Older Adults and Successful Aging: The Effects of Lifelong Learning

by

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Submitted in Partial Fulfillment of the Requirements

for the Degree of

Master of Arts

in the

Gerontology

Program

YOUNGSTOWN STATE UNIVERSITY

May, 2018

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Abstract

Learning is a lifelong process and is viewed as having positive influences on multiple

facets of a person. It is important to understand how a person perceives the benefits of

learning on aspects of successful aging. Another important aspect of learning is the future

of learning: technology, specifically mobile learning. Purpose: To further explore the

relationship between successful aging and older adults that participate in lifelong

learning, and to explore perceptions of older adults toward mobile learning. Hypotheses:

Participants will have positive attitudes about participation in a lifelong learning program

and its influence on successful aging. Also, participants may be open to the idea of

lifelong learning, but they will still prefer the "old fashion way" of learning through a live

classroom. Participants: The participants typically over the age of 50, were attendees of

the Mahoning Valley Lifelong Learning Institute (MVLLI). Procedures: The researcher

conducted focus groups with participants who attended lectures and events offered

through the MVLLI. The groups were asked questions based on learning and successful

aging, learning preferences, and mobile learning. The analyses consisted of drawing out

themes that emerged from the focus groups regarding lifelong learning, the MVLLI,

successful aging, and mobile learning.

Table of Contents

Older Adults and Successful Aging: The Effects of Lifelong Learning

Introduction

Many theories exist to explain why adults continue learning throughout their lives. According to the US Department of Education's TEAL (Teaching Excellence in Adult Literacy) Center's *Just Write! Guide* (2012), three main theories include andragogy, self-directed learning, and transformation learning. Malcolm Knowles popularized the idea of *andragogy*, which is the art and science of helping adults learn. In his book, he hypothesized some assumptions about adult learners. Adult learners can direct their own learning. They draw on their experiences to help them learn. Adults are ready to learn, especially when assuming a new role. They are problem-centered and will apply new information. Adult learners are motivated by internal factors, like wanting to improve their knowledge and skills. The next theory, *self-directed learning*, places the learning on the individual. The individual takes initiative in their learning experiences without outside forces acting on them. Not everyone can learn through self-directed learning. It is harder for those who lack things like resources, confidence, motivation, and independence. The last theory, the *transformational learning* theory, explains how learning changes as people perceive themselves and the world. This learning involves a shift in consciousness. For example, individuals learning about a culture may notice a shift in how they view or perceive that culture.

Although it is important to understand theories about why adults continue to learn, another important aspect of successful aging emphasizes the benefits of lifelong learning. Nordstrom and his son (2006, as cited in Laal, 2012), described 10 top benefits

as the following: a self-fulfilling life, valuable relationships, active in society, meaningful life, adaptable to change, contributions to society, increased wisdom, instilled curiosity, opened mind, and developed natural abilities. Jenkins and Mostafa (2015) observed the effects of lifelong learning on well-being, which mainly focused on quality of life. Their research showed a significant relationship between certain types of learning, specifically informal learning, and well-being. Hammond (2004) conducted interviews with 145 older adults and identified emerging themes throughout the interviews. She reported that "respondents' accounts provide consistent evidence that learning can lead to improved well-being, increased efficacy, protection and recovery from mental health difficulties, and more effective coping, including coping with physical ill-health."

Sloane-Seale and Kops (2008) examined "how participation by older adult learners in educational activities related to successful aging." The participants were members of seniors' organizations, and the researchers used focus-group interviews to study the relationship between lifelong learning and successful aging. They asked questions about motivation, barriers, preferences, and characteristics of successful aging. After the interview, they observed themes that emerged throughout the data. Three main themes emerged for why the participants continued learning: for the sake of it learning, socializing, and achieving a goal. As for barriers, there were situational factors, such as time or money; dispositional, such as attitudes or abilities; institutional, such as requirements; and systematic, such as gender, age, or location. Next, there were also three major themes reported for learning preference: experiential, such as hands-on learning; content/instructor learning, such as learning from an expert; and self-directed learning, where the individual oversees their own learning. Lastly, participants reported their

learning resources. The main resources included non-formal, informal, and formal resources of learning. Non-formal resources included organizations that facilitate learning. Informal resources included aids such as the Internet or libraries. Formal resources included educational institutions such as universities. The next section of questions focused on the aspects of successful aging as defined by: The major themes participants generally reported when asked about activities and goals that greatly impacted their aging: active lifestyle, social connectivity, self-connectivity, personal resources, adaptability and flexibility, spiritual connectivity, and future connectivity. Lastly, the participants were asked to connect lifelong learning to successful aging. "Participants specifically linked participation in educational activities and well-being, suggesting that educational activity stimulated mental activity, provided opportunities for physical activity, offered a sense of satisfaction and achievement, opened up new opportunities for learning and friendships, and provided information on healthy living" (p.53).

