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FLIPPING THE EXERCISE NARRATIVE: An Exploration of Middle-Aged Adults' Lived

Experiences After Making a New Year's Resolution to Exercise

By

David J. McIlwraith

Wilfrid Laurier University, 2020

THESIS

Submitted to the Department of Kinesiology and Physical Education

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Abstract

Objective

The benefits of consistent exercise in the middle-aged adult (44 to 64 years) population has been well documented in existing literature; exercise can delay the onset and progression of a wide variety of chronic diseases such as diabetes, hypertension, osteoporosis, cardiovascular disease and, more generally, premature mortality (Dietz et al., 2016; Thornton et al., 2016; Waschki et al., 2015). Despite increased societal awareness surrounding the importance of exercise in relation to long-term health and longevity, middle-aged adults remain largely inactive. Additionally, there have been few studies that have used a qualitative methodology to give middle-aged adults an active voice in contributing to existing exercise behaviour change literature. This research examines the lived experiences of middle-aged adults who made a New Year's resolution to exercise after having been previously inactive. The study aims to understand people's perceptions towards exercise, the motivating factors for making their resolution, how their lives were impacted by this exercise and their presumed future relationship with exercise.

Methodology

A phenomenological framework was used to guide this study, with a primary focus on people's lived experiences with respect to exercise. Sixteen middle-aged adults (aged 44 to 61) completed four journal entries, six Godin Leisure-Time Exercise Questionnaires (GLTEQ) and one semi-structured interview administered by the primary researcher. The credibility of this study was strengthened through the use of a reflexive thesis journal, an interview transcript verification process and participant member checks, all of which were used in the interpretation of the data.

Findings

Six primary themes emerged from the data set: (1) "We never even called it exercise, 'cuz it was natural"; (2) "They're winning, I'm losing"; (3) My exercise mindset; (4) "It's about finding myself again"; (5) "Taking care of your health is the best thing you can do for yourself"; and (6) "Putting my best foot forward." These themes demonstrated that exercise was generally viewed favourably by participants after making their resolution to exercise, and that it was perceived to have had a positive overall impact on their lives. Similarly, improving one's personal health status was cited as being the main motivating factor for getting active, as well as the area of life most positively impacted by exercise.

Conclusions

Overall, this study provides a unique phenomenological perspective into the exercise-related experiences of previously inactive middle-aged adults, as they started becoming more active. The study findings suggest that an understanding of people's individual health circumstances may be important in promoting exercise in the middle-aged adult population. Similarly, this study showed that participants generally followed a similar exercise behavioural trajectory over their lifespan. Future research should aim to explore exercise identities in middle-aged adulthood and should look at specific strategies to encourage a more natural approach to exercise in this population. Additional research should look at middle-aged adults moving from a state of inactivity to a more active one and should seek to understand middle-aged adulthood as a potential time of life to re-introduce exercise in an effective manner.

Chapter 1: Introduction

Rather than exploring the detailed nuances of exercise behaviour change, this study aimed to provide a holistic understanding of exercise across the lifespan. This holistic understanding was developed using a qualitative inquiry, which was informed by tools designed to explore the lifetime exercise experiences of the participants. Specifically, questions were asked pertaining to how exercise was experienced during childhood, youth and young adulthood in comparison to middle-aged adulthood. Exploring the full context of their exercise experiences across their lifetimes was important in order to fully understand the role their newfound exercise has had upon their lives since having made a resolution to exercise. This understanding of their lifetime experiences with exercise provided the necessary context when determining the meaning they attributed to this exercise after having made their New Year's Resolution.

Part of the inspiration for this project was derived from the fact that middle-aged adults (44 to 64 years) remain largely inactive despite being aware of the benefits that regular exercise would have on their lives. This poses an interesting question that has yet to be fully addressed in the current literary landscape: why do middle-aged adults choose not to participate in regular exercise despite knowing that they should? In my perusal of past research, I noted that it is far more common for studies to ask adults why they choose not to be active, rather than asking people why they choose to be active (Justine et al., 2013; Lattimore et al., 2011). It is for this reason that I felt a valuable contribution to the existing literature would be a phenomenological study aimed to give participants the means to fully express their exercise-related experiences. This point was the primary inspiration for naming this project *Flipping the Exercise Narrative*.

This study aimed to further explore exercise behaviour change research by using the culturally sanctioned tradition of making a New Year's Resolution. According to Arthur George (2020), the idea

of people changing their behaviour at the advent of a New Year dates back to Ancient Civilizations, and this tradition has since become popular in Western society (Norcross et al., 2002). Research suggests that two of the most commonly made resolutions are to exercise and to lose weight (Norcross et al., 2002; Rossner et al., 2011). Despite this intent to positively change one's behaviour, the vast majority of these resolutions fail within the first couple of months (Pienta, 2011). The advent of a New Year provides a unique opportunity to recruit participants who are in a behavioural transition phase and to gain their valuable insights surrounding the motivating factors associated with beginning exercise and the subsequent meaning this newfound exercise has upon their lives. A study of this nature created the opportunity for participants to share their active voice and contribute to the current literary landscape related to exercise behaviour and behaviour change.

Magnitude of the Problem

According to Statistics Canada (2019), only 16% of adults aged 18 to 79 years meet the recommended physical activity guidelines. For optimal health benefits, it is recommended that adults participate in 150 minutes of moderate to vigorous intensity aerobic physical activity per week, while also including at least two resistance training sessions per week (Canadian Society for Exercise Physiology, 2019). These numbers suggest that most adults are failing to meet recommended activity guidelines. Such inactivity comes at a significant cost to overall health, with The World Health Organization (2018) reporting global rates of obesity nearly tripling since 1975. Approximately 39% of adults worldwide were found to be overweight in 2016 and 13% were considered to be obese. Despite widespread efforts to promote positive exercise behaviour change in the population, a systematic review of behaviour change theories and long-term behaviour change maintenance by Kwasnicka et al. (2016) suggest that these efforts have been relatively unsuccessful.

By capitalizing on the popular tradition of making New Year's resolutions, this study allowed for a more in-depth understanding of the motivating factors that got people to exercise and the subsequent meaning that this newfound exercise had upon their lives. The ultimate goal of this study was to provide participants with the opportunity to contribute their active voice to the dialogue surrounding their lived experiences with exercise, and to analyze both the commonalities and differences across these experiences. The hope is that this research can actively contribute to the current literary realm and assist in developing a better understanding of exercise and behaviour change.

Chapter 2: Literature Review

One of the most challenging parts of this literature review pertained to terminology, as the terms "exercise" and "physical activity" were often found to be used interchangeably in the literature. Physical activity can be defined as, "any bodily movement produced by skeletal muscles that requires energy expenditure" (World Health Organization, 2019, p. 1). The Canadian Society for Exercise Physiology (CSEP) defines exercise as, "physical activity that is planned, structured, repetitive and purposive in the sense that improvement or maintenance of one or more components of physical fitness is the objective" (CSEP, 2017, p. 7). Due to their interchangeable presence in existing research, both terms will be used throughout this literature review. It is important to note, however, that my study was largely focused on exercise and the specific resolution to exercise. Therefore, the term exercise will be used when discussing the specific facets of this study.

Inactivity in Middle-Aged Adults and the Associated Consequences

Research suggests that middle-aged adults have low levels of physical activity participation and long-term adherence (Lachman et al., 2018). Pettee-Gabriel et al. (2018) conducted a longitudinal study that sought to explain how physical activity levels changed from when participants were aged 38 to 50 years, to when they were 48 to 60 years. They reported that the amount of physical activity that participants engaged in during their later years (of 48 to 60) was significantly lower when compared to the amount they participated in during the ages of 38 to 50 years. When looking specifically at women, it has also been reported that physical activity rates decline as they move into middle and old age (Holahan et al., 2017). Further, an examination of the weekly physical activity habits of middle-aged adults found that 72% of women and 59% of men aged 50 to 65 years failed to get enough physical activity during the week; and more specifically, that participation in exercise of moderate to vigorous intensity was rare in this population (Mynarski et al., 2014). Furthermore, recent results from the

Canadian Health Measures Survey, which utilized self-reported health data, showed that only 54% of middle-aged adults get 150 minutes of activity per week (Statistics Canada, 2019).

Inactivity in middle-aged adults is particularly concerning, as research suggests that a lack of physical activity is one of the leading risk factors for chronic disease development (Booth et al., 2011; Durstine et al., 2013; Gonzalez et al., 2016). It is well known that older adults (aged 65 years or more) are particularly vulnerable to experiencing chronic disease (Niccoli & Partridge 2012; Prasad et al., 2012; Roberts et al., 2015), which suggests that middle-aged adults may be at a pivotal point in their lives where their level of activity could drastically predict their overall quality of life and their ability to age actively in their communities. A 2019 report from the Centers for Disease Control and Prevention (CDC) showed that two-thirds of American adults over the age of 50 were found to have at least one chronic disease. Further analysis showed that those impacted by chronic disease had 30% lower physical activity levels compared to their healthier counterparts.

Age becomes of particular concern when examining Canada's current demographic makeup. The demographic cohort known colloquially as the "Baby Boomers" (persons born between 1946 and 1964), will be leaving middle-aged adulthood and surpassing the age of 65 over the next 10 years (Statistics Canada, 2018). There is ongoing concern that the aging of this particular cohort will pose a threat to healthcare sustainability because of the potential rate of chronic disease onset amongst these individuals (Canizares et al., 2016; Perez, 2017; Wister & Speechley, 2015). There are a number of reasons why this could be problematic. Chronic diseases are expensive and comprise the vast majority of provincial healthcare spending (Chapel et al., 2017; Dietz et al., 2016; McPhail, 2016; Nugent, 2008; W. Raghupathi & V. Raghupathi, 2018). In 2017, the Chronic Disease Prevention Alliance of Canada (CDPAC) reported that the associated cost of chronic disease is approximately 190 billion dollars annually, with 122 billion being attributed to income and productivity loss and 68 billion

attributed to direct health care costs. Chronic disease is also the primary cause of death and morbidity in Westernized countries (Bauer et al., 2014). A 2013 report from the Public Health Agency of Canada (PHAC) showed that four chronic diseases in particular, including cancer, diabetes, cardiovascular disease and chronic respiratory disease, are responsible for approximately 67% of all Canadian deaths annually (PHAC, 2013).

Despite the burden of chronic disease from both health and fiscal perspective, a recent review of physical activity and its ability to promote healthy aging found that consistent physical activity may reduce the risk of developing chronic disease, improve social outcomes, promote psychological wellbeing, and can allow for adults to continue to function at a high-level even as they enter old-age (Bauman et al., 2016). Other studies have shown similar results, specifically noting that physical activity may be beneficial in offsetting the progression of various forms of chronic disease (Kruk, 2007; Kyu et al., 2016; Nunan et al., 2013). This seems to suggest that while there are certain inevitable risk factors such as age that contribute to chronic disease onset, the ability to age actively and offset chronic disease development seems at least possible through consistent physical activity.

Research also suggests that one's perceptions of physical activity in middle age may influence future physical activity behaviour patterns. Wurm et al. (2008) reported that adults who held more positive views towards aging tended to participate in more regular physical activity compared to those with more negative views. Similarly, it has been suggested that regular physical activity in middle age leads to healthier aging and behaviour practices in older adulthood (Hamer et al., 2012; Sabia et al., 2012; Sun et al., 2010). A recent study that looked at adults suffering from chronic conditions similarly found that participants were aware that they should exercise as a means to improve their health status (Jansons et al., 2018). The question that still remains unanswered is, why do most middle-aged adults continue to be largely inactive despite the potential widespread benefits physical activity may have

upon their current and future health status? The findings from this study focus on gaining an in-depth understanding of participants' experiences with newfound exercise in the hopes of providing some insight into this important question.

Proposed Barriers and Facilitators to Physical Activity in Middle-Aged Adults

While the problem pertaining to physical inactivity has remained persistent, Amireault et al. (2013) conducted a systematic review in an attempt to summarize common physical activity barriers and facilitators in the adult population. It was that found that motivation and self-efficacy are the strongest predictors of long-term physical activity maintenance amongst those aged 18 to 64 years old. Caperchione et al. (2012) found that among middle-aged Australian men, the motivation to feel better, improve their quality of life, and to serve as a role model for their children were the driving force behind their continued participation in physical activity. Other studies have focused on adults' careers, noting that those who experienced more job strain and longer work hours were less likely to engage in physical activity during their leisure time (Caperchione et al., 2012; Cook & Gazmararian, 2018; Kirk & Rhodes, 2011).

Research has also yielded interesting results on physical activity levels with respect to ethnic diversity amongst middle-aged adults. It was found that for members of specific ethnic subgroups, caregiving responsibilities and a perceived lack of energy were common barriers to physical activity (King et al., 2000). A qualitative study specifically aimed at understanding barriers to physical activity amongst middle-aged African-American men found that time constraints, a lack of social support, inadequate access to activity opportunities and a poor perspective on aging were the most commonly reported barriers (Friedman et al., 2011). Amongst Latin-American women, it was found that feelings of pressure, negative affect, narrow definitions of physical activity and physical activity being

considered a low priority compared to family and work were common reasons to forego physical activity altogether (Segar et al., 2017).

From a sociodemographic standpoint, it has been reported that adults who are less educated, older and unemployed are more likely to forego physical activity (Rhodes et al., 2011). Significant life events such as illness, familial death, financial troubles and starting a new job have also been reported to contribute to low activity levels (Oman & King, 2000). McArthur et al. (2014) looked at middle-aged women, and identified six common barriers that were most responsible for poor physical activity adherence: biophysical concerns, such as injury and fatigue; psychosocial barriers, such as negative interactions with people who discourage exercise; a poor environment; a lack of resources; poor intrinsic motivation; and an inability to incorporate physical activity into one's daily routine.

