blagrave, Ph.D., Chair

Kevin Patton, Ph.D.

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# THE EXPERIENCE OF OLDER ADULTS WITH PHYSICAL DISABILITIES IN A PHYSICAL ACTIVITY UNIVERSITY SERVICE-LEARNING PROGRAM

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A Thesis

Presented

to the Faculty of

California State University, Chico

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In Partial Fulfillment of the Requirements for the Degree

Master of Arts

in

Kinesiology

by

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Summer 2019

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# **DEDICATION**

I would like to dedicate this thesis to all individuals who have supported me in order to achieve this milestone.

#### **ACKNOWLEDGEMENTS**

First and foremost I would like to thank all of the participants who committed their time to help make this a reality. In addition, the program coordinator of BE:WEL who made the entire process comfortable and allowed me to conduct research during sessions. Secondly, I would like to thank my committee chair, Dr. Blagrave for her constant support and guidance throughout the entire process. Her dedication to this thesis made the process enjoyable. Moreover, I also would like to thank the rest of my committee members: Dr. Patton and Dr. Braga. Their dedication to support me through edits and data analysis helped me tremendously. Collectively, I am grateful for my entire committee who dedicated their time and efforts to help me achieve this educational milestone. Lastly, I would like to thank my loved ones who supported, guided, and understood the significance of this accomplishment. All of the missed special events were worth it.

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#### **ABSTRACT**

# THE EXPERIENCE OF OLDER ADULTS WITH PHYSICAL DISABILITIES IN A PHYSICAL ACTIVITY UNIVERSITY SERVICE-LEARNING PROGRAM

by

#### Gardenia Juarez

#### Master of Arts in Kinesiology

#### California State University, Chico

#### Summer 2019

The purpose of this phenomenological study was to explore the experiences of older adults with physical disabilities in a physical activity university service-learning program. Subjects participated in the Beyond Exercise: Wellness Enhancement for Life (BE:WEL) two times per week for 1, 2-4 or more than 5 years and shared their experiences through semi-structured interviews. The model of successful aging (Rowe & Kahn, 1997) was the research framework that guided the methodology used for this study. Purposeful sampling of participants which included 55 years or older, BE:WEL participant, and physical disability, observations taken by primary researcher, collection of artifacts such as workout logs, volunteer notes, and previous participation notes and semi-structured interviews. Thematic analysis was also used for the data in order to triangulate participant experience and provide a richer description of participant experiences. Results of the study were three themes: positive mental health, physical competence/confidence, and program vibe. Participants experienced improvements

psychologically and physically from service-learning program. The population size perceives to have successful aging even though physical disabilities were not avoided. The service-learning program provided a social, comfortable, and learning environment for physical activity among participants. Physical activity service-learning programs can be beneficial to older adults with disabilities in a community program setting. Population size was small, so may not be a reflection on the entirety of older adults with physical disabilities. Future studies could include higher population sample, quantitative data on exercises, and a year-long analysis.

#### CHAPTER I

#### INTRODUCTION

Research on physical activity has shown psychological and physical benefits such as improved cognitive function, improved emotional well-being, lowered risk of diseases, and maintenance of skeletal muscle for bodily movements (Boone & Brausch, 2016; Brenes et al., 2007; Hayes & Ross, 1986; Jones, Harris, Waller, & Coggins, 2005; Scully, Kremer, Meade, Graham, & Dudgeon, 1998). Individuals with disabilities receive the same benefits of physical activity as their non-disabled counterparts. There is a misunderstanding, however, among some not in the field of Kinesiology where individuals with disabilities are perceived as helpless and different than able-bodied individuals (Parker-Gwin, 1996; Raymond & Grenier, 2013). This stigma is an issue because individuals with disabilities are not often asked about their experiences, rather their experiences are assumed. The positive benefits of physical activity to overall health are important to teach individuals outside the realm of Kinesiology. In addition, individuals not informed of these benefits may not be motivated to engage in physical activity due to their inability or lack of experience (Allender, Cowburn, & Foster, 2006). Physical activity doesn't just mean walking, hiking, swimming, gardening, or cleaning. Rather, physical activity encompasses all aspects of activity that can be specified into an exercise routine or a monthly activity.

Adapted physical activity (APA), or activity modified to provide accessibility to physical activity for individuals with disabilities, allows all age groups and ability levels to engage in meaningful physical activity regardless of their capabilities. Explaining how APA contributes to inclusion can lead to a better understanding for educators, scholars, and the general

public on the importance of APA. Understanding the concept of APA will help the general public better understand how to keep individuals with disabilities active across their lifespans.

Adapted physical activity is a way to help promote activity levels within individuals outside of education. Additionally, APA is essential in higher education classes in Kinesiology to get a full overview of physical activity in different populations. Through APA classes, students can create activities specific to individuals to maximize their full potential. Adapting or modifying activities is important, not just for the learning of the students, but for those with disabilities. Knowing the capabilities of individuals can help with attaining goals (Armstrong, Sallis, Hovell, & Hofstetter, 1993), including improved physical, social, and/or behavioral skills.

This topic is a relevant area of research because service-learning may be a stepping stone to community programs. Older adults with and without disabilities still need and want to be physically active and engaged. If given the chance to engage in a program, older adults will participate, especially if it is group-based (Hudson & Rich, 1993). Group-based programs allow socialization to take place between participants and older adults who enjoy social interactions because it makes them feel valued (Hudson & Rich, 1993). Having a service-learning program can help facilitate bigger PA programs for the community by troubleshooting successes and failures. There are many exercise program opportunities for children, teenagers, and young adults, however, there are very few for older adults, including those with physical disabilities (Raymond & Grenier, 2013). If these programs are succeeding in the younger populations, then success rates may also be high in the older adult population. For service-learning programs to be effective, additional research of their effect on mental and physical health can provide additional insight on older adults with disabilities in order to be served in community physical activity opportunities.

Community physical activity programs for older adults with disabilities are minimal compared to younger age groups who have programs catered to their needs. There are fewer opportunities for older adults with disabilities, and the research that is available cannot be generalized to all disabilities. For example, van Schijndel-Speet, Evenhuis, van Wijck, van Montfort & Echteld (2017) investigated older adults with intellectual disabilities in a physical activity and fitness program and found physical activity, muscle strength, blood pressure, and cognitive functioning where improved over the period of eight months. These results are promising from this study; however, the researchers did state that further research is needed on participant perspectives because only quantitative data were collected. To understand the bigger picture of how PA programs affect participants in their daily life, more qualitative studies need to be done (van Schijndel-Speet et al., 2017).

#### Statement of the Problem

Understanding the perspectives of older adults with disabilities in physical activity service-learning programs can lead to understanding of the activities that they respond well to as well as aspects that may be helping them in everyday life. In service-learning opportunities, undergraduate students are said to have positive attitudes towards older adults and children with disabilities, but limited studies exist on older adults with physical disabilities within the field of Kinesiology (Santiago, Lee, & Roper, 2016; Woodruff & Sinelnikov, 2015). The studies that have been done are on the older adult population within the field of sociology and have explored older adult experiences in nursing homes, occupational therapy, and health care (Augustin & Freshman, 2016; Greene, 1998; Kalisch, Coughlin, Ballard, & Lamson, 2013). Very few, however have specifically focused on older adults with disabilities in Kinesiology (LaMaster, 2001; Parker-Gwin, 1996; Raymond & Grenier, 2013).

Studies have only investigated older adults without physical disabilities (Roper & Santiago, 2014; Woodruff & Sinelnikov, 2015). This gap in literature offers an opportunity to explore and gain further knowledge of the perceptions of older adult participants with a physical disability taking part in a physical activity service-learning program in a university setting. The many dimensions of PA programs provided through service-learning have not been studied in terms of how they help older adults with disabilities psychologically and physically. To explore participants' perspectives as well as understand how/if they experience new ways of being active, there is a need to investigate the experiences of older adults with physical disabilities in university physical activity service-learning programs. Perspective studies in APA are a newer method of research especially in service-learning. A majority of the perspective studies in APA and service learning have historically been through the eyes of the volunteers and not the participants (Roper & Santiago, 2014; Santiago, Lee, & Roper, 2016). This study will be the first among the early perspective studies in the older adult with disabilities population.

#### Purpose of the Study

This study explored the experiences of older adults with physical disabilities in a physical activity university service-learning program.

#### **Research Questions**

- 1. How does a physical activity service-learning program influence older adults with a physical disability?
  - a) What are the perceived benefits of program participation?
  - b) What are the participant's motives and experiences for engaging in the program?
  - c) In what ways, if any, does participation in the program affect their daily life?

#### Research Framework

Successful aging includes three components: "low probability of disease and disease-related disability, high cognitive physical capacity, and active engagement with life" (Rowe & Kahn, 1997, p. 433). These key components are important because they all contribute to a well-balanced life of individual competence. Figure 1, provided by Rowe and Kahn, shows that to succeed with aging, these major components have to be present to live a healthy life well into the elder stage. Socialization, a component of engagement with life, plays a major part in making individuals feel self-assured in having a happy life, whether it takes place with family, friends, or medical personnel (Manasatchakun, Chotiga, Roxberg, & Asp, 2016; Manoochehri, Shirazi, Tafreshi, & Zayeri, 2014; Rowe & Kahn, 1997).

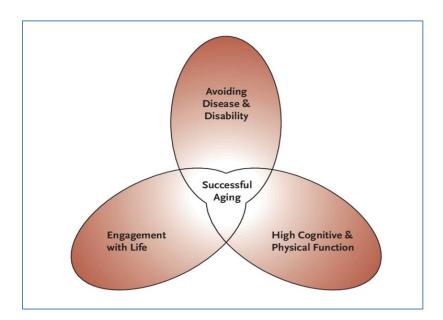


Figure 1. A model of successful aging.

Retrieved from Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, *37*(4), 433-440.

Three other components that contribute to healthy aging include being independent in dependency, being at peace, and being a valuable person (Manasatchakun et al., 2016).

Independence in dependency means that older adults enjoy making their own decisions and engage in activities but like to be supported and helped to feel competent in their decisions. Exploring the components to healthy aging can support our understanding of how older adults are able to excel later in life. These same components can be applied to individuals with disabilities, but more perspective studies are needed to determine if the components will be the same or if modifications should be considered. Investigating individuals with disabilities may add more insight to successful aging, especially if the individuals with disabilities have lived their whole life with a congenital disability.

#### Limitations

- 1. BE:WEL program coordinator bias.
- 2. One program investigated.
- 3. Population size.
- 4. Investigated older adults/older population with physical disabilities, may not be transferrable.
- 5. A semester timeline may be too short to be absolute in older adults with physical disabilities perspective.
- 6. Health status of older adults.
- 7. Injuries that may occur in the daily lives of the older adults with physical disabilities participants.
- 8. Sickness of older adults with physical disabilities that may occur in their daily lives: cold, flu, or food poisoning.

- 9. Investigated program on the CSU Chico campus bias.
- 10. Researcher bias

#### **Delimitations**

- 1. The sample size consisted of 6 participants.
- 2. The program met twice a week for 50 minutes each session.
- 3. Male and female participants with physical disabilities aged 55 and above.
- 4. Semi-structured interviews on the participants to hear about their experiences.
- 5. Older adult participants with a physical disability have to be in service-learning at Chico State.

#### **Definition of Terms**

# Adapted Physical Activity (APA)

Activities modified to suit an individual's physical capabilities.

#### Older Adult

Individuals 55 years old and above.

# **Participants**

Older adult participants with a physical disability.

# Physical Activity

Bodily movement from skeletal muscles that requires energy.

# **Physical Disability**

Limited movement of specific limbs or no use of certain limbs due to cerebral palsy, strokes, amputees, spinal cord injury, musculo skeletal or muscular dystrophy that reduce the ability to physically function properly ("Special Education: Physical Impairments," 2006).

# **Program Coordinator**

Individual in charge of the BE:WEL program.

#### Semi-structured Interview

Individuals interviewed by a researcher about their participation in an open-ended manner with guided questions.

# Service-learning Program

A program with an undergraduate class that offers students to do volunteer work with the communities either on the university campus, nearby schools, or retirement homes. Students can use service-learning to get a unit of credit, depending on the university.