Successful Aging

Rowe and Kahn (1997) defined successful aging as low probability of disease, high functional level, and active engagement with life. Low probability of disease refers to the absence of disease and risk factors for disease. High functional level includes physical and cognitive components. Active engagement with life involves interpersonal relations and productive activity. Relations include contact with others, emotional support, and assistance. Productive activity implies there is social value involved, like volunteering. Rowe and Kahn created a model showing how all three parts are interconnected with each other to influence successful aging. Tovel and Carmel (2014)

noted that successful aging is used "when referring to topics like good physical and mental functioning and well-being, the capacity for cognitive growth, life satisfaction, adaptation to change and the achievement of personal goals, control, productive activity, the completion of developmental tasks, self-fulfillment and spirituality," so there are many other aspects involved when discussing successful aging.

Rowe and Kahn's model for successful aging has different aspects that other researchers have defined as well. Crowther and colleagues (2002) observed positive spirituality as another facet of successful aging. For their study, they coined the term positive spirituality to differentiate between religion and spirituality with their term. Positive spirituality "involves a developing and internalized personal relation with the sacred or transcendent that is not bound by race, ethnicity, economics, or class and promotes the wellness and welfare of self and others" while incorporating aspects of religion and spirituality. The authors also state that positive spirituality "may reduce the sense of loss of control and helplessness that accompanies illness. It is important to include this concept in the model because spiritual beliefs are widespread and are shown to affect other facets of life, including psychological, physical health, and coping skills.

Coping skills are imperative to an aging individual, especially the ability to cope with changing health and function losses. Negative events such as loss and declining health are more frequent in older age. There are many resources that help older adults cope in stressful situations, including self-efficacy, social support, economic status, and education (Tovel and Carmel, 2014). It is important to look at successful aging through the life course perspective. Both aging and learning are lifelong processes. It is also important to understand successful aging, in all aspects, so knowing the original and

sequential works is vital in showing the importance of studying how something, in this particular sense, lifelong learning, influences or affects it.

A more recent article regarding successful aging discuss factors that influence the different aspects of the mode of successful aging. Loeckenhoff, as cited in Mikulak (2017), stated that it encourages renewed focus on the processes that contribute to positive age-related outcomes. Mikulak first discusses that exercise is beneficial for physical and mental health. A specific type of exercise they mention is resistance training because it might be easier than aerobic exercise for older adults. Next, Mikulak discusses high-effort activities that have effects on cognitive performance and function. One study found that older adults who participated in sustained, high-effort activities had improvement in cognitive and psychosocial measures than those who had low-effort activities. Lastly, Mikulak discusses social integration, such as relationships with friends and family or volunteer work. Meaningful roles like these provide social identity, status, and a sense of purpose or meaning.

Quality of life and successful aging are closely related. Quality of life is a significant factor to study in later life because we want to assure that older adults have a good quality of life nearing the end of life. A study by Baernholdt and colleagues (2012) used the definition set forth by the World Health Organization (WHO) as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns." They also noted that WHO mentions several domains under quality of life, including physical and mental health, social functioning, and emotional well-being.

Mobile Learning

Mobile devices are on the rise for all ages, especially adults. Correspondingly, learning apps are becoming popular. This type of learning has educational benefits, including portability, interactivity, context sensitivity, connectivity, and individuality (Churchill, D. & Churchill N., 2008). Mobile learning is the newest media of learning, so research on it is new. There is information on adults' attitudes toward usage of the internet/online courses. Nelly Conte (2012) found that pharmacists who have never participated in online education before stated that online courses could never replace live courses, but that online courses are a good alternative. Some participants even stated willingness to enroll or try again. Jongpil Cheon and colleagues (2012) found that college students were more likely to use mobile devices for learning if it was viewed as easy to use. They also found that behaviors and self-efficacy influenced the use of mobile learning. The researchers concluded that college students had highly favorable attitudes towards mobile learning.