A recent systematic review attempted to summarize the barriers and facilitators that contribute to the adoption and long-term maintenance of healthy behaviours, 19 of which were specifically related to physical activity (Kelly et al., 2016). This comprehensive paper looked specifically at middle-aged adults aged 40 to 64 years, and stated that the most commonly reported barriers to physical activity participation for middle-aged adults were internal perceptions of poor health, a lack of time, job strain, caregiving responsibilities, a lack of access, low self-efficacy and low motivation (Kelly et al., 2016). The most commonly reported facilitators of physical activity included a desire to improve their overall wellbeing, feelings of enjoyment towards certain forms of physical activity, previous ill-health as being a motivating factor, being a positive role model for others, having a higher socioeconomic status and social support while participating in physical activity (Kelly et al., 2016). In sum, there are many barriers and facilitators that have been identified as having an influence on exercise-related behaviours in middle-aged adults. Where the literature could serve to benefit is through the addition of more personal accounts exploring the reasons for engaging in and the subsequent meaning of newfound

exercise on the lives of adults who have just recently initiated exercise after having been previously inactive.

New Year's Resolution Literature

The concept of making a New Year's Resolution is a popular cultural tradition in Western society (Norcross et al., 2002). It provides people with the opportunity to start the year off making positive behaviour changes to better their future selves. This yearly tradition goes hand-in-hand with exercise research, as weight loss and a desire to increase one's amount of activity are two of the most commonly cited resolutions amongst males and females over the age of 18 (Norcross et al., 2002; Rossner et al., 2011). This provides a unique opportunity for research, as Norcross et al. (2002) stated: "[t]he annual tradition of New Year's Resolutions affords a valuable opportunity to research self-initiated behavior change and to intervene in the health behaviors of millions of Americans" (p. 8). It should be clearly stated that the focus of this study is on better understanding exercise behaviour change, and the cultural tradition of making a New Year's Resolution simply provided a way to recruit participants who were in a state of behavioural transition.

Despite the positive intentions of making a New Year's resolution, research suggests that on a grand scale such resolutions are largely unsuccessful. A report from Pienta (2011) suggests that as many as 88% of all resolutions end in failure. Norcross et al. (2002) investigated this idea in further by applying the Transtheoretical Model for understanding New Year's Resolution success for males and females over the age of 18. They found that participants in the "action stage" are more likely to succeed in their resolution than individuals stuck in earlier stages of the model. The action stage refers to people who have started engaging in the desired behaviour (Norcross et al., 2002). In essence, this suggests that participants who actually begin the year by being active rather than simply thinking about it are more likely to follow through with positive long-term behaviour change. This point is further

discussed in an article by Budden and Sagarin (2007), which states that while many individuals express intentions to begin regular exercise, they often fail to link this intention to behaviour (Budden & Sagarin, 2007). The Transtheoretical Model of Behaviour Change postulates that people change their behaviour through a series of six stages: precontemplation, contemplation, preparation, action, maintenance and termination (Prochaska & DiClemente, 1998). In order to conduct a sound methodological study related to peoples' exercise behaviours, it was imperative to have an understanding of where participants are at in terms of their behaviour change process. Recruiting individuals who had recently made a New Year's resolution to exercise offered me the unique opportunity to collect data from people who were all in the same stage of behaviour change and who had direct experience with the phenomenon being studied.

There have been a number of studies that have investigated New Year's resolution making. Research by Woolley and Fishbach (2017) looked at people's general New Year's resolutions, of which exercise and health-related resolutions were most common. When looking at male and female adults over the age of 18, they found that reaping the immediate rewards associated with the resolution (such as actually enjoying exercise) were more likely to lead to long-term change. However, the authors also recognized that both immediate goals and long-term goals play an important role in promoting long-term behaviour change. Another study found similar results, specifically noting that while subordinate goals (i.e., goals that are specific and short-term in nature) are important in goal pursuit, long-term goals also play a crucial role in fostering successful long-term behaviour change for people who have made a New Year's resolution (Hochli et al., 2018).

Another strong predictor of New Year's resolution success relates to self-efficacy, as male and female adults who believed they could truly change their behaviour were found to be more successful in implementing positive long-term behavioural changes (Norcross et al., 1989). Similarly, ridding

one's routine of cues that lead to ill-advised behaviours and instead actively focusing on positively reinforcing perceived beneficial behaviours has also been reported to be an effective strategy for maintaining one's New Year's resolution (Norcross et al., 1989). Another study found that over a twoyear period, successful New Year's resolvers employed more stimulus control, reinforcement and willpower than non-resolvers (Norcross & Vangarelli, 1988). A recently published article by Mullaney (2020) utilized surveys, in-depth interviews and drawing exercises to understand the strategies individuals who make a New Year's resolution establish to reach their distant goals. It was found that being flexible, maintaining optimism, and putting time aside to fulfill their resolution (what Mullaney called "Structuring and Remembering") were key strategies for participants (aged 18 to 75 years) to feel as though they were making progress with their resolution. Despite the positive findings revealed in the above literature, researchers have overwhelmingly focused on asking the question of what makes a resolution successful. The research has revealed positive findings that could potentially enable people to more successfully fulfill their resolutions, especially by informing research on goal pursuit and stimulus control; however, there has been a failure to explore the question beyond this superficial level and truly ask participants what meaning their resolution and subsequent activity has had upon their lives.

Some studies have focused on exercise and the subsequent meaning that it has on people's lives. One such study looked at sixteen adults who had multiple sclerosis and aimed to uncover the meaning they attributed to exercise and physical activity (Stennett et al., 2018). The results of this study showed that exercise was not only seen as a way to maintain independence, but it was also fundamentally important in maintaining one's sense of self and developing a sense of normalcy. Another study conducted a secondary analysis to uncover the meaning that three groups of participants derived from physical activity (Angel, 2018). These groups included individuals who had experienced spinal cord

injury, individuals with low back pain and individuals with heart disease. The study found that, "[t]he meaning of physical activity differs among people and within people. The personal meaning of physical activity is decisive for how people respond to professional recommendations" (Angel, 2018, p. 9). A similar result was found when looking at sixteen female students, as it was shown that conversations pertaining to physical activity were highly emotive and polarizing (Bulley et al., 2009). Participants in this study described physical activity as either leading to positive feelings about themselves or negative feelings.

I feel it is important to discuss these articles in the broader context of New Year's resolution literature because there has yet to be a study that has focused on middle-aged adults New Year's resolution to exercise and the subsequent meaning that this exercise has on their lives. The study conducted for this thesis work went beyond just asking what makes a resolution successful; rather it truly captured participants' newfound exercise experiences and questioned how these changes impacted their everyday lives. Thus, the aim of my research was to change the perspective from which researchers have previously investigated this question, by providing participants with a forum through which they could actively voice their motivations to become more active and the meaning this newfound exercise has had upon their lives. A phenomenological study of this sort allowed for a more detailed understanding of the reasons that govern people's decision making to become more active. Furthermore, this study provided a valuable opportunity to look at people in the transitional state of beginning exercise using the culturally sanctioned tradition of New Year's resolution making. I feel my qualitative study created the opportunity for participants to share their unique journeys to initiating exercise, because as Robertson-Wilson and Dawson (2015) state, "[a]ll effective behaviour change is based on understanding the commonalities among people while appreciating the differences that exist between individuals" (p. 401).

Qualitative Research and Exercise – An Overview

Qualitative researchers have had a focus on sport and exercise psychology for over three decades and this area of research has seen substantial growth since the year 2000 (Smith & McGannon, 2018). A review of three major journals related to sport and exercise psychology found that since 2000, there has been a 68% increase in qualitative studies that have been published in this area (Culver et al., 2012). Qualitative research is a necessary approach when assessing less tangible outcomes, such as people's perceptions surrounding meaning of a particular phenomenon and their lived experiences (Draper, 2009). These studies offer valuable insight into understanding a topic of interest in overwhelming detail, and the findings that emerge from such research can be used in conjunction with quantitative findings to develop a more holistic understanding of a given problem or phenomena.

There have been numerous qualitative studies that have attempted to understand adults' relationships with exercise. One such study utilized interviews to look at the importance of sport and competition in older athletes (aged 56 to 90 years) and found that sport reportedly played an important role in providing fun and challenging exercise experiences (Dionigi et al., 2011). Another review of qualitative research findings examined the reasons people get involved with sport and physical activity and explored this question across different age groups. The researchers found that for children, enjoyment of the activity and support from parents were key reasons for getting active (Allender, et al., 2006). In teenagers and women, the fundamental reasons for getting active related to concerns about appearance and weight management. For adults, this review suggested that a sense of achievement, skill development and luxury time focused on themselves were key reasons for being physically active.

Some studies have focused on older adults in an attempt to understand their exercise-related experiences. Morgan et al. (2019) looked at older adults (60 years of age and older) and attempted to understand what influences physical activity had upon this age group. They reported that major life

events like ill health, retirement and caring for children lead to participation in physical activity because any discomfort they encountered reminded them that their bodies were ageing. Several studies have focused on the lived experiences of engaging in physical activity for a number of specific populations. Danielsen et al. (2015) examined the effects of a lifestyle modification program for adults (aged 35 to 63 years) who were overweight. They subsequently found one overarching theme to summarize people's experiences: "the ambivalence of attending physical activity". The essence of this theme was derived from the polar opposite states that participants described feeling as they completed this program, from feelings of pain to pleasure and desire and duty. Another study looked at participants aged 35 to 55 years and asked them to create narrative maps to describe their social construction of sport and physical activity (Partington et al., 2005). These narrative maps lead to the development of three themes, the most prevalent being that age is a "state of mind". The second theme was the idea that life begins at age 40, implying that physical activity and sport provided an opportunity for mid-life rejuvenation. The third and final theme was the idea that ageing is natural and you can grow old gracefully.

Despite the growing presence of qualitative studies in physical activity and exercise research, it remains a relatively underutilized approach relative to previously dominant quantitative approaches. Thomas et al. (2015) touch on this in the opening chapter of their book *Research Methods in Physical Activity* where they refer to qualitative research as, "the new kid on the block" (p. 22) with respect to physical activity research. While there has been an increase in qualitative studies related to physical activity, phenomenological approaches have seldom focused on middle-aged adults (generally defined as adults between the ages of 45 to 64 years old) as a population of interest. One such study sought to understand the motivators that encouraged three middle-aged adult men to be physically active and found that influential others, looking forward to the future, and the benefits associated with physical

activity were the most common motivators. However this study had only three participants, all of whom were aged 60 to 65 years and male, limiting the transferability of its findings to a broader population (Liechty et al., 2014).

After reviewing existing qualitative literature, the first observation that can be made is that middle-aged adults perceptions and feelings towards physical activity remain largely unknown. While some research has given participants a voice to express the motivating factors that led them to becoming active, few have further explored the meaning behind this newfound exercise or any effects it may have had upon their lives. I also was curious to see if people's perceptions towards exercise change as they move from a state of inactivity to a more active one, and I did not come across any studies that captured this behavioural transition phase. A better understanding of this change amongst new adult exercisers could serve as a valuable contribution to the existing literature. A final observation relates to the apparent lack of exercise research associated with middle-aged adults in general. After reviewing the qualitative literature available, I found that studies have largely focused on children and older adults, while middle-aged adults have been seemingly neglected in this particular area of exercise research.

These trends highlight the need for a qualitative research study aimed at exploring the exercise behaviour of middle-aged adults, with a particular focus on accurately documenting their reasons for beginning a routine of consistent exercise and their perceptions and feelings towards exercise during this time of behavioural transition. It is for this reason that I chose to recruit people who had made a New Year's resolution to exercise because it provided a unique sample of participants from which to capture these experiences during a time of behavioural transition. Additionally, a phenomenological study aimed at further exploring the meaning that people attribute towards this newfound exercise may be beneficial in understanding health behaviour and behaviour change.

Chapter 3: Methodology

Research Purpose

The purpose of this phenomenological study was to explore the lived experiences of middle-aged adults as they initiated and engaged in exercise as part of a New Year's resolution to exercise and to understand the meaning that this newfound exercise had upon their lives. The focus of this study was to explore people's exercise-related behaviour change, and the culturally sanctioned tradition of making a New Year's Resolution provided a simple way to recruit participants in a state of behavioural transition. The following research questions were explored:

- 1. What did participants describe as their main reasons for making the resolution to exercise?
- 2. How did participants perceive their lives have been impacted since initiating and engaging in exercise?
- 3. How did participants' perceptions towards exercise evolve since making this resolution?
- 4. What impact did participants feel their current engagement in exercise would have upon their future participation?

This study aimed to provide a holistic picture of middle-aged adults' exercise experiences during the transitional behavioural period of their New Year's resolution to exercise. This study served as an opportunity to hear participants' unique perspectives related to exercise using a form of qualitative inquiry, ultimately allowing for a deeper and more personalized understanding of their exercise-related experiences.

Research Design

The Qualitative Method

In order to elucidate the very essence of this experience, I used a phenomenological framework. van Manen (1990) described phenomenology as an optimal method to explore the significance of

someone's lived experience and how this experience shapes their perceptions of the world. Similarly, Finlay (2009) stated that, "...applied to research, phenomenology is the study of phenomena; their nature and meanings" (p. 481). My purpose statement was directly concerned with understanding the meaning people attributed to their exercise experiences after making their resolutions to exercise and based on the definition of phenomenology, it seemed like the best framework to guide my study. Specifically, Dowling (2007) explained that hermeneutic phenomenology is particularly concerned with looking at people's lived experiences and seeing these experiences as an interpretive process. Conducting qualitative research is an iterative process where interpretation plays a significant role, particularly in the analytical process. The importance of interpretation in this study meant that hermeneutic phenomenology was the best framework to guide my study as it most effectively aligned with my study purpose and research questions. A phenomenological approach of this nature also allowed participants to express their individual perceptions surrounding this experience in a comprehensive and detail-oriented fashion.