#### Volunteer

Student volunteer from BE:WEL.

#### CHAPTER II

#### REVIEW OF LITERATURE

This literature review will summarize aging and PA, community PA programs for older adults, service-learning in higher education: participant perspective, qualitative research in health of older adults, and qualitative research on health of older adults with disabilities.

Dissecting the existing research will help make sense of what is missing in current research.

There is little research on community programs for older adults with physical disabilities. The lack of PA programs for older adults and understanding how older adults undergo the aging process are reasons why the perspectives studies are important. The few studies that explore participant perspectives in able-bodied older adults exist in research of PA programs are explored in this section.

#### Aging and Physical Activity

Physical activity programs have been shown to improve cognitive and physical function in the general population of both adults and children. Cognitive and physical function will be discussed throughout the paper. Being that both functions contribute to the Model of Successful Aging, it will be used as the framework, which can provide further insight into older populations with disabilities. Improvements in medicine and healthcare have caused humans to live longer, creating an increased need for opportunity for individuals to remain active in society as they age. Current census data shows that 46.3 billion Americans are 65 and older and projection of these values will be 56.4 million people over 65 in 2020 (Older Americans, 2016). As the population of elderly individuals increases, it is imperative to know how physical activity and aging can be attained and maintained for the quality of life.

As generations get older, their quality of life and functional independence becomes important as changes occur within the human body. These physiological changes can be slower metabolism, slower energy production, decrease in muscle mass, and functional loss (Groessl et al., 2016). Psychological changes also occur: a decrease in competence, perception of abilities, an increase in the fear of falling, and not feeling valued (Banhato, Ribeiro, Guedes, Marmora, & Lourenco, 2015; Choy et al. 2003; Groessl et al., 2016; Manasatchakun et al., 2016; Minkler & Fadem, 2002). Sense of identity also becomes an issue in older adults as they age. Studies have found due to the physical and physiological changes, older adults struggle with who they are because they are no longer able to participate in activities from their previous years (Baltes & Lang, 1997; Weinberger & Whitbourne, 2010). The changes that take place in an individual during the aging process, make it both challenging, and important to know how to help engage individuals in physical activity to maintain an independent level of functioning to help both physical and psychological outcomes.

Quality of life (QoL) is improved by exposure to a quality physical activity program (Camboin et al., 2017; Langois et al., 2012). QoL is the general well-being of an individual. As older adults with disabilities age, maintaining QoL and functioning are important and can be delayed through participating in an adequate PA program suited to the needs and capacity of the individual (Camboim et al., 2017; Langois et al., 2012; Tasiemski, Kennedy, Gardner, & Taylor, 2005). PA can help maintain and/or improve QoL by maintaining muscle mass, bone density, and keeping the mind alert. Physical activity allows for physiological changes, chronic diseases, and immobility to be delayed (Chodzko-Zajko et al., 2009; Lord, Despres, & Ramadier, 2011; McAuley et al., 2006; Temple & Walkley, 2007). Physical activity is the core concept that can help older adults with their longevity. People are living longer, so the best way to remain at a

healthy mobile state would be to engage in physical activity, because studies show that physical activity is the best way to prevent diseases (Chodzko-Zajko et al., 2009).

However, physical activity is also shown to decrease as people get older because of the loss in muscle mass, joint problems, falls, or injuries. A longitudinal study done by Bijnen, Feskens, Caspersen, Mosterd, & Kromhout (1998), followed 863 Dutch men aged 65-94 in 1985 for ten years. Physical activity was tracked by a self-administered questionnaire taken at the baseline year of 1985, 1990, and 1995 to see the changes in physical activity over the ten years. At the end of the study in 1995, their sample size dropped to 343 Dutch men versus 863. The sample size dropped within the ten years due to maturation, not enough time, emigration, and disinterest. Results showed that over the ten years, physical activity decreased among the men, however, their activities of daily living were still functioning when needed. In relation, the men developed no health concerns or severe mobility issues because of their adherence to physical activity. Despite growing older, walking remained the choice of physical activity whereas cycling and gardening decreased over the years. Even though these participants are older, they can still maintain a functional level, which is the main focus of APA and PA.

# Community Physical Activity Programs (PA Programs) for Older Adults

Community physical activity programs benefit all populations they serve by providing socialization, allowing for individuality, and improving mental health outcomes (Allender, Cowburn, & Foster, 2006; Capalb, O'Halloran, & Liamputtong, 2012; Kunstler, 2000; Marques et al., 2011; Weinberger & Whitbourne, 2010). Incorporating these attributes in a program can improve mental health outcomes by increasing competency in participants so they feel capable of achieving their goals. Some community programs have been beneficial because

they improve the quality of life within older adults (Janicki, 2010; Scelza, Kalpakjian, Zemper, & Tate, 2005; Tasiemski, Kennedy, Gardner, & Taylor, 2005). However, the number of PA programs for older adults are limited (Hawkins & Mclean, 1993). These PA programs are offered more to the youth and teen-age groups, with limited initiative to provide services for older adults in local communities (Hawkins & Mclean, 1993).

Knowing that programs are already limited for older adults, older adults with disabilities are a minority within this group, with further limited opportunities for participating in physical activity programs. More programs are needed to accommodate the longer lives of older adults because they are still active, including those with physical disabilities. Research has shown physical activity improves bone density, muscle mass, and mental state (Camboim et al., 2017). There have been limited studies regarding this population and how physical activity programs affect older adults with disabilities. The research on community PA programs for ablebodied older adults is a gateway to see how program implementation among older adults with physical disabilities can be similar (Clements & Barret, 1993; Kohn, Belza, Petrescu-Prahova, & Miyawaki, 2016).

# Service-Learning in Higher Education: Participant Perspective

Research has shown that exposure to the hands-on experiences outside of the classroom prove beneficial, especially in areas where social class differences and ageism lie (Parker-Gwin, 1996). There has been research on APE and APA service-learning programs in universities, however, the majority of service-learning research is focused on children, teenagers, or young adults. Research indicates that students have positive attitudes towards individuals with disabilities, especially children (LaMaster, 2001; Parker-Gwin, 1996) and that service-learning

has been a factor in the positive attitudes gained throughout their experience (LaMaster, 2001). However, we still do not know the participant's experiences in these programs the participants who are older adults with physical disabilities.

Incorporating service-learning into higher education can be a legitimate stepping stone in creating opportunities for physical activity community programs without a school affiliation (Bishop & Driver, 2007; LaMaster, 2001). LaMaster (2001) found that service-learning experiences are positive by utilizing concepts such as creating activities, reflecting on the sessions, and partnering with a participant. The same concept can potentially transfer over to a community program by having the staff incorporating the concepts to help their clients with progressive goals. Along with the progressive goals of the clients, the staff can keep track of their growth and understanding of the varied disabilities they are working with. In addition, service-learning can provide an outlet for the socialization of able-bodied older adults and those with disabilities, which allows them to feel happier and have greater program adherence (LaMaster, 2001; Parker-Gwin, 1996).

The social aspect of university service-learning and PA programs display possibilities that service-learning programs can help pave ways on how to develop community programs. Developing a potential community PA program could possibly be done by utilizing concepts of volunteer-participant pairing, participant record keeping, relationship building, and exploring new activities. Investigating the success of PA university service-learning programs from the perspective of participants can give a better understanding of how the participants perceive their experience, helping create PA programs that can be more accessible to the public and their needs.

The literature indicates how similar PA service-learning programs and PA programs are. Similarities are seen with social outlets and attainment of goals. However, not all older adults with physical disabilities have access to universities and potential service-learning experiences. Having other PA opportunities within their communities could help with older adult QoL. Service-learning programs can be an asset to investigating whether creating programs for the public will succeed because if these programs are thriving with undergraduates, then programs can thrive with individuals educated and want to create community programs. Limited exercise program opportunities for older adults makes exploring the perspectives of this population necessary and relevant, especially for individuals with physical disabilities. The needs of older adults with physical disabilities in service-learning physical activity programs can only be known if we explore their experiences. Exploring participant experiences in a service learning physical activity programs is one way to improving understanding of how older adults with physical disabilities are affected by attending these types of programs.

Parker-Gwin (1996) also explored how older adults were able to work with the undergraduates in order to be integrated back into the community. The reason was because they felt they could not provide the same contribution as they once did to society. Since this study was done in a sociological setting with older adults, it would be interesting to see if similar results will occur in an adaptive physical education setting. There is a gap in the literature in the perspectives of participants in PA service-learning programs, especially in older adult participants with a physical disability. Understanding the relationships in service-learning programs can investigate the factors that contribute to the adherence of participation.

Raymond, Grenier, and Hanley (2014) investigated perspectives of older adults who engaged in community activities. Twelve individuals with disabilities participated in this study

and were interviewed and journaled about their experience in community activities and there was consensus between the participants that there was need for more PA programming opportunities. The study concluded three components have to be present in aging communities: selfdetermination, creation of an inclusive environment, and identity integration. Self-determination was described by the researchers as "the freedom to make life decisions from a variety of reasonable alternatives" (Raymond et al., p. 54). Participants also wanted to choose their activities while still having support from society, which ties to being independent while still having dependency on others. The older adults with disabilities wanted to be social, autonomous, and also wanted to feel included in society. The next major theme, inclusive environment, found that the participants had consensus on how society views them as their disability and not as an individual. Since the opportunities in Quebec for PA programs are limited, this makes the participants feel excluded from society because of their different ability levels. The last theme found in this study was identity integration. The researchers suggest there are three components to identity integration, which are "older citizens who are equal to others, long-term activists struggling for social justice, and persons who are living the tensions between aging and aging with a disability" (p. 57).

Identity integration can be difficult for older adults with disabilities because of the barriers of limited access to quality PA programs, not comprehending bodily changes and socialization (Minkler & Fadem, 2002; Raymond et al., 2014). These components are also found in individuals with learning disabilities in Thai culture (Manasatchakun et al., 2016; Newberry, Martin, & Robbins, 2015). The studies discussed above are why the perspectives of older adults with disabilities in PA programs are relevant in society because everyone will go through the

aging process. It is only a matter of how we can help these individuals live a life where they are self-determined, socialization, and not discriminated against because of their disability.

### Qualitative Research in Health of Older Adults

Due to the limited studies on participant perspectives in communities and service-learning, the studies included in this section are not community programs, but rather studies that focus on interviews and the experience of how older participants who are able-bodied view physical activity. Exploring these participant perspective studies from community PA programs can help develop adapted physical activity programs. Mobility is the main health concern for older adults because of the fear of falling aspect with injuries (Clancy, Balteskard, Perander, & Mahler, 2015; Lord, Despres, & Ramadier, 2011). In the qualitative studies done among older adults, it was common for the participants to bring up the fear of falling into their responses. To counter, the majority said that engaging in physical activity allowed more freedom because they had more balance and coordination from walking (Clancy et al., 2015; Franco et al., 2017; Nielsen et al., 2014). Walking is a more attainable task to have among the older adult population because their activities of daily living (ADL) require mobility to succeed with their everyday tasks to feel good about themselves.

There are a few studies that have explored participant perspectives in PA community programs. Hickerson et al. (2008) explored perspectives of able-bodied older adult participants and described the following themes: organizational resources, personal capital, relational capital and social structure, and physical activity and enjoyment. Due to how the program was set up, participants felt the program was attentive to their needs and very responsive. Personal capital was described as motivators participants had in order to keep active. Some motivators were to

remain active, keep potential health problems at bay, and feel confident in themselves. Relational capital and social structure were described as having many participants relate to each other in their capabilities and motivated each other to perform well during the exercises. The physical activity and enjoyment theme was positive as well because participants shared that they would rather engage in an activity rather than lounge at home alone.