There is research on similar topics, like computer-based instruction. Van Gerven, Paas, and Tabbers (2006) reviewed literature on cognitive aging and computer-based training materials that are aimed at older adults. Older adults are slower and make more mistakes than younger adults, so when instructing older adults using computers, the language should be simple and slow so that the load on working memory is as low as possible. They also mention how they do not focus on the reluctance or fear of trying to use computers, but this is a good point to discuss. A study by Czaja and Sharit (1998) studied attitudes of older adults towards computers and what influences them. They found that attitudes are modifiable, and direct experiences with computers lead to more

positive attitudes towards them. However, older adults did report less comfort, competence, and control with computers than younger adults. Newer studies also show that older adults tend to report more anxiety and fear when using computers and doubt their abilities to learn and use them (Marquie, Jordan-Boddaert, & Huet, 2002, as cited in Barnard, Bradley, Hodgson, & Lloyd, 2013). Barnard and colleagues (2013) reported on the learning aspect of using a computer, and it seems that older adults derive their attitudes based on prior experiences and self-perceptions about social expectations (too old to learn computers, learning is a pain, etc.). Older adults seemed more positive toward learning depending on acquiring the technology and availability of support. They may try experimenting with it if they bought the technology or borrowed it from a relative, or if they perceive support to be readily available. Some other characteristics that influence older adults' experienced difficulty with technology include the characteristics of the system, like interface, ease-of-learning, affordability, feedback, and error recovery (Barnard et al, 2013).

The importance of understanding adults' views on mobile learning is moving to the forefront of research. Mobile learning is starting to integrate into classrooms, with apps such as Kahoot that allows teachers to create quizzes and games that enhance the classroom experience (Edshelf, 2017). Children and younger adults are growing up with technology such as this, but adults and older adults should not be left behind in technology learning.

Purpose

There are two purposes of this study. The first purpose of this study is to explore the relationship between participation in lifelong learning and successful aging among

older adults similar to the work of Sloane-Seale and Kops. The second purpose of this study is to explore perceptions of older adults toward mobile learning.

Thesis Statement

Participants will report positive statements regarding participation in a lifelong learning program and successful aging. Also, participants may be open to the idea of lifelong learning, but they will still prefer the traditional way of learning through a live classroom.

Methods

Sample: Study participants were recruited from the Mahoning Valley Lifelong Learning Institute. The Mahoning Valley Lifelong Institute (2017) is designed to give older adults a chance to "explore new ideas, adventures and visions they may not have had the time to consider during their younger and busier years." They offer academic programs that occur in semesters without homework or exams. Over 20 professionally taught courses are offered each semester, and the Institute invites guest speakers. It is located on the Ohio Living Park Vista campus. The participants for this study were older adults, typically over the age of 50, living either on the Park Vista campus or in the surrounding Youngstown area who attended a MVLLI lecture in Spring 2018. After data collection, we had 16 participants throughout 9 sessions, aged 65-92, with a mean age of 76.

Procedures: The researcher conducted focus groups among participants who volunteered to participate. The Mahoning Valley Lifelong Learning Institute was a practical and feasible participant source to use for this study due to proximity to Youngstown State University. These focus groups were obtained with the help of the Mahoning Valley Lifelong Learning Institute Director Marise Sahyoun (see Appendix I: Letter of Support).

Participants were recruited through flyers passed out during seminars, asking to stay after the seminar to participate or learn more. The groups were asked questions based on learning and successful aging, learning preferences, and mobile learning. A self-administered survey was used to collect basic demographic information, including age, gender, educational attainment, and marital status. The focus groups were recorded for audio content so that the researcher could transcribe the conversations to discover overall themes throughout each focus group.

All recruitment and data collection procedures were approved by the Youngstown State University Institutional Review Board (see Appendix II: Approval Letter #090-18 from IRB).

Measures: Before the recording, participants completed informed consents (see Appendix III: Informed Consent) and then completed a self-administered demographic survey that asked the following: age, marital status, education background, and level/amount of attendance (see Appendix IV: Demographic Survey). See Appendix V: Script for the script used throughout the sessions. For the first section, we asked questions pertaining to lifelong learning and successful aging domains: How has participating at the MVLLI affected your physical health? How has participating at the MVLLI affected your mental health? How has participating at the MVLLI affected your engagement with life? How has participating at the MVLLI affected your overall quality of life? Or, how does education affect your quality of life? For the second section, we asked questions about motivation, barriers, and learning preferences: Why do you continue your education? What motivates you to continue learning? What are some barriers that stop you from going, or going more often? Do you have any learning preferences? If so, what are they?

For the third section, participants first answered the following questions: What is your previous experience with mobile devices, computers, or technology in general? What would you say is your general attitude towards mobile devices? After these were answered, we presented the Massive Open Online Course website on a mobile device to the participants. This website offers free online courses for anyone. Some courses include business, language, life sciences, engineering, coding, and data analytics. Once the participants demonstrated a grasp of what the website is about and how they can use it on a mobile device, they answered questions based on their perceptions about this form of mobile learning. Mobile learning: What is your first initial reaction to this learning platform? Do you think you would use this in the future? What are the positives to mobile learning? What are the negatives to mobile learning? What barriers do you perceive that would inhibit your use of mobile learning? The entire focus group should be no more than one hour.