Role of the Researcher

My interest in the realm of exercise and behaviour change began while completing my undergraduate degree at Western University in the field of Health Sciences. My time of study revealed a somewhat paradoxical relationship between the benefits of exercise and actual exercise behaviour. It seemed strange to me that a vast majority of the population avoided a behaviour (i.e., participation in exercise) that had the potential to offset various forms of illness and improve one's overall quality of life. During my later years of study, I was introduced to behaviour change theories, particularly the Transtheoretical Model (Prochaska & DiClemente, 1998) and Social Cognitive Theory (Bandura, 1999). It was not until I read further into the literature that I realized that these rational models towards behaviour change may not hold the complete answer for addressing this inactivity problem. This led

me to explore affective response research, which piqued my curiosity into the importance of a person's general psychological state and the influence this ultimately may have upon one's subsequent behaviours (e.g. research suggests that different exercise intensities will have drastically different effects on the pleasure associated with exercise) (Ekkekakis et al., 2011). While my study did not propose to investigate affective response or any particular behaviour change model per se, my extensive preliminary reading and research in this area did help to shape my project in many ways, such as recognizing the importance of people's emotions and feelings have in dictating important behavioural-related decisions.

With my prior educational background and this newfound knowledge garnered from my extensive review of the literature, I felt that my most effective contribution to the literature would be one that enabled participants to describe their personal journeys into initiating and engaging in exercise and to further explore the perceived meaning these behaviours had on the rest of their lives. As someone who has always been active in both structured and unstructured sport, I recognize the personal benefits exercise has brought into my own life. My research has enabled me to see exercise from the perspective of an entirely different (and largely overlooked) demographic and has assisted me in understanding the meaning exercise has had upon their lives.

Bracketing Techniques

Over the course of study completion, I utilized a reflexive journal that I wrote in on a weekly basis to help address any preconceived notions I may have had in relation to my topic. This journal was most heavily used prior to data collection as it assisted in developing research awareness towards the study topic. According to Rolls and Relf (2006), "[m]aintaining a reflexive journal may raise the researcher's awareness of the topic in daily life and bring it to a level of consciousness prior to undertaking the research endeavor" (p. 87), and this is primarily the way in which I used my journal. I

spent approximately five hours reflecting on my pre-existing ideas related to exercise and exercise behaviour prior to collecting any data. When data generation started, I dedicated one hour each week to writing out any preliminary thoughts I had with respect to the study process, how it was being carried out, as well as reflecting on incoming data that had been completed for the week. The reflexive journal was also used upon completing certain milestones of the study. Such milestones included the completion of all data analysis for the journal entries, completion of the first interview, and following the completion of all the interviews. I felt it was important to mark these particular milestones so that I could take the necessary time to effectively reflect on each major section of the study and internally reflect on how things were progressing.

My reflexive journal was used during my analysis to help produce the highest quality findings possible. I used Braun and Clarke's (2006) six-step approach to conducting a thematic analysis to guide my interpretation and analysis, so I made a point of writing out each of these steps in my reflexive journal as I completed them, allowing me to refer back to each step as I completed my final analysis. I also recorded any preliminary themes in this journal, in order to remind myself of my thought processes as these themes evolved and changed over time.

Rolls and Relf (2006) also suggested that practicing your interview guide with an outside source is an effective method of bracketing. I practiced conducting my interview guide with three different family members, including my mother and father, and also my brother. Generally, this practice runthrough consisted of me reading my interview guide to each of them and them responding with how they would answer these questions. I chose my mother and father to first practice interviewing because they both fall within the age range of my study participants. I should mention that they did not meet the other criteria for my study, in that they did not make a resolution to exercise and they both are fairly active on a consistent basis. I spent the most time going over my interview guide with my father

because he was also completing a qualitative doctoral thesis during my time of study. This helped me practice how to effectively deliver the questions in the presence of another qualitative researcher. He was able to provide brief feedback on how he felt I was conducting the interview. This practice was also helpful in ensuring I did not subconsciously bring in any of my own preconceived ideas related to exercise and exercise behaviour. I also practiced with my brother, who is a teacher's college student and former health sciences and undergraduate student. I felt his background knowledge related well to my study topic, and that he could provide insight with respect to the specific line of questioning and its relevance to my topic. Practicing my interview guide was useful in familiarizing myself with how to deliver the questions. I did not make any changes to the content of my interview guide after completing these practice interviews.

Recruitment Strategy

Upon receiving ethics approval from the Wilfrid Laurier University Research Ethics board, I began recruitment by posting flyers [Appendix A] in and around various recreational facilities in a city located in Southwestern Ontario. I also met with two different gym business owners to get more information about potentially recruiting participants who met all the eligibility criteria from their respective centers. The recruitment flyers and these meetings were not successful in recruiting any participants. After the failure of this approach, I decided to utilize social media to reach my population of interest. I posted a personal message as well as my study's recruitment flyer, on the Facebook pages of various online neighbourhood community groups [Appendix B]. I posted the same message on my own personal Facebook page [Appendix C] informing my online friends of the study information. The use of social media ended up being successful, and all 16 participants were recruited through this method.

Sampling

There were three pre-defined inclusion criteria that had to be met by all participants in order to be deemed eligible for study involvement: 1) all participants had to be a middle-aged adult (between the ages of 44 and 64 years); 2) all participants had to have made a New Year's resolution to exercise in the year 2020; and 3) all participants had to have been inactive for a span of at least 6 months prior to making this resolution. I was looking for participants who had met these study criteria, but I also wanted a diverse sample so that I could look at a breadth of different exercise-related experiences. I wanted my sampling methods to reflect these two points, and therefore decided to utilize criterion sampling and heterogeneous sampling upon recruitment. Criterion sampling refers to recruiting participants that meet pre-defined criteria deemed to be important by the researcher (Patton, 2002). Heterogeneous sampling refers to the purposeful selection of participants who have different characteristics or experiences that could allow for a better understanding of the research phenomenon at hand (Patton, 2002). Both these types of sampling fall under the broader umbrella of purposive sampling, "[p]urposive sampling, also known as judgmental, selective or subjective sampling, reflects a group of sampling techniques that rely on the judgment of the researcher when it comes to selecting the units that are to be studied" (Sharma, 2017, p. 751). Criterion sampling ended up being a successful approach in recruiting participants who met the pre-defined criteria. However, recruiting an ample number of participants was a difficult process, and I did not have a large pool of participants by which I could actively select certain people based on unique characteristics or experiences. The limited number of participants meant that heterogenous sampling was a difficult process to actively carry out, and all participants were accepted for study involvement as long as they met the pre-defined criteria listed.

Participants

This study consisted of 16 middle-aged adults between the ages of 44 and 61 years. Of these 16 participants, there were 12 females and 4 males. All participants involved in the study met the predefined study criteria. A summary of demographic characteristics (see Table 1) can be seen below. I wanted to collect a diverse sample of participants for this study in order to explore various perspectives and experiences pertaining to exercise. While the final sample of participants was diverse in some areas, it was homogeneous in others. My sample adequately reflected the desired age range (from 44 to 64 years), with different ages being represented across this age spectrum. The actual age range was 44 to 61 years, with the average being 54 years of age. The sample was homogeneous with respect to ethnicity and gender representation. Pseudonyms were used for all study participants as a means to ensure confidentiality.

The majority of participants were in the workforce in some capacity. Cynthia, Faye and Kendra did not answer the question related to employment in the questionnaire because they felt none of the available responses reflected their current employment status. Specifically, these three participants stated that they work from home and are frequently involved in their communities and caring for family members, and they did not feel any of the available responses from the background questionnaire reflected their current employment experience.

Participants in this study were well-educated, as everyone had attained some sort of postsecondary education. Ten participants were married or in a common-law relationship. There were two married couples who completed this study together (Will and Molly; Lance and Kendra). The remaining six participants were divorced, separated or widowed. For the two married couples who completed this study together, they completed all forms of data collection individually.

Table 1
Summary of Participants' Demographic Characteristics

<u>Participant</u>	Age	<u>Ethnicity</u>	<u>Gender</u>	Education Attained	Employment Status	<u>Marital Status</u>	<u>Current</u> <u>Health</u> <u>Status</u>	Duration of Inactivity Prior to Making Resolution
Jane	48	European	Female	Trade Certificate /College Diploma	Part-Time	Married/ Common-law	Good	20 months
Beth	56	Canadian	Female	University Degree	Retired	Married/ Common-law	Good	6 months
Cynthia	50	European	Female	University Degree	N/A	Widowed	Fair	10 years
Diane	49	European	Female	University Degree	Full-Time	Divorced	Poor	5 years
Ellie	60	European	Female	University Degree	Part-Time	Married/ Common-law	Good	"years"
Faye	55	European	Female	Trade Certificate /College Diploma	N/A	Divorced	Fair	1 year
Georgia	61	European	Female	Trade Certificate /College Diploma	Full-Time	Married/ Common-law	Good	"years"
Hannah	53	European	Female	University Degree	Part-Time	Married/ Common-law	Good	5 years
Abigail	59	European	Female	Trade Certificate /College Diploma	Full-Time	Separated	Good	16 months
Jenny	52	European	Female	University Degree	Full-Time	Divorced	Good	1 year
Kendra	58	European	Female	University Degree	N/A	Married/ Common-law	Good	20 months
Lance	57	European	Male	University Degree	Full-Time	Married/ Common-law	Good	5-7 years
Molly	44	European	Female	Master's Degree	Full-Time	Married/ Common-law	Good	6 years
Will	49	European	Male	Trade Certificate /College Diploma	Full-Time	Married/ Common-law	Good	10 years
Ollie	57	European	Male	Trade Certificate /College Diploma	Full-Time	Divorced	Fair	9 months
Quinn	49	Asian	Male	Trade Certificate /College Diploma	Full-Time	Married/ Common-law	Fair	8-12 months

The majority of participants said that they felt their health was good, but none said it was excellent. Four individuals stated their health as being fair, while Diane described her health as being poor. Part of the study criteria was ensuring that participants viewed themselves as being inactive for a span of at least six months prior to making their resolution to exercise. The demographic questionnaire revealed that most participants were inactive for a much longer period of time than that. For the fourteen participants that provided a numerical response to this question, the calculated average of inactivity duration was approximately three and a half years. Two participants even chose not to put in a specific number, and instead simply acknowledged that they have been in a state of inactivity for "years".

There were some unique characteristics of certain participants that should be highlighted.

Cynthia was the only participant who had experienced the loss of a spouse, and this was important in interpreting her data. Hannah had previously served in the Canadian military and had spent time living abroad and in other places in Canada. I feel this is an important point to mention because these experiences living elsewhere were important to the interview and in understanding her exercise experiences. During study participation, Jenny experienced an injury (non-exercise related) prior to completing the first journal entry. This incident was mentioned in both her journal entry and during her interview, and she reported that this injury affected her exercise participation during this first week of the study.

Ethics

Ethics approval for this study was obtained through the Wilfrid Laurier University Research

Ethics Board. Upon indicating their willingness to participate in my study, participants read and signed
an informed consent letter [Appendix D] during a rapport meeting that was held at a time and place of
their convenience, prior to any data being collected. These meetings also served as an opportunity to

establish rapport with each participant and helped in informing him or her about key details related to the study process. These rapport meetings were typically 30 minutes in length.

The confidentiality of all participants and their data was assured during both the data generation and analytic process. In an effort to ensure privacy and anonymity, all identifying information was stripped from the data and participant names were replaced with pseudonyms. The only individuals who had access to the raw data were my advisor and myself. One ethics revision was required for this study because of the COVID-19 pandemic. Three of the sixteen participants who were involved in the study had to complete their semi-structured interviews by phone, due to COVID-19 guidelines pertaining to researcher-participant interactions. An ethics revision was submitted to the Wilfrid Laurier University Research Ethics Board in accordance with section 6.15 of the Tri-Council Policy Statement (TCPS2), citing that changes to study protocol can be implemented if such changes are required to eliminate an immediate risk to involved participants. The Research Ethics Board subsequently approved this revision.

Data Generation

A number of tools were used for data generation in this study. Each data collection tool is described below.

Background Questionnaire

Demographic information was generated using a background questionnaire [Appendix E] that took participants approximately 10 minutes to complete. All participants were asked to record their age, gender, highest attained education level attained and marital status. Participants were also asked to rate their current health status as excellent, good, fair or poor. The background questionnaire also included open-ended questions to gather some preliminary information about people's current exercise experiences. These questions included asking the main reasons why they personally made a resolution

to exercise, the typical length of an exercise session, and how often they had been exercising per week (prior to their recruitment). This questionnaire was completed at the rapport meetings after the completion of an informed consent form.

Godin Leisure-Time Exercise Questionnaire (GLTEQ)

The GLTEQ [Appendix F] was administered at the rapport meeting, at each journal entry time point, and prior to each interview, and was used to assess the participant's leisure activity score for the previous week and to identity the types of exercise in which they frequently engaged. In total, six GLTEQ's were completed over the course of this study. The first GLTEQ completed at the rapport meeting was immediately collected by me at the rapport meeting and put in a secure physical folder. For the ten participants who completed the online version of the weekly journal entries, a corresponding GLTEQ email attachment was sent on the same day of each entry. The commitment of these participants to this study was evident in the fact that each GLTEQ was fully completed by each participant and returned on the corresponding day. For the six participants who completed the journal entries and corresponding GLTEQ's using pencil and paper copies, they were emailed reminders the day before and on the day that each was due. These hard copy journal entries and GLTEQ's were collected when I met with participants for their semi-structured interview. Each participant at his or her scheduled interview, prior to the interview itself, completed the sixth and final GLTEQ.

The primary purpose of the six GLTEQ's was to see if participants did in fact follow through on their resolution to exercise. I felt it was important to have some sort of measure to simply evaluate participants' actual exercise levels, and the GLTEQ provided an effective means to do so. I did not conduct a thorough analysis of the GLTEQ scores themselves, due to the small number of participants and the fact that any rigorous statistical analysis would have been questionable at best. Rather this tool served as a way to better understand the context of the participants' individual journal entries and

interview responses, serving as a simple and brief (taking less than two minutes to complete) accountability measure.