Kohn et al., (2016) had similar themes to Hickerson et al. (2008). The study explored perspectives of able-bodied older adults in a PA community program. Themes that were found in Kohn et al., were the following: Physical benefits, functional status, social, and self-image and sense of well-being (2016). Participants shared their physical benefits as improved strength and stamina through the program. Functional status was described by participants as being able to get up from a fall and/or avoiding falls, which made them feel empowered. Participants shared the social theme as being inspired, motivated, and connected to their peers in the program in order to engage in the program. The final theme, self-image and sense of well-being, was described by participants as an overall sense of improved benefits. The benefits included not only physical, but psychological, emotional, and spiritual benefits from the program. Both Hickerson et al. (2008) and Kohn et al. (2016) expressed how successful programs help participants with their needs and values by focusing on goals and establishing rapport. Due to the new nature of this research, more studies should be conducted to further explore how participants engage in community PA programs (Hickerson et al., 2008; Kohn et al., 2016).

Ziegler & Schwanen (2011) explored 119 participants aged 60-95 years old in Durham, England. Nine semi-structured interviews were conducted for individuals with sensory or mobility disabilities. Grounded theory was used to analyze the interviews. Results found participants knew mobility issues are a part of the aging process and know their capabilities to be

mobile. Participants who had support from family and friends found it easier to engage in physical activity, which made PA a more enjoyable experience. In terms of well-being, participants agreed the socialization aspect is what they enjoy most for being active because it allows everyone to talk about their lives. During this discussion, the majority understood each other in terms of mobility because of the proximity in age. Along with socialization, the participants also agreed that autonomy, physical health, and self-care or identity are important to them and having another person in the same stage in their life is motivational to continue to be active. Knowing that socialization plays a key role in PA programs, the literature is suggesting social building is the reason participants adhere to PA programs.

To coincide with this study and support socialization and friendships in PA programs for older adults, Capalb, Halloran, & Liamputtong (2012) conducted individual interviews with 10 participants aged 62-75 years of age to better understand their experiences and participation in community-based PA programs. Throughout participant interviews, social interactions were identified as the main reason participants engaged in physical activity programs because of the connections they felt with others their own age. Socialization in physical activity programs allows participants to engage in activities outside of their PA program. Participants felt more confident in their social skills to talk to other people, which made them want to participate in more activities outside their PA program.

Even though these studies shared similar results, barriers continue to be present for older adults in PA programs. These barriers can include individual pro-longed illness, illness of a family member, holiday seasons and breaks in schedules/routine, transportation issues such as no car, bus issues, and/or no reliable transportation, and proximity of the PA program (Capalb, Halloran, & Liamputtong, 2012; Wu, Li, & Sung, 2016). These barriers are contributing factors

as to why participants stop attending PA programs. Understanding and exploring participants' perspectives is important because we can gain a better understanding of not only how physical activity benefits older adults, but what barriers and facilitators exist for this population regarding PA. Socialization was the main reason older adults participated in physical activities because the friendships that arose throughout the sessions were key motivators (Allender, Cowburn, & Foster, 2006; Benjamin, Edwards, Guitard, Murray, Caswell, & Perrier, 2011; Capalb, Halloran, & Liamputtong, 2012; Stathi, McKenna, & Fox, 2010; Wu, Li, & Sung, 2016). Socialization, autonomy, identity, and physical health were among the responses of participants. One can see a glimpse of how these programs are beneficial. However, it would be interesting to see how older adults view physical activity programs over time rather than a one-time interview on their daily physical activities. In addition, the literature shows similarities to provide PA programs appealing to the public.

# Physical Benefits of Physical Activity for Older Adults

There are changes in gait as individuals get older due to a decrease in functional capabilities in muscle groups and bone fragility (Scully, Kremer, Meade, Graham, & Dudgeon, 1998). Studies have shown that participants feel walking is a huge part of their daily activities, which is how the majority of older adults engage in physical activity (Allender, Cowburn, & Foster, 2006; Barenfeld, Gustafsson, Wallin, & Dahlin-Ivanoff, 2015; Benjamin, Edwards, Guitard, Murray, Caswell, & Perrier, 2011; Capalb, Halloran, & Liamputtong, 2012; Stathi, McKenna, & Fox, 2010; Wu, Li, & Sung, 2016). It makes sense there is a consensus that walking is the main reason participants engage in physical activity because mobility is important to them as they get older. Walking at an older age makes the participants feel like they can live comfortably and in control of their lives (Capalb, Halloran, & Liamputtong, 2012; Hwang, Lin,

Tung, & Wu, 2006; Wu, Li, & Sung, 2016). Self-satisfaction in this population allows independence to exist even if it is a simple task of walking.

Another physical benefit that participants gained by being active was improved ability to manage potential other chronic diseases such as high blood pressure, cardiovascular disease, and diabetes (Capalb, Halloran, & Liamputtong, 2012; Chan, Malhotra, & Ostbye, 2011). Having control in health management is a huge benefit of physical activity across all age populations because it can lead to a higher chance of longevity. Balance is also another key factor of good mobility in daily life because falls can be averted. Walking and balancing exercises implemented together can prevent falling in older adults (Keogh et al., 2016; Thingstad et al., 2014). Through participant perspective studies, one can gain a better sense of how physical activity can contribute to mobility of participants. The psychological benefits of physical activity will be discussed in the next section below.

# <u>Psychological Implications and Benefits of</u> <u>Physical Activity</u>

Depression is common among individuals in older adults because they feel unwanted, vulnerable, and scared of the end stage of life (Newberry et al., 2015). As the aging process occurs, depression usually occurs due to the nature of physiological differences of mobility (Newberry et al., 2015). The feelings of vulnerability and being unwanted are often because of social isolation. Socialization plays a role in PA programs because having other individuals in the same stages of life will help make the experience tolerable (James, Boyle, Buchman, & Bennett, 2011; Newberry et al., 2015).

Age-related physical changes in older adults are related to depressive symptoms (Weinberger & Whitbourne, 2010; Whitbourne & Collins, 1998). The Center for Epidemiological Studies investigated age related physical changes and depressive symptoms

using the Depression Scale- 2.0 and found statistical differences within the older adult participants. The participants were experiencing depressive symptoms due to their physical functioning changes. To relieve these depressive symptoms, exercises modified for individuals with less mobility can be used. Weinberger & Whitbourne (2010) expressed that entwining exercise with Identity Process Theory (IPT) will give a better understanding of the mental benefits of exercise. According to Whitbourne (1986), IPT suggests that individuals come to an understanding of how their physical function is no longer how it was and face their realities of how they are able to be mobile in the present.

Besides depressive symptoms and identity issues, older adults also have trouble with their cognitive abilities. A study that utilized a physical-cognitive intervention for 12 weeks to improve gait speed in older Mexican adults resulted in improvements with cognitive functioning by recalling animals without repeating or counting with no mistakes while walking (Salazar-Gonzalez et al. 2015). In this study, the benefits of engaging in minimal exercise are shown to help with cognitive functioning. It is also shown that prolonged adapted physical activity generates changes in different magnitudes of psychological outcomes (Alburquerque-Sendin, Barberio-Mariano, Brandao-Santana, Rebelatto & Rebelatto, 2012). These findings show the mental benefits of physical activity in older adults. These studies are promising, however, from the participant perspective, there may be a misunderstanding because participants are not often asked about their experiences, rather, their experiences are assumed to always be beneficial. Therefore, it is imperative to understand the experiences of older adults to develop a better programming for this population.

#### Qualitative Research on Health of Older Adults with Disabilities

There have been some intervention studies with older adult participants with both intellectual and physical disabilities. Those interventions will be described in this section separated by physical benefits and psychological benefits. Understanding the similarities and differences of able-bodied older adults and older adults with disabilities is important because it gives us insight into how physical activity affects this population. The following studies will explore how PA interventions have helped older adults with cerebral palsy, spinal cord injury, intellectual disabilities, and mobility disabilities.

#### Physical Benefits

Cerebral Palsy (CP) is a physical disability that can limit mobility in various limbs depending on the individual, causing static movements within individuals (Choy, Isles, Barker, & Nitz, 2003). Flexibility is an important factor of this study because this area of fitness can help with range of motion and blood flow. Using constraint-induced movement exercises can help with daily functions as seen in a randomized control studies (Choy et al. 2003; Wu, Chen, Tsai, Lin, & Chou, 2007). Flexibility activities in individuals with CP are also supported by another study in which family members notice an increase of movements, mood, and ability to move around in a wheelchair when participating in the stretches (Freeborn & Knafl, 2013).

In the case study by Gorgey, Poarch, Miller, Castillo, and Gater (2010) the researchers investigated the use of locomotor and resistance training in a 66-year-old man with an incomplete SCI. Walking restoration can be a long and difficult journey for an individual with an incomplete spinal cord injury (SCI) because the individual can have limited sensation and movement in his lower limbs, which can affect stamina and rehab duration. Utilizing locomotor and resistance training to help restore walking could stimulate musculoskeletal and

neuromuscular adaptations. Utilizing the combination of walking and light ankle weights can help engage muscle memory and the connections of the brain that controls body movement to help with walking again. Utilizing a harness held by two assistants, the participant took steps on a treadmill to practice locomotion exercises. For the resistance training exercises, the participant used ankle weights with leg raises along with walking with the weights. The researchers found that locomotion and resistance exercises can help partially restore walking, but over time, full restoration of walking is promising with locomotion and resistant exercises. This study showed that functional gain in an older adult with an incomplete SCI can walk again over time. Understanding this study shows the importance of physical activity in individuals with SCI because it shows how individuals with disabilities are able to be functional in their own way.

From a participant perspective, feelings of independence and a sense of belonging arise when participants are engaging in physical activity just like able-bodied older adults do (Mortenson, Hammell, Luts, Soles, & Miller, 2015; Tollen, Fredriksson, & Kamwendo, 2008). Simple tasks were engaged through group exercises in order to mobilize their bodies for maximum success. These tasks include balancing and strength exercises similar to those that able-bodied citizens use as described in the previous section. Individuals with disabilities also view physical activity to maintain their aging bodies in a state of recognition and are aware, just like able-bodied older adults, that achieving simple daily activities allows for mini celebrations of life (Buys, Aird, & Miller, 2012; van Schijndel-Speet, Evenhuis, van Wijck, & Echteld, 2014). Understanding the literature in this context is also important because it allows us to understand there are few differences between able-bodied older adults and older adults with disabilities, which allows us to see that physical benefits are similar to those of able-bodied individuals.

Mobility disabilities are viewed by older adults with disabilities as a mixture of positive and negative experiences in their daily activities (Bontje, Asaba, & Josephsson, 2016; Cote-Leclerc et al., 2017; Mortenson et al., 2015). A mixture of feelings are involved in this specific area of physical disabilities because as we age, movement becomes harder to do and can be painful for some individuals if physical activity is not consistent. To support this, perspectives of individuals have expressed that adapting or modifying physical activities allows control over their bodies, which is beneficial for participants to see their progression. Participants expressed movement in their daily lives signified that their bodies are still functioning at a level in which they are satisfied (Bontje et al., 2016). Modifying activities for this population is how PA programs have succeeded according to the consensus of participants (Bontje et al., 2016; Cote-Leclerc et al., 2017; Mortenson et al., 2015). Comprehending the perspective of participants and not just relying on observations can provide insight to what participants enjoy in PA programs.

Even though results are promising from the studies mentioned above, still there is limited research examining older adults with physical disabilities. Some inquiries that researchers wondered throughout many of the studies were: do simple exercises actually help with training individuals with a physical disability as they age? (Choy et al., 2003). Will the interventions have long-term effects? (Choy et al., 2003; Daly et al., 2015; Salazar-Gonzalez et al., 2015). The only way to answer these questions is to ask the participant to see if the questions mentioned above can have an effect on program planning for older adults with physical disabilities. For example, researchers may see the physical improvements, but how does the actual experience of the program make the participant feel? The perspective of their experiences can give researchers insight as to which strategies of the intervention succeeded or failed, how

the intervention affected the individual to continue to be active, and if the participant would want to join an actual community program to continue with the benefits of activity.

## <u>Psychological Implications and Benefits</u>

Newberry, Martin, and Robbins (2015) investigated participants with learning disabilities aged 60 years and above. Participants were asked to talk about how they felt about the aging process. The study found that quality relationships (socialization) are an integral part of life. Participants also expressed how feelings of powerlessness over their bodily changes affect them and families because the changes make them feel like they are losing their identity, so they have to find themselves again by making sense of what their capabilities are now. It is shown that individuals with disabilities also struggle with identity and find enjoyment through social interactions, which is similar to able-bodied older adults.