Analyses: The researcher recorded the focus groups using a device for audio content. Once a focus group was completed, the researcher transcribed the recording and used these to draw out themes that emerged from each focus group. Grounded theory, defined as the researcher "generates a general explanation of a process, an action, or an interaction shaped by the views of a large number of participants" was used to explain the interactions of lifelong learning and successful aging with participants' views during the focus groups (Creswell, 2013, p. 83).

Results

Demographics: There was a total of 16 participants were assessed across 9 focus group sessions, ranging from 1-5 participants in each session. Table 1 (see Appendix VI:

Demographics) shows the demographic characteristics of the sample. Although gender was not asked, the sample was predominately female. The age of the sample ranged from 65-92, with a mean age of 76. Five (31.3%) participants stated they had a Master's or Ph.D. ,10 (62.6%) participants stated they at least attended a 2-year college or higher, and only 1 participant stated they did not complete high school. The MVLLI offered 30 courses in the fall, and 11 additional courses up until data collection ended. Five (31.3%) participants stated they attended the institute 20 times or more, 8 (50.1%) stated they attended 10 times or less, Regarding marital status, 7 (43.8%) of participants stated they were married, 4 (25.0%) stated they were single, 2 (12.5%) stated they were divorced, and 3 (18.8%) stated they were a widow(er). All of these demographic statistics are displayed in table 1 in the appendices.

Lifelong Learning and Successful Aging: The first question asked participants "How has participating at the MVLLI affected your physical health?" Most participants stated that the MVLLI makes them more active. For example, many mentioned that they must walk to the lecture from their apartment or walk from their house to their car then from their car to the lecture. A few participants mentioned that some courses are about aspects of physical health, which made them more cognitively aware of their physical health, such as this participant:

> "*Some of the things have been about science and a healthy eating and aging,*
> *so I guess it has helped me.*"

Another participant stated:

> "*Coming to the sessions getting dressed keeps you physically active as well*
> *as mentally active. and I would say that it has affected me positively.*"

When asked this question, another participant even discussed how other attendees influence them, stating:

"*You see elderly people here still physically in good shape and that's inspiring.*"

The second question was "How has participating at the MVLLI affected your mental health?" Many participants discussed a positive influence from the institute, talking about how attending the lectures kept their brains stimulated. For example, a participant noted:

"*Self-preservation. I want to keep my mind working constantly cause you know, I'm eighty now so I keep worrying am I going to get dementia*"

However, few participants mentioned the institute having an influence on other aspects of mental health, such as depression or loneliness. The third question was "How has participating at the MVLLI affected your engagement with life?" The majority of participants reflected that participating in the MVLLI influences their engagement with life, i.e. being more engaged with life. Participants tended to state that just by attending the institute that they are more engaged with life. For example, a participant stated:

"*I see a lot more people than I would otherwise. it gives me something to talk about with friends who don't come*"

while another noted:

"*And I like the camaraderie with people. I really enjoy that and meeting new people and you get ideas from them and learn from them and that's something to look forward to.*"

The last question was "How has participating at the MVLLI affected your overall quality of life? Or, how does education affect your quality of life?" Overall, participants stated the MVLLI influenced their quality of life in positive manors. When asked about overall quality of life, one participant noted:

> "*I think it's improved it an awful lot because you'd meet different people, different opinions, different activities, rather than sitting at home twiddling your thumbs, you learn all kinds of different things.*"

One problem with this question was that many participants would reference what they had stated for the previous questions of this section instead of answering the question as if it was new. This question was a multifaceted concept that the other questions tapped on.

Motivation, Barriers, and Learning Preferences: The first question was "Why do continue your education?" The participants found that the second question ("What motivates you to continue learning?") was similar to the first question so themes were combined for these. Some reasons for motivation included being interested in a topic, to keep stimulated, or just for the sake of learning. The next question was "What are some barriers that stop you from going, or going more often?" Reasons included time (being too busy, having other obligations), interest (not being interest in the lecture topic), physical limitations, (one participant stated:

> "*Yeah, I'm, well I have difficulty hearing. So, um, if I got to the point where I couldn't participate then I probably would not want to continue*")

and transportation (for those participants who were not residents of the Ohio Living Campus). When asked about barriers, another participant said that

"physical, mental, time, vision problems"

were reasons of not attending as often. Another said that

"As far as a barrier goes, distance could be a problem...it's more involved, more expensive."

Another participant discussed other reasons, such as

"the weather or illness, financial."