Weekly Journal Entries

Participants were asked to complete a total of four weekly journal entries [Appendix G]. These journal entries were completed either online using a software platform called Qualtrics or using a pencil and paper version, if that was preferred. Ten participants chose to use the online version through Qualtrics, while six preferred pencil and paper copies. There were six questions on the journal entry that asked participants about their previous week's exercise behaviour. These questions included discussion of any barriers that may have prevented exercise in the past week, participants' perceptions towards exercise and why they felt the way that they did, and how they felt exercise had impacted their life that week in either a positive or negative way. The first journal entry was scheduled at a time of the participants choosing during the rapport meeting, after which each entry was subsequently completed one week following the previous journal entry date. Participants who completed the online journal entries using Qualtrics were sent an email reminder notification [Appendix H] both the day before and the day that a journal entry was due. Included in the second notification email was a link that led participants to the online journal entry portal. These notifications were helpful in ensuring all journal entries were completed on a timely basis. The participants who completed these online entries were very reliable, and all journal entries were completed on the appropriately scheduled day. For the six participants who preferred the pencil and paper version, email reminders were still sent the day before and on the day that a journal entry was due to remind them to fill out their hard copy of the journal entry. The completed journal entries and GLTEQ's were then collected at participants' individual semi-structured interviews.

These entries were valuable in assessing participants' ongoing exercise experiences. This form of data generation contributed to the overall study rigour because it allowed for multiple forms of data collection for addressing the research questions of interest. These entries also provided a means to assess participants' lived experiences while they were happening, exploring their perceptions towards exercise and how these may have changed during their initiatory phase of exercise participation. One closed-ended question asked participants to rate their perceptions towards exercise for the previous week as very positive, positive, neutral, negative or very negative. This question allowed me to create word clouds to assess peoples general perceptions towards exercise for each of the four weeks.

Semi-Structured Interview

Following the completion of the four weekly journal entries, participants completed a face-to-face semi-structured interview [Appendix I] to further explore and expand upon the research questions in more detail. Before beginning the interview, I explained what the process would look like and gave the opportunity for participants to ask any questions they may have had. All interviews were audio-recorded using a recording app on my iPhone. After completing the interview process, participants were briefed about what their future involvement in the study would look like and were again given the opportunity to provide any clarifying comments or ask any questions. There were 13 open-ended questions in the interview that were divided into 4 different sections. The shortest interview lasted 15 minutes and 47 seconds, while the longest interview was 33 minutes and 30 seconds. The average time it took to complete the interview was 25 minutes and 25 seconds. The interviews were completed in a setting of each participants choosing. Some interviews were completed at people's homes or place of work, while others chose to have the interviews conducted in a public space such as a local coffee shop. In the case of interviews being done in these public settings, a private booth at the corner of the

institution was reserved so that there was minimal outside distraction and noise that could affect the audio-recording.

The interview began with two opening questions. The first question asked participants to explain what specific exercise they had completed over the past week. The second question asked about what exercise they had completed over the past four weeks in general. These questions were meant to help participants get more comfortable with the interview process and to help initiate easy conversation before asking more in-depth questions pertaining to their specific exercise experiences. After these initial questions, there were two questions that asked participants about their personal definitions of exercise and whether there had been any significant gaps or lulls in their exercise participation over their lifetimes. There were various probes used to guide each of these questions, including whether their definitions of exercise had changed over time and how they typically felt during gaps in exercise participation. The third phase of the interview was rooted in understanding their specific exerciserelated experiences. In this section, there were eight questions that each had various different probes to ensure I could fully develop an understanding of their unique experiences. These questions focused on past experiences with exercise, their current feelings towards exercise, ways in which exercise had impacted their lives, their primary reasons for making a resolution to exercise, factors that may have worked against this resolution, and the role they feel exercise will have on their lives in the future. This section was the longest part of the interview. The final section of the interview was the closing question, which asked participants to encapsulate their entire exercise experience since having made their resolution into one word. After this closing question, participants were given an opportunity to ask any additional questions or comment further on any information they had provided. Eight of the sixteen participants asked about the purpose of this study and wanted to hear more information about what some of the practical implications of the results may be. After completion of the interview,

participants received a \$50.00 gift card to a location of their choice. The interview allowed for a better understanding of the research questions by providing participants with the opportunity to have an open and direct conversation about their exercise experiences since having made a resolution to exercise in the New Year. Probes were used in order to fully elucidate the essence of this lived experience.

Transcript Verification

Following completion, each interview was transcribed verbatim and sent back to participants for transcript verification. Once received, participants had two weeks to review their personal transcript. Participants were sent their individual transcripts by email, along with instructions on how to complete the verification process [Appendix J]. During my transcription and preliminary review of the transcripts, I made comments in the margins of indicated areas where further clarification was necessary. Initially, participants had been offered the option to review their transcript either online or using a pencil and paper copy, but as a result of the COVID-19 pandemic and the subsequent procedural changes limited the transcript verification process was limited to an online option only. An accompanying letter was attached to the email that advised participants to refrain from making any editorial changes to the document. Rather, participants were encouraged to include additional information or to clarify any existing data from the transcript using the document margins. Any additional information participants included or modified was considered in the final data analysis. The accompanying letter also reminded participants to refrain from editing grammar or other structural errors in the document and encouraged them to focus on providing clarification only. Transcript verification is a commonly used tool in qualitative research and has the potential to improve the accuracy of the research findings by allowing participants to ensure the transcript is in fact reflective of their particular responses, and ultimately, their lived experiences (Hagens et al., 2009). There were five participants who replied to the email and said that their transcripts looked good and did not require any

changes. They did not, however, answer any of the listed questions in the margins. Only two participants (of the sixteen total) answered the additional questions in the margins and returned their revised transcript verification. The two participants who did complete the full transcript verification process were Will and Molly, the married couple who completed this study together. The fact that the only two participants who completed the full transcript verification process was one of the married couples involved in this study may speak to the importance of accountability, in this case related to completing study rigour checks. Both Will and Molly's responses from the transcript verification process were considered when analyzing their generated data.

Member Check Process

After completion of the preliminary analysis, participants were asked to complete a member check process. This process was beneficial in allowing participants to review emergent themes and provide feedback accordingly. The primary reason for the member check process was to get participants' opinions on whether they felt the themes generated were reflective of their personal experiences. Participants were encouraged to voice their written agreement or disagreement with the themes collected and to provide additional suggestions about how they believe their responses should be thematically categorized. The COVID-19 pandemic limited the execution of the member check process as well, in that a summary of themes was sent out to participants using email only. Along with this summary of themes, participants were also asked to answer two additional questions: 1) What has your exercise behaviour been like since study involvement; and 2) How has the current COVID-19 pandemic affected this behaviour in a positive or negative way, or has it had any effect at all?

Of the sixteen participants involved in this study, five completed the member check process. Of these five, none of them commented on the themes generated, and simply stated that they felt the themes effectively captured their experiences. Four of these five participants stated that exercise had

played an important part in their lives following their participation in my study. In the case of Kendra and Lance, exercise had reportedly improved greatly in their lives and they explicitly mentioned that they were walking more consistently.

Triangulation

I completed a thorough analysis of all the data generated, while my advisor analyzed a sample of the data I deemed to be most reflective of the full dataset. Following this analysis, the independently identified themes were compared to evaluate similarities and differences. Final themes were identified following this collaborative approach to analysis, and I analyzed the remainder of the data. Fusch et al. (2015) recognized four different types of triangulation commonly used in qualitative research. This study was designed to utilize several of these different approaches. Investigator triangulation is defined as having more than one researcher exploring the phenomenon at hand (Fusch et al., 2015). Having both myself, and my advisor analyzing the data helped to achieve this form of triangulation.

Methodological triangulation is the use of multiple sources as a means of data generation for a given study (Fusch et al., 2015). This study consisted of a collection of background questionnaire data, the GLTEQ survey data and journal entries completed at multiple time points, and a face-to-face, semi-structured interview to explore the phenomenon in question. The use of multiple sources of data generation contributed to the overall study rigour and was beneficial for adequately addressing the stated research questions.

Data Treatment

Qualitative Analysis

Braun and Clarke's (2006) six-step method for analyzing qualitative data was used to guide the analysis for this project. These six steps are as follows; 1) familiarize yourself with the data; 2) generate initial codes; 3) search for themes; 4) review themes; 5) define and name themes; and 6)

produce the report. The use of this analytical approach was deemed as an effective framework for analyzing the data in my study because of its emphasis on the researcher immersing him/herself in the data generated. I felt this focus on immersion would be effective in helping to capture the meaning participants attributed to their exercise experiences. Similarly, hermeneutic phenomenology was the qualitative framework used to guide this study, and I felt that the focus on immersion as specified by Braun and Clarke (2006) would be valuable with respect to the interpretation process related to the dataset. The various data sources were compared in a cross-case manner for all participants following individual case analysis. The two primary sources of data generation were the weekly journal entries and the semi-structured interviews, and the analysis and subsequent results that were pulled from the dataset relied heavily on these two sources. The following is a detailed description of how Braun and Clarke's (2006) six steps of data analysis were applied to my data.

The first step involves familiarizing yourself with the data generated. I made it a priority to fully read through each participants' journal entries a minimum of two times before any analysis was conducted. During these preliminary read-throughs, there was no note taking or preliminary analysis of any kind. The focus of this review was to carefully read through these responses and develop some key first impressions from what they had recorded. A similar process was followed for the interviews in that each interview was listened to fully, prior to any transcription and without any associated note taking or analysis. After listening, I manually transcribed each interview verbatim rather than using transcribing software. I felt that typing out each of the transcripts myself would serve as an additional way for me to immerse myself in the data. Following this transcription process, I read through each interview again and made first impression notes on a Microsoft word document, to further familiarize myself with the data. In terms of the demographic questionnaires, I carefully read through each questionnaire and made note of particular participant characteristics that seemed significant or unique.

Especially early on in this study, I felt this was a helpful exercise in developing an understanding of who my participants were and what they had experienced. The GLTEQ data produced a simple leisure-activity score; and thus immersing myself in this data was not necessary. Rather, as each GLTEQ was completed, the leisure-activity score for each participant was recorded in an Excel document and edited continuously over the course of data generation. For both the transcript verification and member check process, I once again read through participants' responses fully before integrating this data into the rest of the findings. After this read-through, I used the additional comments from these processes to help shape the data, so it was fully reflective of participants' responses in their entirety.

The second step of analysis discussed by Braun and Clarke is to generate initial codes. I only engaged in this process of code generation for the journal entries and semi-structured interviews. The demographic questionnaire was useful in providing context for understanding people's responses, but no specific codes were derived from this questionnaire. Similarly, the GLTEQ's were in place primarily as a means to ensure participants were in fact following through on their resolution to exercise. The leisure-activity scores generated from these GLTEQ's were also helpful in providing some context for participants' responses during analysis, but they did not generate any specific codes. For both the journal entries and the semi-structured interviews, codes were generated using an online analytical software program called NVivo. Using this software allowed me to highlight key sections of these data sources and easily sort them into initial codes. I created an individual code set from both the journal entries and the interviews. I then combined these two code sets to create a general code set that was reflective of the data generated from both of these sources. These codes were then manually written on a giant Bristol board, in order to provide a larger visual representation of the codes collected. I found this larger visual representation helpful in the generation and organization of study themes.

The third step discussed by Braun and Clarke (2006) is to begin the search for themes. For this step I used my Bristol board and drew lines connecting the various codes that I felt connected to each other. In this way, I was translating connecting codes into broader themes. In this step, I had to take a step back and look at this data in a broader sense. I continuously kept in mind that my themes generated were meant to address my study purpose and research questions. Part of this process of combining codes was highlighting ones that were particularly important in addressing my research questions. I also had to remove codes that were not as common or relevant across participants. One way that I addressed the issue of ensuring the themes generated were reflective across the entire dataset was keeping themes that were found to be 'universal truths.' This term was meant to represent those themes that were nearly universally expressed by all participants in some capacity or another. This was an iterative process of wading through the data and referring across tools and from participant to participant, and shaping the themes derived from these codes was a detailed and time-consuming task.

Building off of this search for themes was a thorough review of the themes that were ultimately generated. The first step in this process involved reading over each theme and seeing if it held a relationship of any sort to other generated themes. This review process is what led to the pictorial representation showing the common trajectory that exercise seemed to have over the life of middle-aged adults. Similarly, some themes had to be removed because they were not supported across the entire dataset. Part of this review process involved working closely with my advisor, who frequently provided guidance as to how to best represent the themes in an effective and concise manner that is reflective of high-quality, qualitative research. This involved numerous revisions, as well as input from my advisor's own findings after she reviewed a sample of the data. This review of the themes was also revisited following the return of participants' member check responses. These responses also allowed

participants to consider two additional questions that were incorporated into the final revisions of the themes generated. The continuous back and forth of the generated themes over the course of the study, and across various tools, was further reflective of this iterative approach to data analysis and interpretation.

The fifth step in Braun and Clarke's (2006) guide for conducting a thematic analysis was to define and name the themes. A particular problem I had with this step was figuring out the best way to label these themes in a way that was best reflective of a qualitative research lens. I had an initial tendency to present these themes in a highly quantitative nature, and therefore had to work closely with my advisor to appropriately label these themes in a way that was reflective of my study's research design and the narratives of my participants. Wherever possible, I used NVivo quotes as my theme and subtheme labels, as these were directly derived from my participants themselves. This use of NVivo quotes supported my phenomenological framework, in that these theme and subtheme labels attempted to capture the essence of what participants were trying to convey.

The final step taken in line with Braun and Clarke's (2006) guide to conducting a thematic analysis was to produce the final report. The goal in this step was to produce a report that clearly explained the research study in full while also provided a detailed description of each theme in ample detail. I incorporated as much evidence as possible from the generated data in an effort to clearly convey the analysis and interpretation of all my findings. I also worked closely with my advisor who frequently provided detailed feedback, in order to ensure that the report was clear and concise, and representative of high-quality work. Part of producing the report meant going beyond just describing my phenomenon of interest, but also providing a well-supported argument as to why these findings were important.

I want to reiterate that these six steps were not followed in a linear fashion. Rather, the analysis and interpretation for this study reflected the previously described iterative process, with which I would frequently jump back and forth between steps as the study progressed over time. Srivastava and Hopwood (2009) described analysis in qualitative research as being a dynamic process, "[i]n short, rather than being an objectivist application of analysis procedures, the process is highly reflexive" (p. 77). Thus, even though I followed a six-step process to guide my analysis, the analytic findings were generated based on a jumping back and forth between these steps. Such an approach is more congruous with qualitative research and was necessary to shape the themes into reflecting the findings as truthfully as possible.