Nosek, Hughes, Robinson-Whelen, Taylor, and Howland (2006) explored physical activity amongst 386 women with physical disabilities and how socialization played a role in isolation from able-bodied individuals because of their disability. Physical activity is a way to enjoy life and contribute to their self-efficacy of healthy behaviors. Even though external variables of social isolation and unavailable facilities played a part in how others valued them and their disability. The majority of the women had higher self-efficacy and they also had healthy behaviors higher than those with low self-efficacy. The psychology of self-efficacy relates directly to healthy behaviors (Bandura, 1986) in that individuals are motivated to maintain an overall sense of health. If an individual has a healthy lifestyle of being active and eating properly, then self-efficacy will be prominent because they are willing to put the time and effort into their achievement of goals. Socialization is prevalent among both able bodied and physically disabled older adults with disabilities.

#### Conclusion

The review of the literature discusses the aging process, effects of physical activity programs within the older adult population with and without physical disabilities, physical benefits, psychological benefits, and some participant perspective studies. PA programs are important for older adults because they can provide the social, physical, and motivational aspects that decrease as the aging process continues. Aside from the physical benefits of completing acts of daily living activities, community programs for older adults which are shown to have positive effects such as having a social outlet, physical and psychological benefits. However, these benefits are from the perspectives of the volunteers and quantitative data. There is a gap in the literature regarding the perspectives of the older adult population with physical disabilities. Therefore, this present study explored the perspectives of older adults with physical disabilities in a physical activity university service-learning program.

#### CHAPTER III

#### **METHODOLOGY**

## Study Design

To better understand the experiences of older adults with physical disabilities in a service learning physical activity program. This study employed a phenomenological approach. A phenomenological approach is a qualitative methodology that gives participants a voice through sharing their experiences in a shared phenomenon (Moustakas, 1994; Pitney & Parker, 2009; Smith, Flowers, & Larkin, 2009; Sparkes & Smith, 2014). The shared phenomenon in this study was the experience of being an older adult with a physical disability in a physical activity service-learning program at a university. This was possible by not having preconceived notions on the participant response to the interview questions. By not having preconceived notions, the researcher had an open mind to participant responses without expecting certain responses.

### Researcher Role

Having a mother who is an older adult with a physical disability was the initial reason the researcher was interested in working in adapted physical activity. The researcher is also a program coordinator for another adapted physical activity service-learning program at a university that serves younger children with both physical and cognitive disabilities. The realization that as older adults with physical disabilities have limited physical activity resources for this population, led the researcher to explore their experiences in an adapted physical activity program had any effect on older adults with a physical disability in a service-learning program.

The researcher designed the study and recruited participants. During the study, the researcher observed the older adults participate in the program, took field notes four times

throughout the semester, conducted the semi-structured interviews with the participants and the program coordinator, translated one Spanish interview, transcribed all seven interviews, and also analyzed the transcribed data.

Context: Beyond Exercise: Wellness Enhancement for Life (BE:WEL)

BE:WEL is a physical activity service-learning program at a university that focuses on accessible facilities for health promotion. BE:WEL has been providing services to the community for over 20 years. This program provides individualized physical activity programming and support for adults with physical disabilities from the community. It also facilitates personal goal development focusing on a positive sense of well-being through exercise. The BE:WEL environment is specifically designed for participant interaction and support. It provides access to ongoing personal wellness education for individuals with disabilities, and offers hands-on learning opportunities. This program is staffed by CSU, Chico students and the program coordinator each semester. The students are referred to as the 'volunteers' throughout this study. The older adult participants with physical disabilities are known as 'participants' throughout this study. In addition, the BE:WEL program coordinator is referred to as 'program coordinator'. The program coordinator was not a participant of the study, rather, an additional source to how BE:WEL is run. In any given program session, participants could be assigned to more than one volunteer depending on the mobility of the participant, the volunteer schedule, and/or the participant attendance. BE:WEL takes place on Mondays and Wednesdays 12-1 pm and 1-2 pm on campus at a state university in California. Participants are most frequently referred to the BE:WEL program through: physical therapists, word of mouth from participants, hospitals, or university faculty.

## **Participants**

Purposeful, criterion-based sampling was used for this study. Criterion-based sampling is depicted as having a set of criteria that meets what the researcher wants for the participants (Patton, 1990). Inclusion criteria for the participants were: at least 55 years of age with a physical disability (congenital or acquired in their life) and enrolled in BE:WEL. In this study, there were six participants: one female and five males arranged in three categories: first year in BE:WEL, two-four years in BE:WEL, and five or more years in BE:WEL. There were two participants for each category. Participants were recruited by the researcher in person at the beginning of the Spring 2018 semester during their BE:WEL sessions. In early March 2018, the researcher distributed, explained, and collected the informed consents. Copies of informed consents were given back to participants. Description of participants can be found below in Table 1.

Table 1

Participant Demographics

Participant	Ethnicity	Gender	Age	Disability	Year
Gunnar	Caucasian	Male	59	TBI and ISCI	1
Harvey	Caucasian	Male	80	Senior Mobility	1
Emily	Caucasian	Female	56	TBI	2
Gordon	Caucasian	Male	82	Stroke	2
Xavier	Hispanic	Male	55	ISCI	6
Spencer	Caucasian	Male	80	CSCI	7

*Note*: Year = Number of years in BE:WEL; TBI: Traumatic Brain Injury; ISCI: Incomplete Spinal Cord Injury; CSCI: Complete Spinal Cord Injury

#### Gunnar

Gunnar is a 59-year-old male who was in his first year of BE:WEL. Gunnar has a traumatic brain injury and incomplete spinal cord injuries. He reported that he has previously participated in both outpatient and inpatient physical therapy programs. Gunnar was referred to the BE:WEL program by a local outpatient program to continue his physical activity goals of increased mobility and stability. During observations of his sessions, it was noted that he always arrived on time and stretched out his arms and legs with a therapy band prior to his work out guided by his volunteers. He greeted the researcher every time they were in the same room as he walked to his next exercise. Field notes indicated that his workout routine consisted of flexibility, stability, and weight training exercises. His routine was corroborated in his workout log.

# • Harvey

Harvey is a 80-year-old male who was also in his first year of the BE:WEL program. Harvey has senior mobility, issues that affect lower body function, and was recruited to BE:WEL through word of mouth from other participants in the program. Harvey was always on time for his sessions and had a smile on his face. He generally warmed-up with a volunteer on the stationary bike and waved to the researcher during the session observations. Harvey frequently talked with the researcher and the program coordinator during his sessions. His workout routine included cardio, strength training, flexibility, and eye-hand coordination exercises. This routine was supported by volunteer notes and his workout log. Harvey was very informational and humorous in his daily interactions and semi-structured interview responses.

### • Emily

Emily is a 56-year-old female who, at the time of this study, was in her second year of BE:WEL. Emily acquired a traumatic brain injury when she was younger. Prior to BE:WEL, she went to physical therapy and was referred to BE:WEL by her outpatient occupational therapist. She was generally early to her sessions and was talkative to other volunteers before her assigned-volunteer arrived. Emily usually greeted the researcher and started casual conversations prior to engaging in her workout routine. Observations indicated that her workout routine included cardio, stability, hand-eye coordination, flexibility, and strength training exercises. This routine was supported through her workout log. During the semi-structured interviews, she was eager to talk about her life and the BE:WEL program.

### • Gordon

Gordon is an 82-year-old male who was in his second year of BE:WEL. Gordon had a stroke, making mobility hard for him. He was referred to BE:WEL by his doctor to work on his goals to "get better" as he stated. Gordon's attitude was very energetic every session. Field notes from observations indicated that he was eager to try new things and always wanted to give it his best during the sessions. His workout routine was observed to include cardio and strength training, which was supported through volunteer notes and his workout log.

#### Xavier

Xavier is a 55-year-old male who was in his sixth year of the BE:WEL program. He acquired an incomplete spinal cord injury when he was younger. Xavier always arrived early to the program and started his warm-up while his volunteers arrived. He was

observed by the researcher to be very determined in his workouts, which consisted of strength training, cardio, and hand-eye coordination exercises. Xavier spoke little English, so the interview was conducted in Spanish and it made him more comfortable to talk about his experience.

## Spencer

Spencer is an 80-year-old male who was in his seventh year in BE:WEL. He acquired his complete spinal cord injury in his youth. Spencer was referred to BE:WEL program from word of mouth in his rehabilitation program. During each session, his volunteers would always arrive early to help with his transfer from his car to his wheelchair. His workout routine included strength training exercise and was supported by his workout log. During the semi-structured interview, Spencer was very clear in his responses and indicated that he had his routine set, which he felt should not be changed.

### Pilot Interview

The researcher conducted a pilot interview with the question guide was used with an individual not participating in the study prior to data collection. The pilot interview took place in March 2018. The pilot interview helped the researchers assess the feasibility of the study and align the study with the interview methods (Leon, Davis, & Kraemer, 2011). The pilot interview was used to test the electronic recording devices, give a timeframe of how long the semi-structured interviews will take, and gauge participant responses and assess the flow of the question guide. After the interview was concluded, the researcher listened to volume and audio quality as well as to obtain feedback from another experienced researcher. The experienced researcher confirmed the methods used in the pilot interview and discussed interview techniques

and strategies to create a comfortable environment for participants. Once the strategies were in place, data collection began.

#### **Data Sources**

## Field Notes from Observation

The researcher observed the participants in their program routine once a week throughout the month of April 2018. If a participant missed a day, the researcher went back another day during the same week to ensure all participants were observed. Observations were used to provide a thicker description of the experience of participants.

# Program Artifact: Workout Logs

Ongoing data collection of participant's exercise sets, equipment weight, and repetitions.

### Program Artifact: Volunteer Notes

Ongoing volunteer field note observations, if any, on their participant's mood, milestones, and any changes.

## Program Artifact: File Notes

Ongoing health information that has been updated on participants.

## Semi-structured Interviews

All semi-structured interviews were scheduled in late April through early May 2018, the last two weeks of the BE:WEL program. The semi-structured interviews were held in the same location as the BE:WEL program and lasted 30-60 minutes. An electronic recorder app called 'RecUp' was used and uploaded to Dropbox on a private folder. The researcher used an interview guide to conduct the semi-structured interviews (see Appendix C). The interview guide included questions related to: how participants heard of the program, how many years of

participation, their motivations for attending BE:WEL, any changes participants have seen and/or felt, BE:WEL environment, and if participants recommend this program to others.

# **Program Coordinator**

The researcher conducted one structured interview with the program coordinator with the purpose of a better understanding of how BE:WEL operates and any other information on participants' experience throughout the program. The researcher used a different interview guide (see Appendix E). The interview lasted 30 minutes.

### **Data Collection**

Data collection began in early April 2018 with field notes from observations conducted by the researcher while observing the sessions to record the participants' routines and interactions. The researcher noted participant attitudes, social interactions, and exercise routines. The researcher observed each participant four times during April 2018. Each week, one field note from observation was conducted. All observations were coded for type of activity, participant demeanor, level of engagement, and social interactions. The researcher typed up the field notes on a private computer bracketing any preliminary thoughts, questions, or experiences.

The researcher conducted semi-structured interviews with all participants between April and early May 2018. Interviews lasted between 30 and 60 minutes, averaging 33 minutes. The interview guide was used and follow up questions and further prompts were used as needed. Following all of the interviews, the program artifacts were collected by the researcher.

The final source of data was an interview with the program coordinator, conducted by the researcher in late May 2018 in the same location as the BE:WEL sessions. The interview followed a different question guide focusing on the purpose of the BE:WEL program, observed

changes in participants, and any questions the researcher had regarding the participant observations and interviews.

All data were stored on the researcher's private computer of the researcher until completion of the study. The steps in sequence (see figure 1) were completed in order to give an overview of how the study was accomplished. As the chart indicates, the researcher completed an IRB form before informed consents were given to participants. The participants who decided to be a part of the study returned the informed consent to the researcher.