The last question was "Do you have any learning preferences? If so, what are they?" Majority of participants focused on certain topics they preferred, such as history. Only some participants talked about classroom setting and teacher personality. Those who discussed classroom setting mentioned a preference for a lecture setting versus a discussion setting classroom (having a profession lecture versus having attendees discuss the topic). Those who discussed teacher personality used knowledgeable and nice descriptors for a lecturer. One participant noted:

"Um, I prefer classroom type settings. I'm not real fond of um, sharing opinions and that kind of book clubs and things like that don't interest me"

Mobile Learning: This section had the most varied responses. The first question was "What is your previous experience with mobile devices, computers, or technology in general?" Some participants stated that they have only used computers a few times, some stated they have computers, some stated they have cell phones, and a few participants even stated they have smart phones or tablets. For example, one participant said

"I use the computer quite a bit,"

another:

> "*Well, I like the cell phone only because I keep in touch with my kids more*
>
> *by cell phone...and not that I'm a computer whiz or anything, but I like to*
>
> *get on the computer,*"

another about their cell phone:

> "*Oh, I can't live without one now. And, and um, it's funny. People my age,*
>
> *um, my friend's like, oh, they sometimes they get annoyed that I actually*
>
> *carry that phone with me and I, I try not to use it*"

and another participant stated:

> "*I am completely ignorant, and I don't have a computer. I do have a small*
>
> *cell phone that only used for emergency when I'm driving.*"

The second question, "What would you say is your general attitude towards mobile devices?" was varied as well; however, most participants stated that they do not like mobile devices because it takes away from quality time with others. Some participants did note that they are useful for emergencies or easy contact with younger relatives. One participant reflected:

> "*I don't like them. I use them, but I don't like them because people overuse*
>
> *them. You know, you're sitting in a restaurant and everybody's on their cell*
>
> *phone, you go to a family thing, everybody's on their cell phone and nobody*
>
> *talks one on one...It's like a distraction.*"

After participants viewed the MOOC.org website, they answered the next question: "What is your first initial reaction to this learning platform?" Do you think you would use this in the future?" The majority of participants stated "no," such as this participant:

> *"No, no, not at all. It's going to take up more time or my time. I like to read.*
>
> *I like to crochet. I liked to go out and stuff. It's another thing to have to*
>
> *remember to do*."

However, a few participants said they might, such as:

> "*I think it would be interesting myself. I think it would be. I think I wouldn't*
>
> *mind trying. I think it would be interesting if I had the, uh, the computer and*
>
> *the smart phone and everything. I would do what I would do it, but I don't*
>
> *have those things and I don't plan to get them. I know there's a lot more*
>
> *opportunities for everything in this world, from the computer or from a*
>
> *smartphone*."

One participant stated they would use mobile learning in the future because they have similar apps on their phone (The Great Courses Plus). This participant also talked about using online sites, such as YouTube, to teach them, stating

> "*I do Great Courses...and I subscribe for these lessons. I'll take one every*
>
> *morning, which is like a chapter, takes about 15-30 minutes. I also like*
>
> *YouTube. I used it to teach me statistics. I love technology, and I am really*
>
> *engaged in it*."

When asked about the positive to mobile learning, participants stated that you can learn topics that you are interested in that you may otherwise not have a chance to. Another positive was that mobile learning is portable, so if they were to use it, they can use it just about anywhere. In addition, a participant mentioned that

> "*you learn at your own pace*."

The one participant who does use mobile learning had this to say as well:

"But uh, I liked it, but I do like this in a, in a course, you know, here's something that gives you a structure and you have a, uh, there's a value at the end of it with a certificate or some kind of recognition that you completed this. And I, I think that that's, that's good. And I think I can see where this might even evolve into maybe a degree or something like that later. One where it might be more, it might be recognizable. I think the traditional classrooms, or we have to change this."

Participants had more to say about the negatives to mobile learning. Some negatives included the cost of the mobile device, the cost of the learning platform (if it is not free), and the small screen. Some participants discussed their ability to use a mobile device would be a negative because they believed it would be difficult to learn. Some more negatives included

"what it does for your posture cause you're hunched over all the time"

and

"the isolation of the user. You're not engaging."

When asked about the barriers they perceive that would inhibit their use of mobile learning, many cited the same negatives stated previously; specifically, their ability to use the mobile device would inhibit their use. One participant discussed the trouble they would have trying to learn how to use a cell phone:

"but sometimes it takes me a long time to learn something and I need a lot of time and I feel, I do feel like I'm not smart enough"

while another talked about price of a cell phone:

"Well, I think the phones are pretty expensive first of all and I don't want to go out and spend three and five, $800 for a mobile device that I may or may not even use. That's getting into a price of a computer and so I know that it is a computer but the screen is entirely too small."