It is also important to mention that I engaged in other forms of analysis that fell outside of this more traditional form of thematic analysis. I felt it was important to provide some visual representations of my data, in order to interest the reader and to provide a sense of aesthetical merit that contributes to study resonance, a key criteria of establishing trustworthiness in qualitative research according to Tracy (2010). To this end, I used word clouds that were designed using my textual data and NVivo software. As part of each journal entry, participants were asked to characterize their exercise experiences for the past week as very positive, positive, neutral, negative or very negative. Word clouds were then designed using these responses, allowing me to visually represent the participants' data for each week of my study. A summative word cloud was also designed, and this combined all of these weekly responses into one larger, cumulative word cloud. As part of each journal entry, participants were also asked to use one word to summarize their exercise experience for the previous week. These responses were also taken and made into a word cloud. I felt that these word clouds provided a unique and creative way to represent these findings. Other studies have utilized word clouds as a means to present qualitative data. One such study used word clouds to assess nurses'

responses when asked about leadership challenges at their place of work (Sellars et al., 2018). Another study used word clouds to present older adults' subjective well-being (Douma et al., 2017). When looking at the effectiveness of word clouds, McNaught and Lam (2010) found that word clouds can be used as an effective supplementary tool to assist in educational research. The research suggests that word clouds can be used to present qualitative data in an effective manner, and I felt that this visual form of data analysis provided a creative way to present my study findings.

I also wanted to use a creative way to express the general trajectory of exercise across the lifespan for middle-aged adults. There was a common pattern in the dataset that showed that exercise was an important part of life in childhood and youth but became less important in young adulthood, due to other areas of life overshadowing it. Upon reaching middle age, there seemed to be an increased desire to become more active, and the majority of participants saw exercise as being a more important part of their life in the future. These four life stages (childhood/youth, transition into young adulthood, young adulthood and middle-aged adulthood) were pictorially represented by the four seasons. Specifically, there were objects in each picture meant to symbolize what participants perceived their exercise behaviour to be like in each life stage, as well as objects that symbolized perceived barriers they experienced at each stage. I felt this pictorial representation allowed for a creative understanding of this common trajectory described by most participants.

Trustworthiness and Credibility

Anney (2014) defines trustworthiness in qualitative research as, "...a methodological accuracy and adequacy of the research inquiry. Each research approach employs different evaluation criteria to ensure the rigour of the inquiry" (p. 1). In this sense, trustworthiness is a means of assessing the overall quality of the qualitative research conducted. Tracy (2010) describes eight criteria that she believes serve as key markers for conducting high quality, qualitative research. These criteria include: studying

a worthy topic; providing rich rigour; sincerity; credibility; resonance; significant contribution; the study being ethically sound and meaningful coherence. I will be outlining each of these criteria and will then subsequently explain how I feel my study met each of these markers.

A worthy topic is described as being, "...relevant, timely, significant, interesting or evocative" (Tracy, 2010, p. 840). My literature review led me to the conclusion that it is well established why people choose not to exercise, however a notable gap exists in the exercise and behaviour change literature in terms of studies that ask people why they choose to exercise. Herein lay the inspiration for my study of "flipping the exercise narrative", and thus the gap in the literature that my study was aimed at addressing. The fundamental goal of this work was to provide participants with a forum through which to describe their personal exercise-related experiences, making a unique contribution to the existing literature. Similarly, I felt that the unique idea of recruiting participants who had recently made a New Year's resolution to exercise allowed for a timely investigation of the role of exercise during a time of behaviour transition. This is a topic that I have not yet seen in the qualitative behaviour change and exercise literature, to date. I also felt that my study was investigating a largely overlooked population that was in need of study. During my literature review pertaining to exercise and behaviour change, I found numerous qualitative research papers that focused on children, youth and older adults, but studies investigating middle-aged adults seemed to be far less common. It is for all these reasons that I believed my study would address a worthy topic that provided a unique contribution to the existing literature in the area.

The second criterion Tracy (2010) discusses is rich rigour. This refers to having rich descriptions and explanations that allow for a full understanding of the research questions at hand. In essence, rich rigour is concerned with whether or not the data generated reflects an ample amount of time and effort on the part of the researcher, while conducting the project. As the primary researcher, I am confident in

the data that was generated throughout the course of my study. Each participant completed a demographic questionnaire, four journal entries, six GLTEQ's, a semi-structured interview, and a transcript verification and member check process. There was an abundance of data collected for each participant. From this data key words, phrases and feelings were captured to fully reflect their experiences. I think examples of this rich data can be seen throughout the analysis, and the quotes provide the necessary support to justify the themes that were derived from these participants' narratives throughout the study.

The third criteria pertaining to conducting high-quality, qualitative research is sincerity. Sincerity simply refers to the research being conducted in an honest and transparent fashion (Tracy, 2010). One of the primary ways I practiced sincerity in my study was through the use of my reflexive study journal. This tool was helpful in addressing my preconceived ideas and inclinations towards my study topic. My reflexive journal was a way for me to be completely transparent about my process.

Practicing my interview ahead of time with non-participants was another step taken to ensure that it was administered in a way that did not skew participants to respond in any particular way. I can also personally attest to the fact that I have been completely transparent about how the study was conducted. I have clearly addressed both the strengths and limitations of my study in honest detail.

Credibility can be defined as, "...the trustworthiness, verisimilitude and plausibility of the research findings" (Tracy, 2010, p. 842). Achieving credibility in qualitative research can be attained in numerous different ways, including through the process of triangulation. There were two types of triangulation that were part of my study procedure. The first was data triangulation. I had numerous methods of data collection, with the two primary methods being journal entries and the semi-structured interviews. Similarly, investigator triangulation was also carried out, in that I analyzed the full dataset while my advisor analyzed a portion of it. Tracy (2010) describes triangulation as being an effective

method to enhance the credibility of a study. Another such way to enhance the credibility of one's study is through member reflections, that is, an opportunity for participants to reflect on the analyzed data and provide comments and points of clarification. I performed member checks as part of my study, and each participant was given the opportunity to complete this member check to have an active role in how the data was shaped. I feel it is also important to mention that I worked closely with my advisor when going through the analysis of my data and in writing up my qualitative report. Having multiple voices involved in a qualitative study is referred to as multivocality and similarly contributes to study credibility (Tracy, 2010).

The fifth criterion discussed by Tracy (2010) is resonance. This term essentially refers to how effectively a research study can encapsulate and interest an audience. I feel it is harder to comment on this criterion in particular, because it is more concerned with what readers feel they get out of the study. However, one such way to attain resonance in research is through aesthetic merit, "[a] key path to resonance and impact is aesthetic merit, meaning that the text is presented in a beautiful, evocative and artistic way" (Tracy, 2010, p. 845). I feel that my study explained the results in ways that were both effective and creative. The use of word clouds provided a visual representation to show participants' perceptions towards exercise. Similarly, I utilized a pictorial representation to explain the general trajectory of middle-aged adults' exercise experience over their lifetime. I felt that these approaches went beyond the traditional text based analysis and provided the opportunity for readers to learn about participants and their experiences in a more creative fashion.

Another key marker for conducting high-quality research pertains to whether the research has made a significant contribution. I would argue that my research is practically significant, in that it assists in providing potential solutions for the growing inactivity problem facing Canadians today. As discussed in the literature review, inactivity in Canada poses a huge problem from both a health and

fiscal perspective. Similarly, our aging population means that more people may be experiencing ill health in the coming years. Exercise has been demonstrated to be an effective means to mitigate some of these detrimental effects, and my study looked at middle-aged adults in particular, who actively took steps to exercise. The results of this study could be useful in shedding light on the growing inactivity problem among this population, because it actively involves middle-aged adults in the discussion. Similarly, I would argue that my research gives rise to additional questions that could be explored in the future, including the role of exercise on identity in middle-aged adults and a longitudinal examination of adults' long-term New Year's resolution adherence.

Tracey (2010) describes research being conducted in an ethical manner as the seventh criteria for conducting high quality qualitative research. In my study, I worked hard to develop rapport with participants so that they felt comfortable and trusted as participants of this research project. One way I did this was by setting up a rapport meeting where participants had the opportunity to ask any questions or comments related to the study. I also made it a priority to ensure that participants felt as though they got something out of this research project too, and I emphasized that their safety and comfort took top priority above all else. The Wilfrid Laurier Research Ethics Board also reviewed my study and found it to be ethically sound. Participants were told full study details at their rapport meetings and were also given letters of informed consent that outlined the study procedure in full. All research data was stored on a password-protected computer, while hard copy data was kept in a locked room at all times. There was one instance where an ethics revision was required due to the COVID-19 pandemic. Specifically, three of the sixteen participants had to complete their interviews over the phone, rather than in person. They were clearly told about the change and consented to completing their interview in this fashion under the circumstances. An ethics revision based on this change was submitted to the Wilfrid Laurier Research Ethics Board and was found to be ethically sound.

The eighth and final measure of high-quality qualitative research is described as meaningful coherence. Tracy (2010) describes this as a study that achieves its purpose and uses methods and techniques that properly reflect their purpose and research questions. A top priority for both me and my advisor was to ensure that my research purpose and questions aligned with my phenomenological framework and my data collection tools. The study did not advance until I got approval from my advisor that all of these study components were in alignment. Similarly, I routinely sent documents to my thesis advisory committee to get continuous insight on my literature review and general study procedure. This was done to ensure that my study was moving forward in the right direction, without any major setbacks. I do believe that the results generated from this study clearly and concisely answered the research questions and the underlying purpose of this study as a whole.

Through an understanding of these eight criteria, I believe that my research was conducted in an effective and high-quality manner. The most important point I feel worth mentioning pertains to my own personal efforts that were put forth into the project. I consistently tried to do things the right way, and put in a great amount of time and effort working alongside my advisor to produce as high quality a project as possible. While there are inevitably limitations to my study, the focus of this study was to always do things in the most systematic and diligent way possible, maintaining an accurate audit trail throughout.

Chapter 4: Findings

The overarching essence that emerged from my findings was the concept that each participant's relationship with exercise was highly complex, and there were both similarities and differences across people's individual exercise experiences. Many participants expressed that when they were growing up, exercise was all about having fun. In particular, they described how getting outside and running around was ingrained in their everyday life. Generally, this association with exercise as being fun shifted as people reached their early twenties, and then exercise became viewed more as a chore, as they became were mired down by other responsibilities such as caregiving and career stress. One participant described exercise as being "something you have to work at", during young adulthood. When specifically discussing exercise after making their resolution to exercise, they described how there were times when it simply did not fit into the day, and others when it provided an opportunity to spend quality time with oneself, but none of these participants stated that their relationship with exercise had been consistently steady or easy. The overwhelming majority of my participants described their New Year's resolution to exercise as a positive experience, citing that it was a means for them to achieve better health and improved quality of life, while affording them more time to spend with family now and in the future. Exercise was also perceived by many as being fundamentally important in how they viewed themselves and was described as providing them with a means to recapture both a sense of lost purpose and identity. Additionally, they articulated their beliefs surrounding exercise's larger role, since having made their New Year's resolutions.

Upon listening to their stories and interpreting their responses, I chose to express the commonalities among their experiences by depicting this shared journey on a continuum from past to future. The themes were constructed using all participant data from a demographic questionnaire, six GLTEQ's, four journal entries, one semi-structured interview, as well as a transcript verification and

member check processes. Six main themes emerged following my data analysis, including: (1) "We never even called it exercise, cuz it was natural": Insights on exercise from childhood and youth; (2) "They're winning, I'm losing": Insights from a time when exercise was not the priority; (3) My exercise mindset: General perceptions towards exercise; (4) "It's about finding myself again": Exercise and its perceived influence on identity; (5) "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise; and lastly, (6) Putting my best foot forward: Insights and intents regarding future exercise.

I have discussed each of these themes here as part of a continuum from past to future, conveying the evolution of meaning surrounding exercise for these men and women over the course of their lifetimes. The first theme addresses their descriptions of what exercise meant for them during their childhood and youth. The second highlights some of the reasons they stopped exercising initially, which was commonly described as occurring just prior to and during their early twenties. The third theme touches upon their current feelings towards exercise, since having made their New Year's resolution. The fourth expresses how exercise has affected their life and identity now, as a middle-aged adult. The fifth theme looks at the importance of health and its perceived role in current exercise behaviours, and the sixth theme addresses how participants believe exercise will affect their future lives, moving forward. Ultimately, these findings provide a unique perspective to contribute to the existing literature on middle-aged adults and exercise, and the influence that establishing a New Year's resolution may have upon this experience. I thought it would be prudent to clearly highlight how these different themes answer each of the study research questions and this distillation of participants' responses can be found as an appendix below [Appendix K].

Theme 1 – "We never even called it exercise, 'cuz it was natural": Insights on exercise from childhood and youth

This theme is focused on how exercise was overwhelmingly described during childhood and youth. A common sentiment that was conveyed by the participants was that exercise was simply part of "what you did" when you were younger. It was ingrained in everyday life and the activities that these men and women participated in as children, particularly in reference to sports. Every participant (with the exception of one, who will be discussed as a negative case) shared this point of view. Perhaps the most interesting facet of this theme was that participants described not even using the term exercise, when they were growing up. In my estimation, this was arguably the most notable finding uncovered from my participants; and Faye's narrative conveys this sentiment clearly.