A pilot interview was conducted before any data were collected. This interview took place in March 2018. After the pilot interview, data were collected through observations, workout logs, semi-structured interviews, and volunteer notes. All participants had the same order of data collection: four field note observations, collection of workout logs and volunteer notes, and a semi-structured interview. The interviews were transcribed verbatim by the researcher. Member checks took place after transcription of interviews, and data analysis began after the member checks.

### Data Analysis

Data analysis for this qualitative phenomenological study began with transcribing the audio files and re-reading extensively through the data. The researcher analyzed data by using the modification of the Van Kaam method of phenomenological data analysis (Moustakas, 1994). First the researcher used horizontalization (Moustakas, 1994). First, the researcher used horizontalization means that the researcher listed and grouped responses of the older adult participants with physical disabilities to the experience of BE:WEL. Reduction and elimination followed to remove responses that were not relevant and vague to the experience of BE:WEL. Next, common terms or segments of data were grouped together by similar experiences called

themes (Moustakas, 1994). A qualitative phenomenological analysis was done by coding and creating overall themes for the cluster of words or phrases. The researcher compared participant responses and coded similar experiences to convey themes of the study. A table showed the main themes, codes, sub-themes, and participant response. Three experienced researchers familiar with qualitative methods helped the researcher analyze data during debrief meetings. They used a similar method described above and helped group common experiences together to identify the themes to avoid any bias.

## Steps in Sequence

Figure 2 describes the steps taken for this research study.

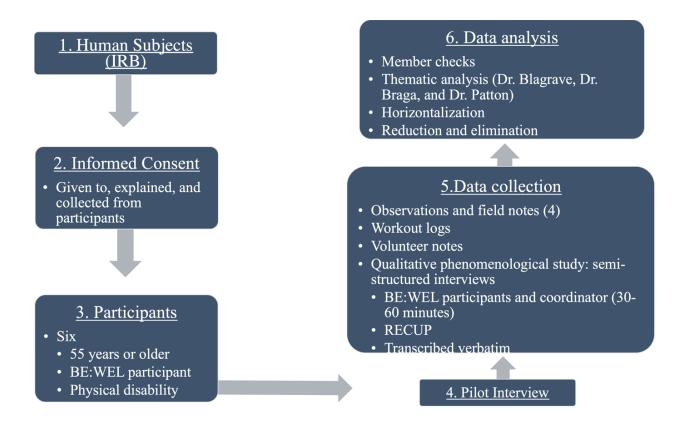


Figure 2. Steps in sequence.

#### Trustworthiness

Qualitative studies differ from quantitative because they use credibility, transferability, dependability and conformability to ensure validity and reliability. Credibility was verified by triangulating the data between different modes of data collection. The different modes were field note observations, semi-structured interviews, workout logs, volunteer notes, and program coordinator interview. Data were also triangulated by comparing experiences between participants. Interviews were carried out until saturation response of the questions was achieved. Member checks were used to ensure validity by having the participants examine their transcripts for accuracy. While themes were not presented to the participants in this study, they were reviewed by the researcher and three other professors who are experienced in qualitative studies to help the researcher interpret and condense the data appropriately. Debrief meetings helped researchers reach a consensus regarding codes and themes.

Trustworthiness was achieved by verbatim transcription of the interviews because the participant responses were typed out and given to participants to have honest and accurate data. Transferability was achieved by using thick descriptions of participant experiences so that analysis of the themes could be judged by an outside reader to confer findings. Dependability was achieved through the use of a question guide for each participant, organization of data, and an inquiry audit from three other professors. Finally, to demonstrate conformability in the study detailed notes of the process, drafts, and journaling were present throughout the study.

### Summary

Using a qualitative phenomenological design, the researcher explored the experiences of older adults with physical disabilities in a service-learning physical activity program in a university setting. Program observations, participant interview, collection of artifacts and

program coordinator interview were used to provide a thick description of the participant's program experiences. Data were organized at the individual level and then on a broader level to obtain themes between the program participants. In Chapter 4, the researcher will discuss the findings of the study through the themes.

#### **CHAPTER IV**

#### **FINDINGS**

For a theme to be overarching across all participants experiences, it had to be present in each individual narratives (Smith et al., 2009). Three themes emerged from the data (program observations, participant interviews, and artifacts) to describe of the experiences of older adults with physical disabilities participating in a physical activity service-learning program in a university setting: 1) Positive Mental Health, 2) Physical Competence/Confidence, and 3) Program Vibe (see Table 2).

#### Themes

### Theme I: Positive Mental Health

In this study, positive mental health can be associated with engagement with life. The first theme of positive mental health described the positive psychological outcomes to the program participants. Participant experiences from the service-learning physical activity program with broader subthemes is described in the narrative below as a sense of purpose and empowerment.

Most participants had a positive experience with BE:WEL and described the program as giving them a sense of life purpose because they all shared the experience of no longer declining mentally, a routine to look forward to, and an overall sense of mental well-being. In addition to feelings of purpose, participants also felt empowered by their engagement in the program. Several participants shared their experience of how missing BE:WEL sessions negatively impact them and as a result, motivates them to attend. Xavier's statement about participating in the program encapsulates the sentiment of the participants well:

Table 2

Referenced Participant Statements Reflected in Themes and Subthemes

Theme	Subthemes	Codes	Participant  Emily, Spencer, Harvey, Gunnar, Xavier, and Gordon	
Positive Mental Health	Sense of Purpose Empowerment	Highly motivated Increase of mental health Self-empowerment Improved outlook Mental toughness Sense of purpose Not afraid No change		
Physical Competence Confidence	Cognitive benefits Successful PA participation	Increase of perceived health Strength test improvements Toned muscles No falls Body awareness Knowledge No Change	Emily spencer, Harvey, Gunnar, Xavier, and Gordon	
Program Vibe	Relationship building Uniqueness	Social Low cost Unique experiences Volunteers	Emily, Spencer, Harvey, Gunnar, Xavier, and Gordon	

If I'm home 2 or 3 days my mind like uh well I forget things and I get bored and and I'm not as happy but when I come here I feel more comfortable and confident because my mind is alert and I uh well I don't feel as stressed because I do feel stress when I'm just at home.

Emily, Harvey, Gunnar, and Gordon shared their experiences of feeling more confident in their movement and comfortable in their bodies since attending BE:WEL. Gunner described having "a more sense of confidence I feel like I'm in control of what my body does." This was also seen in the program artifacts, as all participants made some gains in their endurance, strength and/or improved range of motion.

Most participants in this study described the service-learning physical activity program as providing them with a sense of purpose. For older adults with physical disabilities, finding meaning in life may be challenging. Each participant described struggles with this feeling.

Gunnar described the service-learning program as "feeling like you are behind the wheel of your own recovery." a sentiment that was shared by both Xavier and Emily. Emily and Xavier also shared that their participation in physical activity while the program helped decreased their depression. Previous volunteer notes and the program coordinator confirmed their improvement, noting their consistent attendance, mood, and personal conversations.

Participants also shared that having a routine provided them with a purpose each week. The following quote by Gunnar described his experience in the program and why he felt BE:WEL gave him a sense of purpose:

Well yea obviously I just there is more of a sense of you know purpose to life because like I said, I'm not feeling like I'm on a decline and uh I'm feeling like more in charge of myself and my future and that.

Overall, mental health improvements were seen in various ways by all the program participants and this theme was enriched by supporting program artifacts and observations.

Spencer was the only participant who stated he did not have any changes in his mental health like the other five participants. When asked about his experience, Spencer simply stated "no". However, from the observations and student notes, Spencer was seen as a motivated individual and previous volunteer notes indicated his improvements in being encouraging of others.

## Theme II: Physical Competence/Confidence

In this study, physical competence/confidence referred to improvements of physical health as a result of participation in the program. These improvements are presented via participant knowledge gain as well as physical improvement in the physical activity service-learning program with the subthemes described in the narrative below as cognitive benefits and successful physical activity participation.

All of the participants in the study shared the experience of gaining cognitive benefits from the BE:WEL program. Cognitive benefits such as learning a new exercise and ways of "tricking your mind like if I think I can't do it or the pain" as Emily described in regards to her repetitions of sets, which was supported by Gunnar, Gordon, Xavier, and Harvey. Being mindful of how much your body can endure during physical activity is a learned skill that helps with body awareness. Emily's description of how "tricking your mind" has affected her is described below and is an encompassing quote with the rest of the participants:

It's so much more than learning and trusting your strengths and things you've never thought you can do um you know the hands-on experience because it goes both ways it's not just hands on for the students you know learning different exercises and that's what is awesome about [volunteer].

All participants underwent physical therapy and rehabilitation programs before attending BE:WEL. Xavier's recollection of his progress is similar to that of other subjects: "The first three year were tough you know you have to relearn everything again and you have to keep

yourself afloat but now I'm able to navigate really well." All participants shared the similar experience of having to relearn every day exercises and Xavier's response encapsulates the progression from acquisition of his disability, to participation in the BE:WEL program.

Motivation to continue to be active outside of the program by going on walks, nearby gym, and household chores were common among Harvey, Gunnar, Xavier, and Emily. Spencer was knowledgeable about physical benefits as a result of his educational background prior to BE:WEL, so he expressed how in his opinion, no changes occurred. Volunteer notes, however, indicated that he had gained confidence in executing heavier weight exercises. Overall, competence levels were gained by all participants through the physical activity service-learning program in their own personal ways. The shared experiences of physical competence/confidence benefits among five participants are supported by field note observations, volunteer notes, and program coordinator. Some examples were participant engagement in new exercises, confidence to add another repetition, and participant inquiries about form.

Moreover, successful PA participation was also a shared experience among participants in the program. Any mention of improvements in physical health in the program and daily activities was considered successful PA participation. Harvey's description of his success in the program captures all of the shared experiences of participants:

My hands are much stronger now my upper body is much stronger that's what I was working on you know it goes from a simplicity of opening a bottle cap which you'd be surprised when you age ... Yea and uh just lifting things around the house and uh just being able to do more uh definitely.

Improved strength, as Harvey expresses is a shared experience among Emily, Xavier, Gunnar, and Gordon. All five participants noted improvements in strength and endurance which is supported by observations and workout logs.

Another area of successful PA participation among participants was stability and coordination, which was experienced by Gunnar, Xavier, and Harvey. Gunnar described his success in the program as "increased stability in doing those kinds of more coordination type to get everything to work globally." This encompassed how the knowledge learned throughout the program is applied in order to achieve participants' goals. In addition, this ties into the cognitive benefits of body awareness in getting the entire body and mind to work as a unit.

All five participants had similar successful PA participation during BE:WEL. This was supported by field note observations, volunteer notes, workout logs, and program coordinator. Spencer was the only one who perceived no physical changes. However, his workout log showed improvements of increase weight and repetitions. In addition, when asked about BE:WEL, he shared the following statement: "But I find that it helps my muscles, keeps me toned." Even though he stated he did not have any changes, his workout log and the mention of toned muscles supports that he had successful PA participation. Overall, all participants shared a similar experience of having successful PA participation in their own ways in the program.

## Theme III: Program Vibe

Program vibe captured any responses that added personal value to the program and differ from other rehabilitation or activity settings which will be described by subthemes of relationship building and uniqueness of the program in the narrative below.

Three participants shared a similar experience of relationship building through interactions during their BE:WEL sessions. Interactions included conversations with other participants, volunteers, and program coordinator that were personal, informational, and casual. When asked about social interactions, Emily stated "...I didn't realize how much of a social

piece would be threaded throughout..." The same realization was also reported by Xavier, Gordon, Spencer, Harvey, and Gunnar in regards to their interactions with their volunteers. Spencer's realization on his social interactions with volunteers was described as "sad because you do become acquainted and [they] are a part of your life at least for an hour a week or two". This is also supported by the field note observations and the program coordinator. Even though most participants experienced relationship building with their volunteers, when asked about inter-participant relationship building, two participants said they did not. Gordon describes his experience as the following statement: "Not really no. It's usually I get here and I do my workout and it's time to go home." Harvey shared a similar experience with Gordon in that neither had any interactions with other participants. On the other hand, Emily, Xavier, Spencer, and Gunnar shared the experience of talking to one other participant in the program.