Discussion

Overall, the MVLLI seems to have positive influences on many, if not all, of the aspects of successful aging. When participants would discuss the institute, they had nothing but high regards. The majority of the sample was not interested in mobile learning, but this may change as generations age.

Much of the themes/responses from these participants seemed to be similar to the Sloane-Seal and Kops article. For example, both sets of participants mentioned time as a barrier. Also, participants shared similar reasons as to why they continued learning: for the sake of learning. In addition, the learning preference of learning from an expert/instructor learning was a shared preference between the two studies. More themes may have related if this study replicated more questions that Sloane-Seal and Kops used.

One theme I noticed traced back to theories of learning. Many of the participants in this study fit under the three theories of learning discussed in the introduction. First, andragogy states characteristics of older adults, including being motivated by internal factors. This group of participants are intrinsically motivated, with a majority of them stating that they continue learning for the sake of learning or because they are interested in a certain topic. This also fits under self-directed learning, where the individual takes charge of their own learning. The participants in this study do so by deciding to learn through the MVLLI. Lastly, the transformational theory states that learning changes as

people perceive themselves and the world. Through the MVLLI, attendees learn about different cultures and topics, such as various religions. One participant noted:

> "*I particularly liked the ones that really challenged me to think about stuff I've never thought about.*"

This could cause a change in how attendees perceive others and their cultures within the world, which fits under transformational theory.

Although participants did not directly state that 10 benefits described by Nordstrom and his son, participants did report that the MVLLI does influence them in positive ways. Participants also described different aspects of their well-being during the successful aging and lifelong learning section. This relates to Jenkins and Mostafa's work as well as Hammond's research on learning and well-being, where a significant relationship was found in the first and improved well-being was found in the later.

Cheon and colleagues found that behaviors and self-efficacy influenced the use of mobile learning in college students. Also, Czaja and Sharit found that direct experience with computers lead to more positive attitudes towards them. Similarly, the older adults who had cell phones or other advanced technology seemed more willingly to try mobile learning under certain circumstances. Also, Marquie, Jordan-Boddaert, & Huet mentioned about older adults report anxiety and fear when using computers and doubt their abilities to learn and use them, and one participant discussed this:

> "*I think that scares a lot of people in our age because we do become fearful of doing something wrong because we don't completely understand why it works, you know?*"

There are strengths and weaknesses to be discussed with this study. One strength is that this study has novelty. From the research conducted, there are few, if any, studies available that record older adults' reaction to mobile learning. Another strength is that the responses showed what the study aimed to do: to further explore the relationship between successful aging and older adults that participate in lifelong learning, and to explore the perceptions of older adults towards mobile learning.

Although this study has strengths, there are limitations as well. First, the sample size was on the smaller side of what was originally aimed. However, themes were still able to be drawn from the participants. Another limitation is that most of the sessions were one-on-one interviews rather than focus groups due to difficulties scheduling participants with other participants. A third limitation is that gender was not recorded. However, females were noticeably more predominant in the study, but this cannot be exactly reported since it was not officially collected data. Although this did not affect other responses, it would have been an interesting point to make if the data was collected. Another limitation is that the majority of participants lived on the Ohio Living Park Vista Campus. This may have influenced participants' answers, as they are better able to attend the institute because it is located where they reside.

Future Directions: Lifelong learning institutes are becoming more available as the interest increases. One prime example of an institute is the Chautauqua Institution (2018), located in New York. More than 100,000 people attended schedule public events here, including art classes, performances, religious and political programs. These institutes are worthy of future studies because of their expected rise in popularity. Studies can help develop marketing designs and programs for lifelong learning institutes to bring more

participants. Also, studies can show benefits of lifelong learning, which can be used as a marketing strategy.

Future research should find a way to objectively measure level of attendance. Participants seemed to struggle to remember how many lectures they attended, and many estimated or even "just guessed" how many lectures they have attended. Also, future research should ask participants their gender. That way, there can be an official report on the statistics and study any influence this may have. Another aspect this study could explore is careers and how that may influence attendance or views on the different aspects of this study, such as mobile learning. For example, having a job where you work with a computer every day versus having a job where you never have to use a computer may influence how people view technology and their abilities to use it. Related to careers, research can also ask questions regarding personality traits. Certain personality traits, such as the Big 5 (openness to experience, conscientiousness, extraversion, agreeableness, neuroticism), may influence attendance and interest in particular topics. One way to expand the research on lifelong learning and successful aging is to have a control group of individuals who do not attend any lifelong learning institute. That way, we can compare personality, attendance, views and opinions on lifelong learning and how these influence successful aging with a control group that does not have the benefit of lifelong learning. One way to expand the research on mobile learning is to have participants officially enroll in a course using a mobile device. That way, participants can have first-hand experience using mobile learning, instead of receiving a quick overview of what mobile learning is and looks like. With first-hand experience, participants can easily report what they experienced versus what they think they would experience. We

can use the information that participants report to shape future platforms of mobile learning, making it more accessible for people to use. Future research should also tap more institutes with more and a wide variety of participants to see bigger picture of how these institutes influence successful aging. That way, barriers, motivations, and the benefits of lifelong learning can be assessed and used to try to get more people involved.