So we never even called it exercise, 'cuz it was natural. We were always outside playing. We were always running up and down the street. We were running and jumping and that sort of thing. I was never involved in organized sport but I kept active just by being a kid and running. - **Faye**, **55**

I feel this may be one of the most significant quotes generated from all of my participants, because it illustrates what I believe to be a common fallacy with respect to exercise as experienced during childhood and youth. Faye expressed that exercise in and of itself was not a term that existed for her while growing up and many of my other participants expressed this sentiment as well. She stated that this term did not hold any meaning for kids because it was naturally rooted in what they did. As Faye mentioned, she kept active simply by "being a kid." This is a powerful sentiment because I think it demonstrates that exercise has the potential to be viewed as something that is fun and simply "part of being". Perhaps adopting a mindset more in-line with how children see exercise could be a simple, yet impactful approach to promoting more consistent exercise for the middle-aged adult population. However, we are left with the question: how do we foster a similar mindset among middle-aged adults? And if we are successful in doing so, could this be the answer to lifelong exercise?

There were three subthemes that evolved from the responses generated for this theme, including:

(i) Exercise?! – The term didn't even exist when we were kids!; (ii) How my childhood environment encouraged "natural" activity; and (iii) The significance of sport and activity. The first subtheme describes how exercise was perceived by participants as something you "just did" and how the actual term "exercise" was meaningless for them as children. The second subtheme describes how participants' different home environments positively encouraged them to engage in consistent activity. The third subtheme describes how being active was associated with enjoyment for people when they were younger, and that this enjoyment primarily manifested itself through sport and activity-based exercise.

(i) Exercise?! – The term didn't even exist when we were kids!:

The men and women in my study described how exercise in and of itself was perceived to be a natural part of life growing up, and that the term "exercise" was not even part of their vernacular as children. Exercise was not perceived as something you consciously did; it was merely something that was ingrained in their everyday life. Diane discussed this sentiment with respect to her childhood experience, focusing particularly on those activities that she participated in outdoors.

As a child, absolutely. We had a swing set in my backyard that I would be on the monkey bars all the time. I was a really, really skinny kid and I enjoyed all types of activity from rollerskating to biking to doing things, ya know, at the park and, always active. As a teenager, always active ya know? Teenagers never sit down. They're always on the go. They don't care about sleep. — **Diane, 49**

For Diane, the free-spirited nature of childhood was emphasized. Diane's perceptions of activity was similar to Faye's with respect to this childlike view that exercise was not considered to be a formal, structured activity. Of particular note is her comment at the end of the quote where she is discussing young people as always being "on the go" and not caring about sleep. I interpreted this to

mean that exercise was not perceived to be a structured activity at this time; it was merely perceived as something you did during this phase of life.

Ollie is a 57-year old male whom I felt had a highly unique perspective for this subtheme. He highlighted the influence of generational differences.

Well, exercise was – as a child, it was, I mean different generation, right? We were always active. Like I mean, we didn't have cell phones and stuff like that. – *Ollie*, 57

Ollie, also explicitly mentioned that exercise was not even something he thought of until he went to college.

I probably didn't start thinking about exercise until after college, when all of a sudden, I started gaining weight and things like that and you're going oh, okay. You have to put work into this. — Ollie, 57

Ollie's point shared the same sentiment as Faye and Diane, but instead of focusing on what exercise was when he was younger, he described how his perceptions towards exercise changed once he entered college. Ollie described how exercise was simply not something he consciously thought of when he was a child, yet upon entering college, he started to view it as more of a chore, and a less natural part of his life. This "aha" moment for Ollie was similar to that of Beth, where she said she did not even think about exercise in her youth.

I loved it. I love it. Like it's not anything I would – I didn't even think about it. – **Beth**, **56**

The key message from this subtheme that exercise in and of itself was not a term that existed during childhood for these participants; it was simply a way of life. They shared a common perception that exercise was a natural part of their life during their childhood and youth.

(ii) How my childhood environment encouraged "natural" activity

The second subtheme explained how the environment in which these participants grew up were fundamentally important in influencing their "natural" activity of childhood and youth. Both Cynthia

and Abigail were raised on farms, so exercise was very much a part of their daily chores. In fact, they described how most of their childhood was spent working on the farm, helping to contribute to their family unit.

As a child I grew up on a farm, so I worked a lot on the farm. So it was walking all day long, lifting things, teenage years as well got more physical through that. — Cynthia, 50

All of my public school years and half of my high school years, the day after school was out until the day before school was in. I went to my old order cousins and I worked on the farm. Dipping the bails and doing the, bringing in the sheaves and all that kinda stuff. But that, that is an exercise also but it's not an extra exercise because you always figure that you work for the eight hours and anything outside of the eight hours is called exercise. — Abigail, 59

In the case of Cynthia and Abigail, their natural approach to exercise as children was rooted in their home environment. The importance of this environment with respect to exercise growing up was also seen in the case of Jenny, who grew up in Northern Ontario.

Well, as a family we used to go hiking in like, - 'cuz I'm from Northern Ontario. We used to go hiking a lot. We'd spend like the entire day. - **Jenny**, **52**

These cases clearly illustrated how the opportunity to exercise manifested itself naturally in their youth, but also revealed just how fundamental the family unit was in determining how exercise was ultimately experienced while growing up. In the case of Jenny, growing up in Northern Ontario meant that her family had access to different hiking trails in combination with parents who encouraged family hikes and getting outside.

Alternatively, Jane cited running as being equated with a greater sense of independence and freedom while growing up, in part because she grew up in a small town where it was not easy to get around. For Jane, running provided her with the necessary transportation to get where she wanted to go.

Well I knew I liked exercising. I liked running a lot because I think exercise gave me a sense of freedom, right? I think it equated freedom and also independence. – Jane, 48

This natural inclination towards exercise through one's context in childhood may have also been partly due to the friendships one kept in their youth, Georgia stated:

Well ya know, you'd just be out playing with your friends or playing hide-n-seek running around, road hockey, stuff like that. – **Georgia, 61**

This subtheme explored the fact that participants' home environments and families influenced their natural approach towards exercise. The particular context described was different for different participants. In the case of Cynthia and Abigail, growing up on a farm meant that there was a natural inclination towards exercise because they had chores around the house that encouraged activity. Similarly, the fact that Jenny grew up in Northern Ontario meant that she was situated close to hiking trails that her and her family frequently used. In the case of Jane, it was not the geographical landscape of her hometown that encouraged activity, but rather the "small-town" feel meant that exercise was equated with overall independence and freedom. Finally, Georgia touched on the importance of friends growing up, and how this had a positive influence on her activity. This subtheme highlighted the various characteristics of participants' home environments growing up that encouraged them to be active and that "naturally" incorporated exercise as part of their everyday life.

(iii) The significance of sport and activity

This third subtheme described how exercise (even though they did not define it as such in their youth) was something participants genuinely enjoyed doing, and they attributed this enjoyment to the fact that it was largely sport and activity-based. Sport and activity-based exercise opportunities were also described as being more plentiful in youth, when compared to adulthood. This was especially apparent when talking to Hannah:

I started playing baseball. And then the thing — what I found about baseball was I was actually really good at it, and I'm a very, well I was, I haven't played in a long time. But I was a very powerful hitter, so I used to play in the mixed leagues and I would get home runs, which was, to me it was such a rush. I just loved it. Like that crack of the bat I just absolutely loved it. — **Hannah, 53**

Hannah was previously in the Canadian military, so she had always been active as part of her job, but there was a unique element of excitement when she described engaging in sports in her youth, especially when it came to playing baseball. From her vivid expressions, "the crack of the bat", "the rush" that she got, the raw enjoyment she experienced when playing baseball in her youth was clearly evident. Later in the interview, I asked her about how she felt about exercise currently, and she mentioned that she wished she could get back to the level she used to be at, where she fully enjoyed it.

I just feel — it's unfortunate that I've let myself get so much out of shape, because now I have to build up again, right? I think that's my biggest challenge is making sure I make the time and building up to the level where I want to be so I can fully enjoy it, because right now I enjoy it when I do it, but it's still a bit of a challenge right, so. — **Hannah, 53**

When examining Hannah's quote, in comparison to her previous quote, it would appear that she currently viewed exercise as more of a chore, rather than something that was done for pure enjoyment as described in her youth. Even though she still described enjoyable elements to participating, she recognized the challenges in actually doing it in the first place, and this challenge was not evident in her descriptions when discussing sport and exercise in her youth.

Both Kendra and Lance also discussed their experiences of exercise growing up and how it related to sport.

Well I didn't go out for runs or anything like that, I didn't do that. I was involved in activities at school and stuff, so it was just the daily activity stuff. It wasn't a regimented, go and workout for an hour. – **Kendra**, 58

I didn't go for a jog. I didn't go for a walk. What exercise was, was I mean, I played hockey. I played baseball, I played tennis. I went to the cottage and would swim, had the pool, and exercise was I would say more sport, more golf and walking as opposed to riding [in a golf cart] and all that kinda stuff. – Lance, 57

These quotes reveal the emphasis that was placed on sport and activity when Kendra and Lance were growing up, as both had ample opportunity to engage in these activities through school and through

their extracurricular life. Ellie also cited the importance of sport growing up, specifically mentioning that different seasons provided different sporting opportunities.

I played baseball in the summers. We boated, but in a different way. We fished for summer holidays. We hiked. I had a friend whose brothers were competitive kayakers, so we were always trailing along kayaking and canoeing and whatever else. We swam all the time. We rode our bikes everywhere [laughs]. We played as a group. We were lucky enough to grow up in a neighbourhood that we had like a green space that was a crescent, and then the main street, and there was a green space within that crescent. So we had year-round rink, hockey rink, ice rink in the wintertime in that space. The summertime it was used for everybody and anybody to play baseball or football or just play tag or run around; and that's what we did. We played tag and ran around in the neighbourhood because we just could. Walked to school everyday or rode bikes. We'd walk or ride; we didn't drive cars to school. — Ellie, 60

Ellie cited numerous different sport and activities that she played year-round during her childhood and youth. It was also evident that exercise was tied to her daily routine, especially when she discussed walking to school everyday. Quinn, too, cited sports as the primary vehicle for exercise in his youth.

I was more active younger, played tennis pretty well everyday. I was playing tennis against pros and semi-pros almost daily, so. As far as my cardio, was like crazy. I felt I was probably a little more toned then than now. — Quinn, 49

Will mentioned that he was always playing sports growing up.

So, always, growing up was always playing sports, something one or the other; baseball, soccer, hockey, um, a little bit of football, basketball, just anything. As a kid, uh, going into teens, got down to just a couple, it was baseball in the summer and hockey in the winter. — Will, 49

Much like Will, Ollie described the significance that sport had upon his life in childhood. He stated:

I probably did something physical everyday. Whether it be road hockey, I played hockey, I played soccer, I – probably every day. That's what we did, totally different than today. – Ollie, 57

This subtheme illustrated how sports and activity-based exercise was prevalent for participants when they were younger. It was common for these men and women to describe playing sports year-round, and this activity was typically associated with a sense of enjoyment and genuine desire to play. *Negative Case*

Molly was the only participant who stated that exercise was not an integral part of her childhood. When asked about her past experiences, Molly said that her family was not sporty by nature, and instead focused largely on musical pursuits.

I wasn't – growing up, I didn't do sports. My family was more musical and that kinda thing. They didn't watch hockey, they didn't do anything with sports, um, and it wasn't until really after high school. – **Molly, 44**

Exercise became more frequent after high school when she joined a gym and began playing recreational volleyball.

I was on a volleyball team for — I don't know I was probably on the volleyball team for about 10 years; and it was just like a Thursday night thing, until I had kids. So, I did do that and then I also just kinda, it was my own motivation to go to the gym. It was something to do after work and I enjoyed going to the gym because it wasn't a, it wasn't just for the workout it was social too. Like I always saw people I knew, it was enjoyable, it was like an outing where you got a workout and I felt better too, right? — Molly, 44

Unlike the other men and women in this study, Molly did not describe exercise as having been significant for her in her childhood. Molly's lived experiences did, however, support the notion of the importance of one's context in which they are raised (as described in subtheme #2). Molly described how exercise was not perceived to be a family priority when she was growing up, and her experiences ran counter to the experiences of other participants in my study.

Theme 2 - "They're winning, I'm losing": Insights from a time when exercise was not the priority

The phrase, "They're winning, I'm losing" seemed to aptly encapsulate the exercise experiences of these men and women in this study during the transitional period between childhood/youth and young adulthood, as described in their interviews. For the purposes of this study, young adulthood will be defined as including the age range of 22 to 43 years old, as this was usually the time of life that participants described exercise as drastically decreasing in frequency. The term "They're" referred to the life stressors that had begun to demand more of their attention during young adulthood, usually at the expense of exercise. A majority of the participants stated that their exercise behaviours were

fundamentally impacted when they started their families, quickly becoming less of a priority at the time. Similarly, many participants perceived their careers to have significantly impacted their exercise behaviours at this time as well. Another factor that these men and women described as being a barrier to exercise was their general lack of motivation towards engaging in exercising. However, I found that many of the participants described how accountability was closely related to this particular barrier, and this was directly related to the fact that they had made a resolution to exercise. This relationship will be further explored within this theme as well. Each of these barriers will be explored, in turn, in order to gain a better understanding of the role each was perceived to play in the exercise experiences of these participants. This was an important theme because it provided a broader context for how people experienced their resolution to exercise. The following subthemes will be explored, including: (i) The caregiving burden; (ii) The career burden; and (iii) Generally unmotivated – but can accountability help?

(i) The caregiving burden

The most commonly described reason that people stopped exercising after their more active youthful phase was due to their caregiving responsibilities. Essentially, they described having to give up their activity time to look after their kids. This decision ultimately led to a sort of "falling out" with exercise, and an inability to maintain prior activity levels. I noticed this was an issue for both the men and women alike, within my study. This was an interesting observation in light of the fact that we commonly assume young women are the primary caregivers to their families, and therefore, may be more likely to be significantly impacted by these caregiving roles. While this may be true, the results here suggested that men, too, cited caregiving responsibilities as a common barrier to exercise. Lance, who had three daughters, discussed the fact that he had to give up many of the sports he was participating in earlier in his life when he started having kids.

As I got older, it was, it became -I gave up a lot of the sports when the girls were doing things, and was more interested in what they were doing and being part of their life as opposed to mine, so I stopped a lot of stuff. Stopped playing slo-pitch, stopped doing things. - Lance, 57

I found that for Lance, and many other participants, caregiving meant a re-prioritization of needs. Generally, these men and women described putting the needs of their kids at the forefront, and thereby deprioritizing or negating their own needs. This is evident in Lance's quote, when he cited that he wanted to be part of their lives, as opposed to focusing solely on his own.