Most of the participants experienced relationship building with their volunteers, which was supported through observations and confirmed by the program coordinator. In terms of relationship building between participants, four of the participants shared their experience of interacting with one other participant from the program. However, two participants did not have any relationship building with other participants.

Uniqueness of the program was another subtheme of "program vibe". One of the elements that contribute to the uniqueness of the BE:WEL program were the volunteers. All participants shared the same experience that Harvey had as he described the interactions with the volunteers as being "very supportive". Emily, Gunnar, Xavier, Spencer, and Gordon had similar experiences with their student volunteer. This was also seen throughout the field note observations by students welcoming their participant, conversations held between the pairs, and demonstrations. In addition, the program coordinator also saw an overall support.

When the researcher observed the participants and their volunteers, the volunteers were always encouraging the participants by positive feedback such as "great job", "keep it up", "one more rep", "push through", and "you're almost done, you got it". The volunteers also kept track of the number of sets and repetitions, which allowed the participants to focus on their workout. Their interactions were also positive because volunteer-participant pairs would talk about personal topics such as family, work, and school. Both sides showed empathy and support for each other, and the participants recognized how much their volunteers care about them.

However, there were also negative experiences when participants talked about their volunteers. Harvey described his negative experience in the following statement: "Don't inject too much with what I should do or better form". Harvey is generally an honest individual who will let others know what is on his mind, but in a nice way. He could have been irritable that day when it happened, but he was also understanding of what goes on in his volunteer's life. Gunnar also experienced a similar situation to Harvey in that his volunteer was not as motivational. He has a committed attitude in that he wants to improve his life and wants someone to help him reach his full potential. Like Harvey, Gunnar is also understanding of what his volunteer goes through in life. For example, educational, personal/familial, and monetary problems. This ties back to the notion of knowledge because without learning about correct form or motivation to continue a workout, the participant may not adhere to physical activity due to the lack of competence.

The third element was that BE:WEL was more valuable than other programs. Gordon captures the shared experience among all participants as he describes in the following quote: "Physical therapists at the hospital didn't have much to work with and so I just practiced sitting down and standing up. It was elementary. I wanted more challenging." All participants shared a

similar experience of wanting a more challenging program in which they could become successful in. Their shared experiences are supported through the workout logs and the field note observations.

BE:WEL was also seen as a benefit to everyday life. Spencer described an overarching response that captures all participant views in the following statement:

I just enjoy the program its uh I just feel a lot better when I do uh you know when I do and it really helps me uh do things that I normally do in my daily routine and stuff like that so it's really helpful in that respect uh like I say I miss it.

The shared experienced in improvements of daily routines with their families and house chores encompasses the participants' engagement with life. Field notes from observations and workout logs supported their experiences though their consistency in the program.

The fourth element of "program vibe" that participants shared was the low cost for an entire semester as stated by Emily. "It's only \$90 a semester!" Participants shared that physical activity programs were usually more than the \$90 fee indicating that BE:WEL was worth the cost. In addition to the low cost, location was also a uniqueness of the program and added to the positive environment. Gordon described his reasoning behind why the location of the program was unique: "I enjoy coming here. I enjoy the college environment because I taught college for a long time. Being around students keeps me very young." He and Emily were the only participants who talked about the location of the program and how the college atmosphere made them feel.

The final element that made the program unique was the entire atmosphere of the program. Gunnar describes how the program makes him feel in the following statement: "It's truly a privilege to be here." All of the participants agreed to Gunnar's statement. In addition to

feeling privileged to be in the program, Emily encapsulates the entity of the program atmosphere, which was shared by all volunteers in the statement below:

...I've had a really positive relationship with those students who have worked one on one with me and like I said it's benefitted me in more ways than just physical and you know strengthening and just my ability to just accept myself and I could do more so that's what is cool so social, emotional and physical that support you really don't anticipate getting from an exercise program so that's been really good.

All participants shared similar experiences of how the program provided the environment to be themselves and feel supported by all stakeholders. Relationship building and uniqueness were elements that contribute to "program vibe." The uniqueness was shown through having volunteers, being viewed as more valuable than other programs, with low cost, ideal location, and motivating program atmosphere. The relationship building and uniqueness were supported through the field note observations and the program coordinator. The program coordinator shared insight of participant engagement because participants would talk to the coordinator about their experiences in BE:WEL.

### Summary

Three themes were presented which explained the experiences of older adults with physical disabilities participating in a service-learning physical activity program in a university setting: positive mental health, physical competence/confidence, and program vibe. Using the older adult aging model as a framework for this design, results delve into the perceptions of participants to determine if they have had a successful aging process. Thus far, the participants have had a successful aging process even though disability was not avoided. Chapter V will discuss how the results of this study compares to previous research, limitations of the study, and future research.

### CHAPTER V

#### **DISCUSSION**

This study explored the experiences of older adults with physical disabilities in a physical activity university service-learning program using the Model of Successful Aging (Rowe & Kahn, 1997). Throughout this study, the service-learning program positively affected participants psychologically, physically, socially, and added a unique experience for those involved. Participants in this study were not able to avoid disability, however, they perceived to have a continuum successful aging process that is catered to their capabilities. Therefore, one could argue that avoiding disability will not deter an individual from a successful aging process. The majority of the participants in this study acquired their disabilities while they were younger. Thus, they were able to adapt their lifestyle to navigate through their daily activities better than the participants who acquired their disability later in life. Engagement with life for participants in this study is depicted through their social interaction and commitment to the program.

Participants were able to personally connect with their volunteers and attendance was consistent. The high cognitive/physical function piece of the Model of Successful Aging (Rowe & Kahn, 1997) was shown through the physical competence/confidence theme as increased strength and body awareness of individuals. Even though two elements of the model were present, participants can be seen as having a successful aging process. Results are promising because participants had different disabilities, yet shared similar experiences within the program that have allowed them to be successful in their aging process. All participants had a positive experience in the BE:WEL program. Even though the participants in this study were older adults with physical disabilities, one can see the commitment they had to maintain a healthy lifestyle.

For this study, the main research question was how does a physical activity service-learning program at a university influence older adults with a physical disability. The main research question was explored and answered by three themes. The three were the following: positive mental health, physical competence/confidence, and program vibe. The results of this study also answered the sub-questions of what benefits are perceived from the program, what are the participant's motives and experiences for engaging in the program, and how do older adults with physical disabilities feel participating in a PA program affects their daily life. As the data indicated, the participants shared experiences in empowerment and sense of purpose (positive mental health), cognitive benefits and successful PA participation (physical competence/confidence), and relationship building and uniqueness (program vibe) of the BE:WEL program.

Previous research indicates that as individuals age, their psychological capabilities diminish, leading to a decreased confidence, a fear of falling, and feeling unworthy (Banhato et al., 2015; Choy et al. 2003; Groessl et al., 2016; Manasatchakun et al., 2016; Minkler & Fadem, 2002). In this study, participants expressed that BE:WEL not only helped with having a sense of purpose, but resulted in increased confidence of their physical and mental capabilities. All participants in the study shared a consensus of the psychological benefits from BE:WEL.

Research on the mental health of older adults with and without disabilities show that depression is a part of aging. In addition, identity also becomes an obstacle through the aging process because individuals have to rediscover their body capabilities (Newberry et al., 2015). The benefits of this study can serve as an outline to a community level PA program. It is imperative to be aware of how a PA service-learning program can be transferrable to a community PA program to cater areas that are more populated with older adults whom have a disability.

Research shows that individuals who are more physically competent are willing to adhere to PA programs and activities (Raymond et al., 2013). Physical health benefits of BE:WEL included keeping muscles toned, an increase in cardiovascular endurance, upper body strength, stability, balance, and activities of daily living. These results add more to the existing research that physical activity holds benefits for maintaining bodily functions (Boone & Brausch, 2016; Brenes et al., 2007; Hayes & Ross, 1986; Jones, Harris, Waller, & Coggins, 2005; Scully, Kremer, Meade, Graham, & Dudgeon, 1998). Participating in BE:WEL helped individuals in their daily lives with being mobile and engaging in outside activities. Results imply that quality of life has improved as found in previous research (Camboim et al., 2017; Langois et al., 2012; Tasiemski, Kennedy, Gardner, & Taylor, 2005). Because fear of falling was a concern for one participant, the goal established during the program was to work on core stability, balance, and basic ambulation. Previous qualitative health research in older adults attributes programs adherence to participants feeling a sense of control and body awareness when improvements are seen (Clancy et al., 2015; Franco et al., 2017; Nielsen et al., 2014). Similarly, their sense of worthiness increases as expressed by Gunnar in this study.

Previous research has also shown that one of the main reasons for participation in community and service-learning activity programs is the social piece among participants (Allender, Cowburn, & Foster, 2006; LaMaster, 2001; Capalb, O'Halloran, & Liamputtong, 2012; Parker-Gwin, 1996). However, in this study, little social interactions took place among participants. The main social interactions were with participant-volunteer, so there was a social piece present, just not among participants. During the interviews, participants shared a desire to interact with other participants, but that the routines made it harder to interact because everyone was focused on different goals. For example, Gordon expressed how they tried to interact with

others, however, the response was not mutual, and it made them feel "out of water" because their disability is not as severe as others. In this study, the majority of the social interactions took place between volunteer and participant. The participants had positive experiences with their volunteers because the volunteer was helpful, caring, educational, supportive, and motivational. Two of the participants, however had a negative experience with their volunteer as not being constructive on form or not as motivational. Because two participants (Spencer and Xavier) have been in BE:WEL over five years, it could be hypothesized that due to their commitment over the years, they have met and maintained consistent relationships over the years compared to participants relatively new to the program. This information could offer ideas to help the program be more effective by offering additional socializing opportunities among participants.

The perceived program benefits of BE:WEL made the experience unique to participants because the environment was supportive, inclusive, low-cost, a college atmosphere, and more engaging than other programs they had experienced. The concept of a PA service-learning program can also be used for community activity programs by providing a supportive inclusive environment and activities that are engaging. Congruent with existing research, barriers to the program were transportation, language, and negative volunteer experiences (Capalb, Halloran, & Liamputtong, 2012; Wu, Li, & Sung, 2016). The perceptions also relate to previous research in that physical activity programs with an inclusive environment, integration of identity, and individual determination contribute to a successful experience for participants (Raymond et al., 2014). This study indicated that participation is all-encompassing. For example, when asked about motivation to attend BE:WEL, participants expressed that they wished to get better, improve their overall health, and added depth to their weekly routine. Participants added that BE:WEL gave them something to look forward to, adding to existing research because it is

another reason participants are keen to engage in these activity programs. Experiences shared in this study can add to existing research about PA participation in older adults with a physical disability and can help future programming in PA programs for this population. Additionally, this study adds to the lack of research examining the experiences of individuals with disabilities, specifically regarding PA participation by adding areas that have not been discussed such as environment, cost, location, and participant motivator factors.

### Limitations and Future Research

There were limitations to this study. First, one could argue bias from the researcher because of their experience on campus. To avoid bias, the researcher had outside audits, question guides, conducted the research with an open mind, and let the participants confirm study results through member checks and triangulation. The BE:WEL program coordinator's responses could also be argued to have bias because they have been closely involved for the past five years. To avoid bias, the researcher interviewed the program coordinator with a question guide. Second, only one program was investigated at one university. The experiences of the individual participants in this program could be unique to this setting because there are not a lot of PA service-learning programs in the area that are held on campus. Third, the number of participants was small, so the study may not reflect the entire participant population. Next, the transferability of the older adult population with physical disabilities may not work in all community areas and may not transfer to larger populations or individuals with disabilities in other settings. Next, one semester may be too short to be absolute in the participant's perspectives because there could be more relevant data to collect after a year. To account for this limitation, the researcher collected a wide variety of data.

Other limitations of the study were the health status of participants, injuries that occurred during daily life, and sicknesses such as flu or cold. It is hard to avoid sickness and injury unrelated to participants' disability. Two participants were ill and injured outside of the study. This led to different observation days with fewer activities than normal, rather than their normal routine. The interviews also took place during the BE:WEL session times. Therefore, the distraction of doing an interview rather than participating was another limitation.