Conclusion

Understanding the reasons why older adults continue learning is significant. Theories include andragogy, self-directed learning, and transformational learning, among others. Although theories are important, this study focused on how lifelong learning influences different aspects of successful aging because of the many benefits of lifelong learning, including a self-fulfilling life and valuable relationships. Lifelong learning is shown to affect well-being, efficacy, and coping skills as well. Successful aging is a beneficial model to include because its definition, low probability of disease, high functional level, and active engagement with life, covers many aspects of the aging adult life. This model has existed for a while, so additions have been suggested; however, researchers and other health professionals still use this model today. This study was designed to investigate lifelong learning and successful aging with an added component: mobile learning. Mobile learning, or learning on a mobile device, such as a cell phone, is a newer form of learning, so this research aimed to explore the perceptions of older adults towards mobile learning as well as studying the relationship between lifelong learning and successful aging. Overall, participants report positive influences from the institute on their successful aging processes. Barriers included time, interest, and transportation. Motivations for continuing learning included interest, to keep stimulated, or for the sake

of learning. Participants preferred the lecture setting for a classroom. As for mobile learning, most participants stated they would not be interested in pursuing this as a future means of learning, but they did see positives to it. In summary, lifelong learning may be important for successful aging, but future research should continue to study the relationship between lifelong learning and successful aging in more depth.

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Ohio Living
Park Vista

Mahoning Valley Lifelong Learning Institute

1216 5th Ave. Youngstown, OH 44504

Dear Dr. Larwin

My name is Marise Sahyoun, and I am addressing this letter to you to describe my intent to support Nicole Balog in her Master's Thesis. Nicole's thesis requires her to speak with older adults about lifelong learning and successful aging. We agreed that she can conduct focus group using the population of older adults that attend the Mahoning Valley Lifelong Learning Institute, where I am the director. She will use these focus groups to collect information regarding lifelong learning, successful aging, and mobile learning and has my full permission to work with me.

Thank you,

Marise Sahyoun

Appendix II: Approval Letter from IRB

Youngstown
STATE UNIVERSITY

February 10, 2018

Dr. Tiffany Hughes, Principal Investigator
Ms. Nicole Balog, Co-investigator
Department of Sociology, Anthropology & Gerontology
UNIVERSITY

RE: IRB Protocol Number: 090-2018
       Title: Older Adults' and Successful Aging: The Effects of Lifelong Learning

Dear Dr. Hughes and Ms. Balog:

The Institutional Review Board of Youngstown State University has reviewed the above mentioned Protocol via expedited review and determined that it fully meets YSU Human Subjects Research Guidelines. Therefore, I am pleased to inform you that your project has been fully approved for one year. You must submit a Continuing Review Form and have your project approved by February 9, 2019, if your project continues beyond one year.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB. Best wishes in the conduct of your study.

Sincerely,

Michael A. Hripko
Associate Vice President for Research
Authorized Institutional Official

MAH:cc

c: Dr. Matt O'Mansky, Chair
      Department of Sociology, Anthropology & Gerontology

Youngstown
STATE UNIVERSITY

One University Plaza, Youngstown, Ohio 44555

Office of Research
330.941.2377
www.ysu.edu

April 9, 2018

Dr. Tiffany Hughes, Principal Investigator
Ms. Nicole Balog, Co-investigator
Department of Sociology, Anthropology & Gerontology
UNIVERSITY

RE: HSRC PROTOCOL NUMBER: 090-2018MOD1
     TITLE: Older Adults and Successful Aging: The Effects of Lifelong Learning

Dear Dr. Hughes and Ms. Balog:

The Human Subjects Research Committee has reviewed the modifications you have requested to the above-mentioned protocol. The request to increase the number of participants in the focus groups does not change the risk associated with your project. Therefore, your project continues to meet the condition of minimal risk and is fully approved.