Will and Quinn also described how starting a family was the main barrier to their pursuit of exercise during young adulthood.

Getting married, starting a family though too, so time commitment. So, I didn't have as much free time on my hands. That was probably most of it. – **Will, 49**

I think just, when, ya know, family just started to get a little busier. That sorta led with responsibilities with work, as well as just family duties. — Quinn, 49

The context here is important when discussing their experiences with caregiving. Will and Quinn were both 49 years of age, and their kids were still young and living at home with them. They mentioned that in some circumstances, their ability to be active continued to be curtailed by their parenting responsibilities. Will provided a specific example:

Things come up; the kids get sick that's fine. That happens once in a while. — **Will, 49**Both Will and Quinn's quotes provide important context for understanding the factors that affected their exercise experiences since making their resolution to exercise.

There were many female participants who also cited caregiving responsibilities as being a primary reason for stopping exercise, after having been previously more active. Beth stated:

So since I had the kids, that's all sorta fallen apart, which is how we get to not doing as much as I should be doing. They've been at the house recently, but I really gave up all those activities when I had the children. So that was a long time ago, but I never got back to that level of activity. — **Beth, 56**

Beth has four sons, each of whom are involved in sport. Beth touches on the point that even though her kids are now older, they are still living at home with her and her husband. I interpreted Beth's response to mean that caring for your kids is an ongoing responsibility that never disappears, even as they get older.

Cynthia, who at age 50 had three teenage daughters of her own, expressed a similar sentiment.

After that it was kids, things that life just – things just got complicated with the kids; and then after not exercising for those two or three years, you just fell out of it, and then life got too busy. – **Cynthia**, 50

Cynthia also described having additional caregiving responsibilities beyond just her children, as she provided care for her husband who fell ill. She expressed that a majority of her adult life has been spent caring for others. Her ever-present responsibility of looking after her kids and her husband meant that she was always putting the needs of others ahead of her own, and this subsequently changed how she was experiencing exercise over the course of young adulthood.

Ellie expressed similar sentiments related to caregiving responsibilities and noted that it was when her kids started doing their own extra-curricular activities that her own participation really dropped off.

I was very busy when my kids were young because you're running after them all the time. For myself personally, exercise dropped off when the kids started doing their own activities outside of the house, because it was more driving them there and waiting for an hour or two, in a hockey rink or wherever we were. In a dance studio, hockey rink, and you're just sitting there waiting, whereas at home you would be doing something else, you wouldn't just be sitting around, you'd be busy tidying up, putting kids to bed, giving them baths, running after, taking them for a walk around the street, just making that sure that you're out there too with them. – **Ellie, 60**

Later in the interview, Ellie described how despite middle-aged adulthood being a time in life where you have more time to focus on yourself, the responsibilities of caregiving never go away.

I think that's one part of parenting that never changes, it doesn't matter what time of day, what age your children are, whenever you either are going to talk on the phone or you're going to use the washroom or there's something specific to yourself that you're going to

do, that's the exact time that someone decides that they need you to do something for them. – *Ellie*, 60

Ellie also had a similar experience to Cynthia, in that she was not only caring for her children, but she was also caring for her aging parents.

I'd say there was also lulls when I've been looking after my own parents, so the times, the ages when my kids were on their own, then my focus got switched to looking after my parents as they aged and eventually passed away. But, my dad especially, 'cuz we moved him into the house with us for the last few months of his life, so the times that he wasn't here, maybe I was a bit more active but I was spending more time physically with him and just sitting with him and keeping him company basically. — **Ellie, 60**

Ellie again highlights the idea that caregiving is an ongoing responsibility that affects how exercise is experienced in middle age. Faye, Georgia and Abigail all have multiple children, and the three of them similarly cited that starting their families meant they were constantly on the go.

You just get busy and you get doing other things and you're raising a family and you're working hard, and you just don't [exercise] if it's something you don't enjoy right. – **Georgia, 61**

You're trying to achieve to get everything done on the house, to get the meals made, to get the children bathed and dressed and combed and all that kind of stuff. – **Abigail, 59**

Faye (a mother to triplets) mentioned that she was exhausted following the birth of her kids.

After my triplets were born, yeah. After they were born I was go go go, but certainly not exercising as per se, right - going to a gym or purposely walking – 'cause I was exhausted for years [laughs]. – Faye, 55

As previously discussed with Lance, it became apparent that many of these participants described the need to reprioritize their lives after children.

It was after I had my daughter really that your life kinda shifts into, you're living for what their needs are, right? And then your needs kinda go by the wayside. – **Diane, 49**

I found that participants commonly mentioned the concept of caregiver burden as a barrier to being more active. The responsibilities of caregiving were not only described during young adulthood, when their children were young, but also described in middle-age once their children were older and

more independent. I feel it is important to mention that with each journal entry, participants were asked about some of the common barriers that got in their way of exercising for that given week and family responsibilities remained one of the most commonly reported barriers. I feel that this supplementary evidence supports Ellie's earlier quote about how being a parent is an ongoing process, and the one thing that never changes is that you are always needed.

(ii) The Career Burden

Another commonly cited reason for people stopping or otherwise being unable to continue to exercise was due to increasing career responsibilities. Both the men and women in my study described this as a significant barrier and I felt that the impact of this particular barrier was clearly evident in the depth of their responses. They provided a great deal of detail surrounding the specific aspects of their careers that they had found to be particularly limiting, and how these had influenced their exercise experiences since having made their resolutions to exercise.

Abigail was a single-mother who worked in the healthcare field as a support worker. She specifically mentioned that her job frequently limited her sleep schedule, and that it inevitably impacted her ability to exercise regularly since having made her resolution.

I know that it's very healthy for me; I know it's something that, everybody should be doing it. So I always feel good about doing it but to find the time, ya know. Like, last night I worked . . . and I was supposed to sleep from midnight to 6am, but one of the clients woke up at quarter to 3 so I had two and a half hours of sleep last night. — **Abigail, 59**

The overall tone of Abigail's interview when discussing her career seemed to be rooted in a sense of false hope; she could see the other side and wanted to get there, but remained trapped by her circumstances.

Another common concern when it came to participants' careers getting in the way of their abilities to exercise related to the actual physiological strain that their work put on their bodies. Diane

had recently started a new job, and she continually expressed how she had a tough time adjusting to the new physical demands associated with her job.

I did get that job about a week after you and I met so, what that entails is me to stand and walk for 6 hours straight. And I hadn't stood or walked for six hours straight in over five years. So just that job, in itself, was so hard on me. I came home and went right to sleep and slept all night, like; I couldn't - my body just couldn't handle it. I was in a lot of pain from that, my ankles would swell up as big as my feet, I mean it was really really hard in the beginning. It's getting a little bit easier now. — **Diane, 49**

Diane raises an interesting point in that the ability to exercise at work is certainly encouraging, but it cannot be at the expense of the body and one's general health. Diane articulated that her new job limited her ability to exercise in the manner that she had wanted, following her resolution.

Molly was also in the middle of a job transition in the New Year and she discussed the difficulty of this transition and its effects on her ability to exercise:

I've just changed jobs like I'm just in my second week in my job. So I found, if I'm thinking about stuff too much I don't wanna do anything else. Like my head's just going, and I know I should workout 'cuz I know that would clear my head, but I just don't want to, 'cuz I get caught up in my own headm, more so I find, the older I get. – **Molly**, 44

Molly and Diane both discussed how transitioning to a new job can affect one's newfound exercise in a negative way. Ellie discussed her changing job environment and the fact that some physical tasks in the past had resulted in injury. This had, however, since been replaced by a lack of movement, which was also not good.

I'm not lifting 20-pound boxes all the time, which is what aggravated my back and neck in the first place [says laughingly]. So that's going away, but it's just the stagnancy, the stagnant sitting which has been not good over the last 33 years. — **Ellie, 60**

Fortunately, Ellie's company had progressed to housing their documents online, but this also meant less movement overall in her job.

Here at work, I'm not moving much throughout the day other than when I physically get up every hour or 45 minutes and walk somewhere just because I know I have to or else my body will seize up before I leave at the end of the day. — Ellie, 60

Ellie brings up an interesting point. On one hand, we want workplaces to encourage movement, but not at the expense of one's health and safety.

Jane also expressed negative health experiences from her job, and how the pressure of working in the healthcare industry exacerbated her back injury.

I work in [medical field] and you're not supposed to be sick if you work in a healthcare field. So as much as I tried to fight it, I was – the pain got so consuming, and then I started to worry about myself. So I was creating my own vicious cycle and I've managed to break it now, since engaging in more exercise, getting out of the house. – Jane, 48

Jane raised an interesting point, with respect to the vicious cycle she was experiencing. This points to the question of whether those in the healthcare field experience additional physical duress resulting from their own health conditions, because of their professional focus of caring for the needs of others. In the case of Jane, she felt her back injury was negatively impacted by her job, and she frequently broke down in tears and got emotional throughout her interview. When asked about these strong emotions and where they come from, she stated:

Because with my job, I work with so many people that have pain, and then their pain is tied into their depression, the depression is tied into the pain, it becomes a vicious cycle; and I think my mood was starting to get affected. – **Jane**, 48

This quote from Jane raises an additional point of concern when it comes to people's careers and the impact that they may have on their health status. Specifically, Jane described how her mental health was also affected by her career, and this suggested that one's job may affect health in numerous different ways other than physical.

Beyond the direct health consequences described by the participants in relation to their careers, they also described the general stagnancy of their jobs. This stagnancy resulted from long work hours, which had an undesirable negative effect on overall exercise behaviours as well.

Well usually - well it [exercise] always has to be in the evenings 'cuz I'm at work 7 'til 5. – Will, 49

Like last week, like I would start at my desk at like 7:30 and I'd come down and get something to eat for lunch and I'd go back upstairs and then come down at like 7 and have something to eat and then go back up to work and realized like, that's really bad. — **Georgia, 61**

I'll sit at my computer from 8 in the morning, could be as late as 10, 12 at night. – **Jane**, 48

The other thing is you spend so much time on your ass in an office and that doesn't help you either. It's easy to say, here we're supposed to get up every hour and go for a little walk around the office or something but it's, when you have too much work to do you just don't do it, right. — Ollie, 57

The above quotes illustrate the stagnant nature of deskwork, and in the case of Will, these long hours limited the time available in which to exercise.

Lance, who worked as an executive, described how his job required frequent travel. Lance reported that this travel was one of the main reasons his exercise had initially slowed down in young adulthood. He also perceived this frequent travel as being a key factor in his weight gain, early on in his career.

You know I work on the road so, it [exercise] wasn't important when I first went on the road, and that's probably when my weight ballooned a little bit too. – Lance, 57

It was evident that the men and women in this study may have perceived the specific effects of their career on exercise-related behaviours differently, but that it was a commonly cited barrier. For many, the problem came down to a general lack of time and the long hours of their jobs. The point that I felt was most interesting was how in the case of Diane and Ellie, their work had gotten them moving in the past, but it was often in a dangerous and excessive manner that ended up causing them injury. I think this evidence suggests that it is necessary for workplaces to promote safe and productive activity for employees on a daily basis, but without exposing them to unnecessary injury. This common finding of career strain as being a barrier to exercise has been frequently cited in the literature, but I feel giving

participants the voice to discuss it in more depth was beneficial in uncovering the nuances of this particular experience.

(iii) Generally unmotivated – but can accountability help?

While caregiving and career responsibilities were described as the main reasons many of these men and women initially stopped exercising, it is important to note that some participants also just expressed a general lack of motivation to get started altogether and to continue exercising, once they had started. I found this point to be of interest because all participants made a New Year's resolution to exercise, so they clearly had a desire to start exercising; but what this finding implies for me is that consistently exercising regularly is not necessarily easy. This may appear to be common sense, however I feel it is important to explicitly state that even after these participants made a resolution to exercise, they still had weeks where they just were not feeling up to exercising. This subtheme will also address the observation that many participants who described a general lack of motivation to exercise, also cited that feeling a sense of accountability to exercise could be beneficial in offsetting this general lack of motivation. This highlights a potential point of interest in how to get people to exercise, even when they are not motivated to do so. This subtheme also supports my initial contention or overarching essence that one of the key overall findings for this data was the complexity of this exercise relationship for all these participants. In light of this complexity, it is interesting that many participants mentioned accountability as potentially offsetting this lack of motivation, which highlights a potential solution for motivating people in the future. In saying this, however, it is also important to note that this study does not address how to instill this sense of accountability, and that could be an area of research that warrants further exploration in the future.

Married couple, Molly and Will, discussed difficulty with continuing their resolution to exercise. Will specifically touched on the fact that he needed activity to be scheduled and structured into his routine.

Just me being lazy, that's it. If I don't have something scheduled and structured and it's already, say Thursday night I have to go and play hockey between 7 and 8. That's set, that's carved in stone, I have to be there.

Will's wife, Molly, mentioned a similar point:

Like if I had an appointment to - like with a trainer or something like, that would probably be more motivating. I would do it, whether I was motivated or not I would still do it because I have that commitment that I made. - **Molly**

Will and Molly both expressed similar thoughts with respect to making excuses and dragging their heels when it came to exercise. However, they mentioned the importance they placed on accountability, and how they would be more motivated if they had scheduled appointments they could not shirk.

Molly and Will touched upon an interesting dynamic related to exercise and motivation. It became clear that a key barrier for both was that they sometimes just did not feel like exercising, and they did not know how to overcome this feeling. The solution to this problem could be, however, in their discussion of accountability as a means of overcoming this lack of motivation. They described how their resolution to exercise helped to improve their sense of accountability towards each other or via the scheduling of an appointment to exercise. Another married couple involved in the study, Kendra and Will, shared near identical thoughts, in that they also cited having a general lack of motivation to exercise, but recognized that accountability can be helpful in combatting this. Lance stated:

Well [this research study] was probably the number one motivator so I didn't look like a putz, but close behind was making sure it was like, ya know that can be a number one motivator and that's fine, but the end result is, hey I'm doing more and it's making me want to do more and, so that's a good thing. – **Lance, 57**

Kendra mentioned a similar point in that this research, and the subsequent accountability that came along with it, was a motivating factor for her to continue to follow through on her own resolution.