Service-learning programs have the potential to be transferrable to communities and are a resource to see how it affects participants (Bishop & Driver, 2007; LaMaster, 2001). Based on the results of this study, a community concept could be plausible. However, future research may utilize mixed methodology. This could include taking the quantitative data of the workouts to see numerically how the participants have changed over their time at BE:WEL. Another idea would be to have a similar study, but for an entire school year rather than a semester. Because participant perspective research is new, it would also be interesting to see how participants would be in a group interview sharing their experiences. Moreover, future research could include a more personal approach with participants by interviewing the volunteers, family, and friends of the participants.

### Recommendations

From this study and previous research, we know that older adults with physical disabilities want to take part in physical activity programs that provide them an opportunity for relationship building, attainment of goals, positive environment, and learn new ways to keep active. Some recommendations for practitioners and scholars are to see if a PA service-learning program can be transferrable to a community PA program would be the following: gather

community population data on older adults with disabilities, interview a small group of individuals from the community population to identify their perspectives on attending a community PA program, seek out potential spaces (parks, any school campus, and/or sports club), seek out volunteers to work with participants, seek out donations for basic equipment to do a trial run. Establishing a successful PA program will be time consuming. Therefore, it is recommended to be patient, plan accordingly, and spread awareness on the benefits of physical activity to all populations because the knowledge gained could be potential information that can be used later in life. If there are PA programs are already in place, it is recommended to talk to their participants to hear about their experience. Listening to participants can lead to potential improvements for the program to make the experience more wholesome.

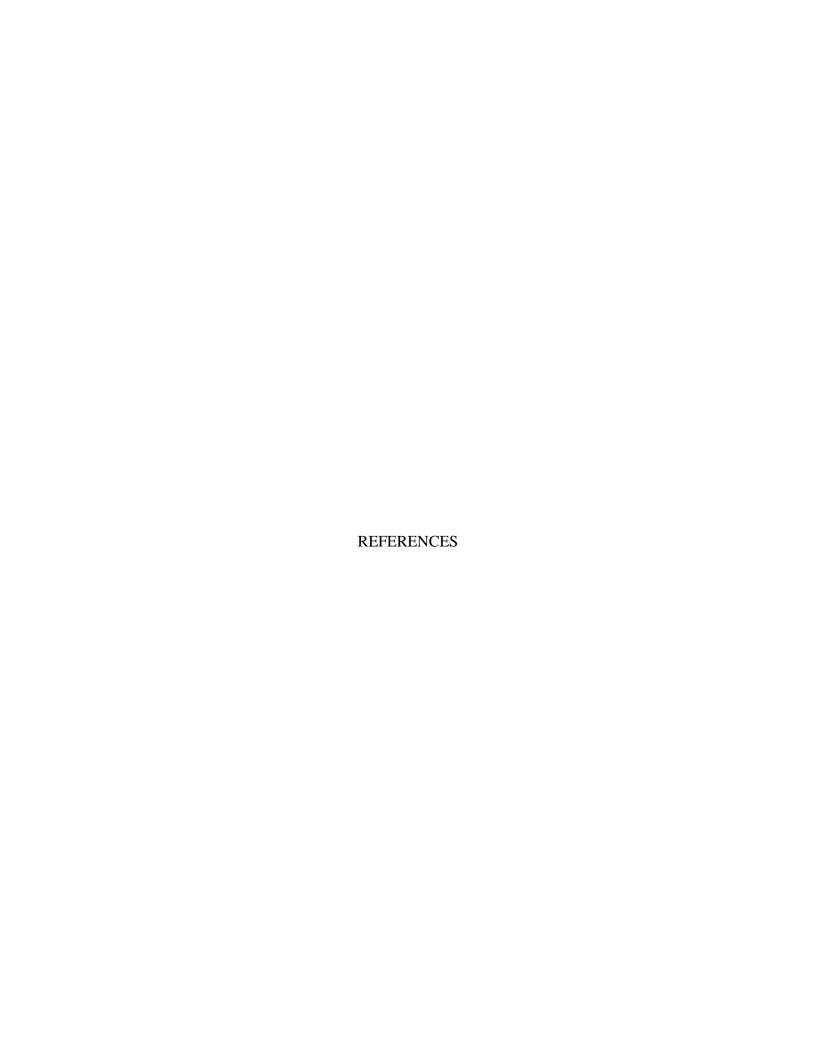
#### Conclusion

This qualitative phenomenological study investigated a university service-learning program at a university in California. This study may be among the first to investigate participant perspectives in not only a university service-learning program, but also for older adults with physical disabilities. The BE:WEL program focuses on accessibility for health promotion and provides individualized support for adults with disabilities within the community. In addition, the program provides access to personal wellness education, hands-on learning, and support.

This study explored the experiences of older adults with physical disabilities in a physical activity university service-learning program using the Successful Model of Aging (Rowe & Kahn, 1997), and indicated that even though participants' disabilities were acquired in life, they still managed to have a successful aging process.

Throughout this study, the research question of how does a physical activity service-learning program at a university affect older adults with a physical disability was answered by analyzing the data, including thematic analysis by horizontalization, reduction and elimination.

Data analysis resulted in the identification of three themes: positive mental health, physical competence/confidence, and program vibe. Participants mostly had a positive experience in the program other than a few negative experiences with volunteers. The service-learning program provided a social, comfortable, and learning environment for physical activity among participants. In accordance with Rowe and Kahn's model of successful aging (1997), components such as engagement with life and high cognitive and physical function were common attributes of successful aging. In this study the participants did not avoid a disability yet have been living a successful life. To conclude, physical activity service-learning programs can be beneficial to older adults with disabilities in a community program setting also.



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### INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

**Project Title:** The Experience of Older Adults with Physical Disabilities in a University

Service-Learning Program

**Investigators:** Gardenia Juarez<sup>1</sup>, Kinesiology, CSU, Chico

Josephine Blagrave<sup>2</sup>, PhD., Kinesiology, CSU, Chico

**Email:** gjuarez9@mail.csuchico.edu<sup>1</sup>

ablagrave@csuchico.edu<sup>2</sup>

You are being invited to participate as a subject in the research project of Gardenia Juarez in the Kinesiology Department at CSU, Chico. The purpose of this research is to explore the perspectives of the BE:WEL participants by interviewing the older adults with physical disabilities participants on their experience of the program. The information gathered from this investigation will allow researchers to gain insight into how much service-learning programs help members of the community to remain active and/or promote unity between CSU Chico and the community.

If you indicate a willingness to participate in the study, you will be asked to take part in audio recorded face-to-face semi-structured interviews lasting about 30 min to an hour at the end of the Spring 2018 semester in relation to the BE:WEL program at CSU Chico. In addition, you will be observed during your sessions by the primary investigator and specific artifacts will be gathered from your workout folder.

There may be some discomforts during the interview process that may occur, but we would like to know the honest opinions about your experience with the BE:WEL program. It is unlikely that you will get injured during your participation in this study; however, in case of an unanticipated injury, emergency personnel will be contacted. Neither the researchers, nor CSU, Chico is responsible for any injury that may occur during the course of your participation in this study.

Reports resulting from this study will not identify you as a participant. All information gathered in this study will remain confidential and be given out only with your permission or as required by law. If you give us permission by signing this consent form, we will protect your confidentiality. To maintain confidentiality codes will be linked to subject names consent forms, audio- or videotapes, and data will be kept on a private computer accessible by the researcher only. The data, important information, will be kept on the primary researcher's private computer. Confidentiality will be the upmost importance to the researchers. However, as required under California law, we are obligated to report any abuse that is present or rationally suspicious during the study.

Please feel free to contact anyone of the investigators if you have any questions or concerns about this research project or your participation. Your participation is voluntary. You may choose to stop your participation in the study at any time during the testing session. Your decision will be respected and will not result in any penalty. 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 psychological stress occurs for older adults with physical disabilities participants, you may contact Butte County Behavioral Health at 530-891-2810. If you have any questions about your rights as a participant, you may contact the Human Subjects in Research Committee at 530-898-5413 or rwhite@csuchico.edu.

Participant Name (Please Print)	-	
Participant Signature	-	Date
	_	



### INFORMED CONSENT FOR PARTICIPATION IN RESEARCH

**Project Title:** The Experience of Older Adults with Physical Disabilities in a Physical Activity

University Service-Learning Program

Investigators: Gardenia Juarez<sup>1</sup>, Kinesiology, CSU, Chico

Josephine Blagrave<sup>2</sup>, PhD., Kinesiology, CSU, Chico

**Phone Number:** 1209-284-8604

<sup>2</sup>530-518-2495

Email: gjuarez9@mail.csuchico.edu¹ ablagrave@csuchico.edu²

You are being invited to participate as a subject in the research project of Gardenia Juarez in the Kinesiology Department at CSU, Chico. The purpose of this research is to explore the perspectives of the BE:WEL participants by interviewing the program coordinator. The information gathered from this investigation will allow researchers to gain insight into how much service-learning programs help members of the community to remain active and/or promote unity between CSU Chico and the community.

If you indicate a willingness to participate in the study, you will be asked to take part in audio recorded face-to-face semi-structured interviews lasting about 30 min to an hour at the end of the Spring 2018 semester in relation to the BE:WEL program at CSU Chico.

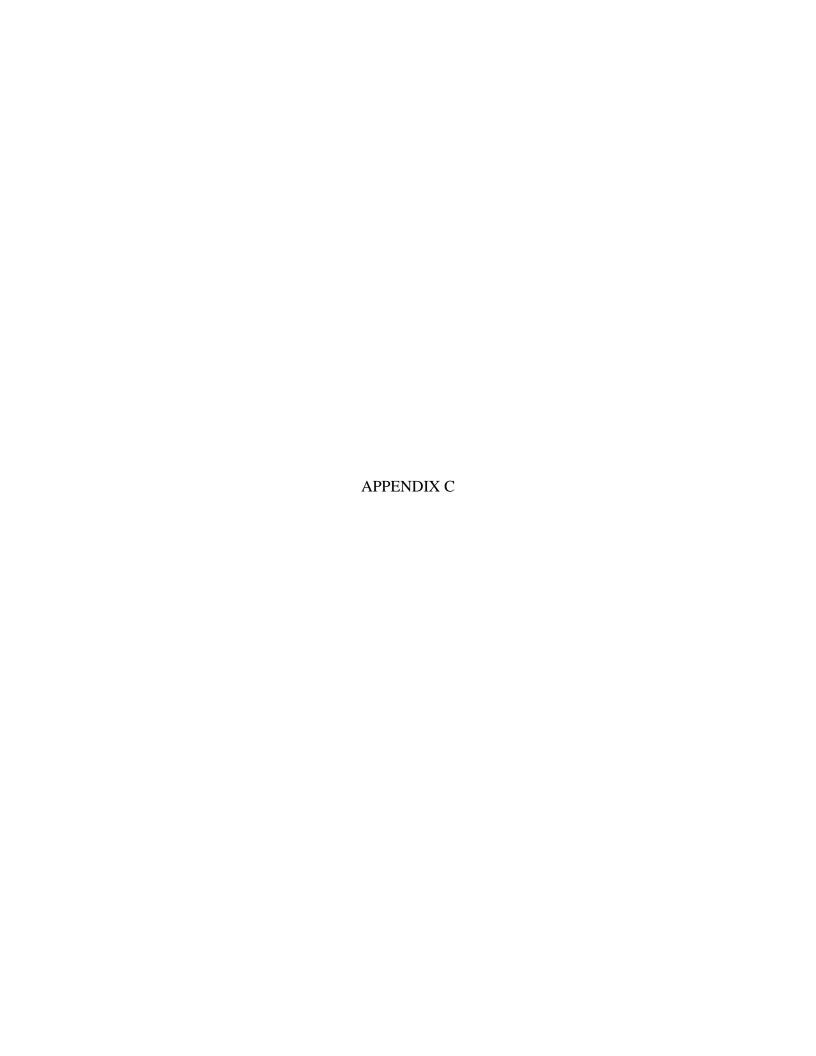
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Participant Name (Please Print)	
Participant Signature	Date
D 1 0'	
Researcher Signature	Date