Any other changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Michael A. Hripko
Associate Vice President for Research
Authorized Institutional Official

MAH:cc

c: Dr. Matt O'Manskky, Chair
      Department of Sociology, Anthropology & Gerontology

Appendix III: Informed Consent

Informed Consent

The purpose of this study is to discover your attitudes, opinions, and perceptions of lifelong and mobile device learning. In this study, you will report your experiences related to learning. In addition, you will also have a chance to observe learning through mobile means. If you decide to participate in this study, you will reflect on past experiences related to learning, and you will have a chance to learn through a new medium. Your responses will remain anonymous. Your participation should take no more than 60 minutes. To complete this study, you will complete the steps described on this informed consent during a one-hour interview with other participants in the Mahoning Valley Lifelong Learning Institute. All interviews will be recorded for researcher purposes. Once the study is completed, all recordings will be destroyed to keep confidential.

There are no known risks for participation in this study. Your participation may benefit society by helping to better understand how older adults feel about learning and learning on a mobile device. All information will be handled in a confidential manner, so that no one will be able to identify you with the results. Participation in this project is voluntary and you may withdraw at any time without negative consequences. You must be 18 years of age or older to participate in this project. The results will only be summarized as group data, so no names will be used. You can withdraw from this study at any time with no consequences. The researcher does not offer any compensation to you for participating in this study.

If you have any questions about this project, please feel free to contact the principal investigator, Nicole Balog, Master's student at Youngstown State University at XXXX. Or, if you have questions about your rights as a participant in a research project, you may contact the Office of Grants and Sponsored Programs at YSU (XXXX).

I am 18 years of age or older and I agree to participate. I understand that submission of a completed survey indicates that I have consented to participate in the survey.

Yes_____ No_____

Signature: _____ Date: _____

Appendix IV: Demographic Survey

Demographics Survey

Please circle one response

What is your age?

_____

What is your marital status?

- A) Married,
- B) Single,
- C) Divorced,
- D) Widow(er)

What is your highest level of education completed?

- A) Did not complete high school,
- B) High school,
- C) Vocational school,
- D) A little bit of college,
- E) 2-year college,
- F) 4-year college,
- G) Graduate school: Master's,
- H) Graduate School: Doctorate,
- I) Graduate School: Ph.D

Including the previous and current semesters, approximately how many times have you attend a MVLLI program?

- A) 1-5 times,
- B) 6-10 times,
- C) 11-15 times,
- D) 16 to 20 times,
- E) 20 times or more

Appendix V: Script

Hello, my name is Nicole Balog. I am a Master's student at Youngstown State University. I thank you for your voluntary participation in my study. Before we begin, I would like to review the informed consent form. (Review form, mention voluntary, can drop out at any time or have their data removed, mention recording, have them sign and date). This group interview should take about an hour of your time and will be divided into three sections of questions, with about 3-6 questions per section. Any questions before we start? (Proceed to ask questions by section, rephrasing and leading discussion when necessary)

Successful aging and education: How has participating at the MVLLI affected your physical health? How has participating at the MVLLI affected your mental health? How has participating at the MVLLI affected your engagement with life? How has participating at the MVLLI affected your overall quality of life? Or, how does education impact your quality of life?

Motivation, barriers, and learning preferences: Why do continue your education? What motivates you to continue learning? What are some barriers that stop you from going, or going more often? Do you have any learning preferences? If so, what are they?

Mobile learning: (Ask the following two questions before you show MOOC) What is your previous experience with mobile devices, computers, or technology in general? What would you say is your general attitude towards mobile devices? (Show MOOC, explain what it is, show the layout, show a class and its information, etc.) What is your first initial reaction to this learning platform? Do you think you would use this in the

future? What are the positives to mobile learning? What are the negatives to mobile

learning? What barriers do you perceive that would inhibit your use of mobile learning?

(Close with debriefing and review of rights of participants before closing with a thank

you)

Appendix VI: Demographics

Age	Minimum	Maximum	Mean	Std. Deviation
	65	92	76	7.87401
Education	Frequency	Percent	Valid Percent	Cumulative Percent
Did not complete high school	1	6.3	6.3	6.3
High school	3	18.8	18.8	25.0
Little bit of college	2	12.5	12.5	37.5
2-year college	1	6.3	6.3	43.8
4-year college	4	25.0	25.0	68.8
Graduate school: Master's	3	18.8	18.8	87.5
Graduate school: Ph.D.	2	12.5	12.5	100.0
Attendance	Frequency	Percent	Valid Percent	Cumulative Percent
1-2 times	1	6.3	6.3	6.3
3-5 times	2	12.5	12.5	12.8
6-10 times	5	31.3	31.3	50.0
11-15 times	2	12.5	12.5	62.5
16-20 times	1	6.3	6.3	68.8
20 times or more	5	31.3	31.3	100.0
Marriage	Frequency	Percent	Valid Percent	Cumulative Percent
Married	7	43.8	43.8	43.8
Single	4	25.0	25.0	68.8
Divorced	2	12.5	12.5	81.3
Widow(er)	3	18.8	18.8	100.0