# INTERVIEW GUIDE FOR OLDER ADULTS WITH PHYSICAL DISABILITIES PARTICIPANT

The questions below are prompt questions for the participants:

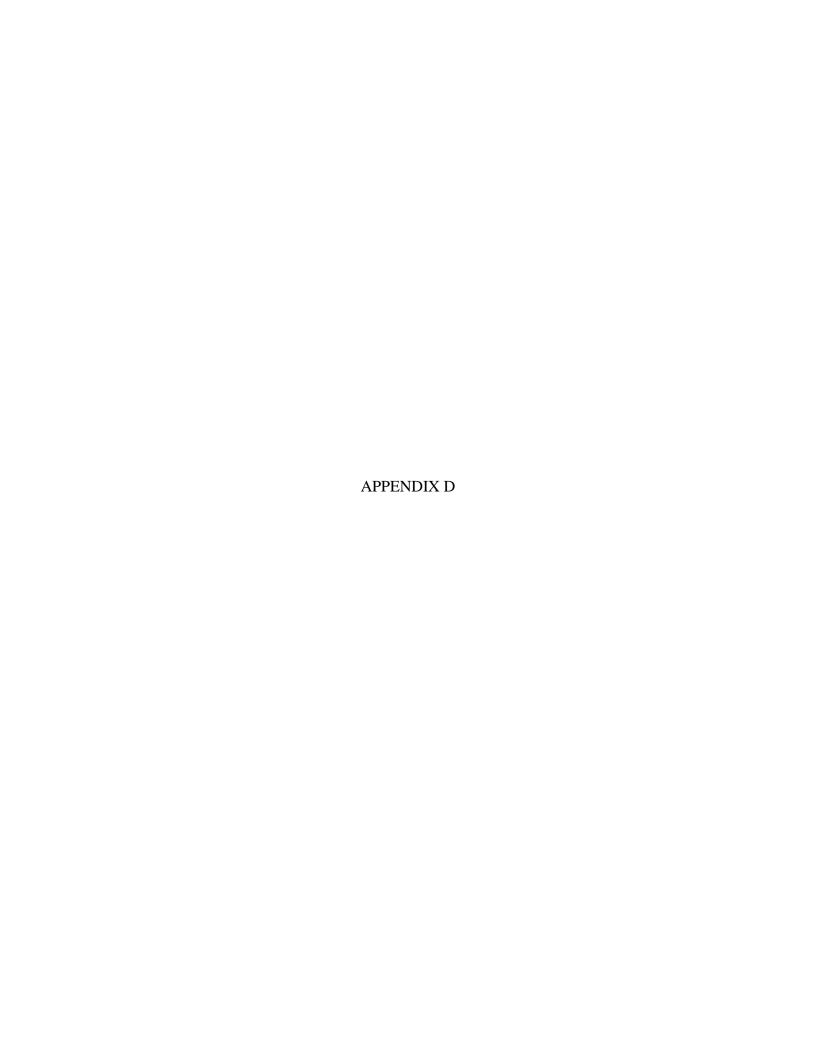
1.	"Can you tell me about yourself?"
2.	"How old are you?"
3.	"Can you tell me about your disability?
	a) When did you acquire?
4.	"How did you hear of BE:WEL?"
	a) Why did you join?
	b) What did you hope to gain?
5.	"How long have you attended BE:WEL?"
	a) If first year, what motivated you to start to BE:WEL?
	b) If 2-3 years, what motivated you to return?
	c) If $>5$ years, what drives you to be committed to this program?
6.	"What does your typical day at BE:WEL look like?"
<i>7</i> .	"Did you set any goals for yourself in BE:WEL?"
	a) If yes, did you meet them?
	b) If not, why?

8.	"How does coming to BE:WEL make you feel?"
9.	"Is your experience at BE:WEL different than other rehab/exercise experiences?" Please
	explain.
10.	"Tell me about your experience with your student volunteer."
	a) How did he/she make you feel?
	b) Did you feel your volunteer consistent in attendance?
	c) Did you feel your volunteer prepared for the sessions?
	d) Did you feel that your volunteer was motivating? Explain.
11.	"Did you notice any changes in yourself physically or mentally this semester?"
	a) Did you observe any physical or mental changes in your volunteer this semester?
12.	"Which aspects of BE:WEL help you when not in sessions?"
13.	"Any mental skills learned from BE:WEL that help in your daily life?"
14.	"Any physical skills learned from BE:WEL that help you in your daily life?"
15.	"Any specific activities that help with daily activities learned from BE:WEL?"
16.	"Does any socializing take place between you and other participants?"
	a) If yes, can you tell me about your experience?

b) If no, why?

<i>17</i> .	"Has your socializing skills in your daily life changed since participating in BE:WEL?"
18.	"If you had to describe your overall BE:WEL experience, what would you say?" (can be
	positive or negative)
	a) i.e.: better mood? More energy? Increase in self-efficacy? Identity awareness?
19.	"Would you recommend this program to others?"
	a) If yes, why?
	b) If no, why not?
20.	"Anything else you would like to share?"
21.	"Would you continue to attend BE:WEL?"
	a) If yes, why?

b) If no, why not?



# INTERVIEW GUIDE FOR OLDER ADULTS WITH PHYSICAL DISABILITIES PARTICIPANT (SPANISH VERSION)

Los abajo preguntas son para guía los participantes:

1.	"¿Puedes hablarme de ti?"
2.	"¿Cuántos años tienes?"
3.	"¿Puedes hablarme de tu discapacidad?"
	a) ¿Cuando paso?
4.	"¿Cómo se enteró del BE:WEL?"
	a) "¿Porqué te uniste?"
	b) "¿Qué esperabas ganar?"
5.	"¿Cuánto tiempo has venido a BE:WEL?"
	a) Si es tu primer año, ¿que era tu motivación para empensar?
	b) Si es tu Segundo o tercer año, ¿qual es tu motivación para regresar?
	c) Si es mas de cinco años, ¿que te impulsa a comprometerte con este programa?
6.	"¿Cómo se ve tu dia normal de BE:WEL?"
7.	"¿Estableciste metas para tie n BE:WEL?"
	a) Si es así, ¿cumpliste tus metas?
	b) Si no, ¿porque?

- 8. "¿Cómo te hace sentir cuando vienes a BE:WEL?" 9. "¿Es tu experencia en BE:WEL diferente a otras experiencias de rehabilitación/ejercicio?" Por favor explique. 10. "Cuéntame sobre tu experiencia con tu estudiante voluntario" a) ¿Cómo te hizo sentir? b) ¿Sintió qu su voluntario era consecuente en la asistencia/venir? c) ¿Sintió qu su voluntario era preparado/a para las sessiones? d) ¿Sintió qu su voluntario estaba motivando? Explique. 11. "¿Notó algún cambio en usted física o mentalmente este semestre?" a) "¿Notó algún cambio física o mentalmente en tu voluntario este semestre?" 12. "¿Qué aspectos de BE: WEL te ayudan cuando no estás en las sessiones?" 13. "¿Alguna talento mental que aprendiste de BE:WEL que ayuda en tu vida diaria?" 14. "¿Alguna talento física que aprendiste de BE:WEL que ayuda en tu vida diaria?" 15. "¿Cualquier actividad especifica que aprendiste de BE:WEL que ayuda en tu vida diaria?" 16. "¿Alguna socialización entre usted y otros participantes?"
  - b) Si no, ¿porque?

a) Si es así, ¿puedes contarme sobre tu experiencia?

17. "¿Ha cambiado tu socialización en tu vida diaria desde que participó en BE:WEL?"

18. "Si tuvieras que describir tu experiencia general de BE:WEL, ¿qué dirías?"

a) Por ejemplo: mejor attitude, mas energía, mas capacidades personalmente

19. "¿Recomendarías este programa a otros?"

a) Si es así, ¿porque?

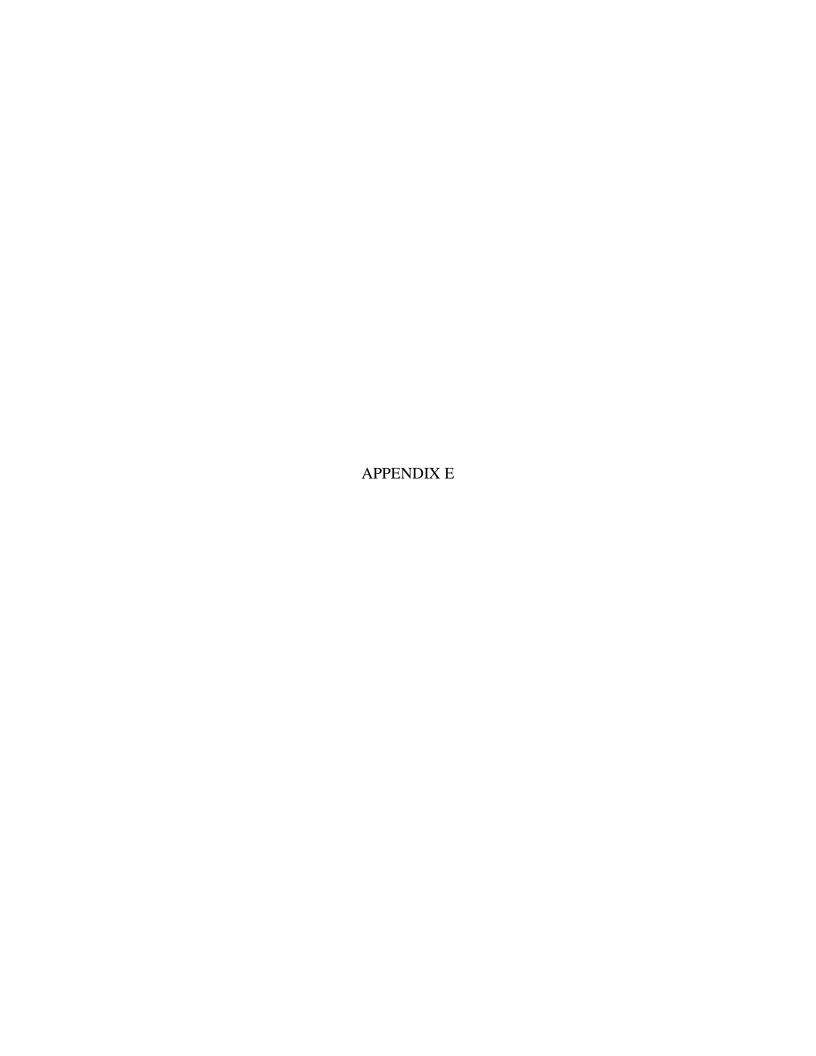
b) Si no es así, ¿porque?

20. "¿Algo más que quieras compartir?"

21. "¿Seguirías viniendo a BE:WEL?"

a) Si es así, ¿porque?

b) Si no es así, ¿porque?



## QUESTION GUIDE FOR BE:WEL PROGRAM COORDINATOR

	The questions	below are	prompt	auestions	for the	program	coordinator:
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1.	"Can you tell me about yourself?"
2.	"How long have you been the BE:WEL program coordinator?"
3.	"Can you tell me about the purpose of BE:WEL?"
	a) Who can participant?
4.	"What does a typical day of BE:WEL look like?"
5.	"Have you seen any psychological changes in the participants?"
	a) If yes, can you tell me about it?
	b) If no, why do you think that is the case?
6.	"Have you seen any physical changes in the participants?"
	a) If yes, can you tell me about it?
	b) If no, why do you think that is the case?
7.	"Have you seen any social interactions between the participants?"
	a) If yes, can you tell me about it?

b) If no, why do you think that is the case?

8.	"What do you see in new participants versus long-term participants?
	a) How are their motivational levels?
	b) Same workout routine or tries new things?
	c) Any emotional changes?
9.	"Have you received any feedback on the program from participants?"
10.	"Anything else you would like to share?"
11.	"Would you recommend this program to others?"
	a) If yes, why?
	b) If no, why?