I figured if I offered to be a part of [the research], then it would be another motivating factor for me to do it, because I wouldn't wanna disappoint you [referring to me as the researcher] in terms of saying I would help you. I didn't wanna disappoint myself in terms of saying I made a resolution to be healthier, but mostly, I didn't wanna fill in the sheets at the end of the week that said I didn't do anything. So accountability is everything, right? – **Kendra, 58**

These participants described how being held accountable for their decision of whether or not to exercise was perceived to be a motivating factor, helping them to overcome their general lack of motivation they occasionally felt towards exercise. Their New Year's resolution to exercise helped them feel a sense of accountability in this respect. This, however, could also be perceived as a limitation to this study, as it may have artificially enhanced their general sense of accountability in the short-term. Despite this, it does appear to demonstrate that motivation and accountability may go hand-in-hand, at least in reference to the participants in my study. This would be an interesting relationship to further explore in greater depth.

Faye, who had mentioned in her interview that she often felt bad about herself for not exercising enough, held a similar viewpoint with respect to motivation and accountability, as she also mentioned that accountability with respect to this study was beneficial in helping her overcome a lack of motivation towards exercise.

And then of course, New Year's is always a good time to restart, and like every other gym and [person] that tries to get in there in January and falls off the wagon by February. But yeah, this was interesting, this [points to research folder] was kinda a new way to keep me accountable. – Faye, 55

While Georgia did not cite accountability as being an important motivating factor for her, she did describe herself as lacking in motivation to exercise. Firstly, she mentioned that her laziness was one of the key factors stopping her from exercising. Additionally, at the end of her interview she referred to

herself as a "lazy sloth who is trying to get better". Similar to Kendra's point, Georgia also mentioned that she knew what she needed to do, but did not always follow through with it as often as she would like.

You know what, it's something that I know that I should do, I know it would be good for me, it's just getting the motivation to get up and do it. I would rather read. I would rather make a meal for a couple hundred people than do something like that. — **Georgia, 61**

In her statement, Georgia is echoing the sentiment that a general lack of motivation is often cited as a common barrier for adults, when it comes to exercising. Will similarly referred to himself as being "lazy", and I think these comments raise an interesting point, when it comes to motivation. Perhaps the focus should not be on criticizing what people *have not* accomplished, but rather focus on what *they have* accomplished.

Ollie, too, touched on accountability during his interview. Specifically, he mentioned that he did not have a social network that held him accountable. In fact, his friends often pushed him towards engaging in unhealthy behaviours, as opposed to healthy ones.

There's been times where a buddy will send me a text and say, "Hey we're going out for a beer after work", so it's that choice of hey, do you go for a beer or do you go to the gym? Sometimes, the beer wins. Next thing you know it's a few beers and it's chicken wings, and that would be one of the main things. — Ollie, 57

From the responses above it is clear that a general lack of motivation remains a common barrier to exercise for the men and women in this study. Despite knowing that they should exercise, there are times when it still remains difficult to do so consistently. I found this to be a particularly interesting point, and I feel that these responses could be used to better understand how to overcome this lack of motivation. Part of my goal for this study was to understand how to get people over their general disinterest in exercise, and some participants expressed that increased accountability could be a way to offset this perceived lack of motivation.

Theme 3 – My exercise mindset: General perceptions towards exercise

After perusing the data gathered from participants, I found there to be commonalities with respect to how the participants approached and thought about exercise, after having made their resolutions to exercise. These commonalities represent each of the subthemes for this theme: (i) "It [exercise] always makes me feel good"; (ii) "I would rather participate in sport, absolutely"; and (iii) "I think exercise can be anything you want it to be." These subthemes illustrate how the participants generally had positive perceptions towards exercise. They further emphasized the fact that they felt most positive towards sport-based exercise because it was perceived to be more enjoyable than other types of physical activities. They also described the different ways in which they defined exercise, but reiterated the fact that their individual definitions were perceived to be consistent over time. Each of these subthemes relates to how people mentally approach exercise, and for this reason I felt the most impactful way to present the data would be to group these subthemes into one broader theme. After reviewing the literature, I came across a quote from Meier (2010) that says, "[a] mindset is a mental attitude. It shapes your actions and your thoughts, as well as how you perceive and respond to events" (p. 179). Reading this quote was the inspiration behind naming this theme, My exercise mindset, because the underlying theme aimed to show the commonalities with respect to how middle-aged adults mentally approached exercise after having made their resolutions to exercise. For the first subtheme, additional supplementary journal data will be presented in the form of word clouds, to further illustrate how people generally had positive attributions towards exercise.

(i) "It [exercise]always makes me feel good"

This subtheme illustrated the participants' overwhelmingly positive feelings towards exercise, in large part because exercise was an activity that made them feel good about themselves. It should be noted that there is indeed a difference between simply feeling good about exercise versus actually

getting up and engaging in consistent exercise on a regular basis. This point highlights the importance of having participants complete weekly GLTEQ's during their involvement in the study, as these scores provided context when interpreting their results. Participants' GLTEQ scores [see Appendix L] showed that the majority of participants remained at least somewhat active during their involvement in the study, and I would argue that their positive feelings towards exercise likely influenced their exercise adherence. Jenny stated:

It always makes me feel good. It makes me want to go back and do more. And ya know, I'm always, I always just feel like I have more energy, and I've been really tired, like after a week or so of not going, like doing anything at all, ya know I was just exhausted. — **Jenny,** 52

Jenny also raised an interesting point here when she mentioned that exercise gave her more energy.

Cynthia expressed a similar point, and associated exercise with a feeling of empowerment.

Because, I, I have lost weight, everything is getting easier. My body doesn't ache as much. I know that physically, I'll be able to do more and I know how I felt when I did exercise and I really want that feeling of empowerment back, yeah. — Cynthia, 50

For both Jenny and Cynthia, there were positive views towards exercise based on how they felt after completing their exercise session. In the case of Jenny, she felt more energized and encouraged after exercising, whereas Cynthia felt less achy and more motivated to attain a sense of empowerment associated with exercise. Others shared similar positive views when asked about their current feelings towards exercise. Hannah stated:

I've just really, I've always loved being physically active and I really have a hard time sitting still. I have to be doing something all the time, so I think exercising is an outlet as well right, so, yeah. — **Hannah, 53**

I think Hannah highlights the importance of positive feelings towards exercise and utilizing these feelings to actively change exercise behaviours. Hannah appeared to have flipped the script in relation to how exercise was perceived during young adulthood, seeing exercise as a mode of escape rather than something that gets in the way of other areas of life. Instead of seeing exercise as a barrier,

Hannah perceived her participation in exercise as a privilege, and this could possibly explain why she loved being active to the extent that she did. Hannah's point demonstrated how one can change their perceptions of exercise to be something more positive.

I found that Faye was a bit more reticent when discussing exercise, but she did express similar positive perceptions towards exercise.

They [her perceptions towards exercise] are positive. They're positive and they're always in the back of my mind. It's just getting there. - **Faye**, **55**

Abigail was more expressive about her love for exercising, and how being active outside, in particular, made her happy.

Good, good. I enjoy walking, I enjoy – or anything, and I think you can do the mowing the lawn, the shovelling, the whatever - I love it, I'm out there I'm smiling, I'm humming, I'm singing, ya know. I'm enjoying it and so it's, it's all good. – **Abigail, 59**

Abigail suggested feeling similarly to Hannah, in that she had discovered ways to view typical exercise-related activities as being more enjoyable.

Jane's positive perceptions towards exercise seemed to be rooted in the fact that it was a mood booster.

Well now I look forward to being active because it has such a good impact on my mood; right, because when you sit in the house and work and sit day after day, you're not out socializing which I think is also part of exercising is being around others that are doing the same thing. Now I'm looking forward to getting out more and doing more and maintaining, because right now I'm on a positive upswing right, so. – Jane

These quotes illustrate how these participants generally had positive perceptions towards exercise after making their resolution to exercise. The question then becomes, however, where do these positive perceptions come from and what specifically about exercise makes people hold such positive views? The above responses reflect the overarching essence that the participants' responses varied, depending on the individual. In the case of Jenny and Cynthia, their positive feelings tended to be based on how exercise made them feel afterwards. For Hannah, her positive perceptions seemed to be

rooted in the fact that exercise served as an outlet, and relieved her of the stress she was feeling in other areas of her life. Abigail seemed to cite outside activities as being the most enjoyable for her, and this suggested that outdoor pursuits might be better in promoting positive perceptions towards exercise for some individuals. In the case of Jane, she seemed to view exercise as being important in keeping her in a "positive upswing", and in this sense, exercise may be viewed as a therapeutic type of activity that is important in keeping people in a positive state of mind. In essence, I would argue that the reasons for such positive perceptions vary depending on the individual and promoting positive perceptions towards exercise and encouraging long-term exercise adherence must first begin by understanding people's individual needs and life circumstances.

I feel it is important to separately discuss people's journal entry data related to how participants felt towards exercise, as this served as important supplementary evidence that showed how participants in my study held predominantly positive feelings towards exercise. As part of each journal entry, participants were asked on a weekly basis to choose one of five options (very positive, positive, neutral, negative or very negative) for how they perceived exercise for that given week. The word cloud below [Figure 1] provides a textual representation showing participants' general perceptions towards exercise during the four-week journal entry time period. It is clearly illustrated that "positive" responses were the most common across the four-week time frame. The second most common response was "neutral." While it would appear that people felt either positive towards exercise or fairly indifferent towards it, I find it interesting to note that the majority did not report any negative feelings towards exercise. Participants were clearly told that there was no right answer to any of these questions and to answer all these questions honestly. In saying this, it is still important to acknowledge that given the nature of the study, some participants may have inevitably answered in a way that they felt would please me as the researcher, and this could be viewed as a study limitation. "Very positive" perceptions

became more prevalent during weeks three and four, and this may suggest that for this sample of people, perceptions towards exercise may have improved over the four-week period. In line with this trend, negative perceptions decreased between weeks two and three, but became more prevalent during week four. The only "very negative" response also came during week four. Individual word clouds were generated to show people's responses for each week [Appendix M].

Figure 1

Summative Word Cloud showing how participants perceived exercise during the 4-week journal entry time period.



Note. This word cloud was generated using NVivo based on participants' journal entry data.

Figure 2

Summative Word Cloud showing participants one-word responses when asked to summarize their feelings towards exercise each week



Note. This word cloud was generated using NVivo based on participants' journal entry data.

As part of each journal entry, participants were also asked to use one word to describe their feelings towards exercise over the past week. As opposed to the above question pertaining to people's perceptual responses that were limited to five possible options, this question was completely openended and there was no limit to the words they could choose. A subsequent word cloud [Figure 2] showing these one-word responses across the four-week journal entry time frame was generated. I reviewed and characterized each word as being either positive or negative in nature Of the 63 responses, I interpreted 37 of them to be positive and 26 to be negative. The most commonly recorded words were "optimistic", "good" and "satisfied", all of which were perceived as positive. The most commonly reported negative responses were "disappointed" and "guilty." This summative word cloud suggested that when participants were given the option to describe their exercise experience in one word they generally used positive terms. A full table showing these one-word responses on a week-toweek basis can be seen in Appendix N. The purpose of the above word clouds was to present participants perceptual responses towards exercise in a unique way that allowed for a more visual representation. I would argue that participants' responses towards exercise seemed to be overwhelmingly positive, but whether or not such perceptions towards exercise have changed since having made their resolution remains unclear, and future research aimed specifically at exploring this question may be warranted.

(ii) "I would rather participate in sport, absolutely"

The topic of sport and activity-based exercise was important when exploring the participants' past experiences with exercise growing up, but it also figured prominently in this subtheme surrounding the participants' exercise mindset. The difference here pertains to the fact that this theme related to how middle-aged adults approached exercise following their New Year's resolution to

exercise and the concept of sport was found to be important with respect to participants' mindsets. In this way, I believe that participants in this study were coming full circle in their thinking, and were now looking at sporting opportunities available to them in adulthood, which are different than those that were available to them as children. I found that most participants cited sport and activity-based exercise as being more enjoyable than traditional exercise. By traditional exercise, I am referring to workouts such as lifting weights, running on a treadmill, or engaging in some sort of program where the primary goal is to improve one's fitness as opposed to winning a game. For many, it was not necessarily their pure love of sport driving these sentiments, but rather it was their perceived disdain towards the stereotypical gym setting. This was particularly true for Georgia:

And I don't like to do it by myself. But I don't want to do it. I don't wanna go to a gym and stand in front of a bunch of skinny-mini's either. I hate it [said emphatically]. Like I paid for a gym for three years and went like four times, yeah. — **Georgia, 61**

Kendra expressed a similar disdain towards the traditional gym setting:

Some people really thrive at the gym, I just hate it. [Her daughter] said to me "Will you come to the gym with me mum?" and I was like, "Ugh, I hate that, no. Love you, but I'm not going to the gym with ya". – **Kendra, 58**

Kendra also expressed the importance of sport throughout her interview, commonly citing tennis in particular. When describing tennis, it did not even seem like she perceived it as an exercise necessarily, but rather something social and fun that made her feel good about herself.

Playing tennis with other people, it's social; it's fun when you make a good shot you get encouraged. You're riding your bike by yourself, nobody encourages you if you go up a hill, ya know. Sometimes the encouragement that you get from your opponents and your teammate, pretty good, ya know? – **Kendra, 58**

Both Kendra and Georgia touched on another aspect of sport that should be mentioned, and that is the importance of social connectivity. Georgia specifically said, "I don't like to do it by myself" while Kendra discussed that part of the attraction with tennis was the social aspect when interacting with other players. Sports provided a means for people to interact with others while exercising, and for

many participants this was an important piece as to why sports-based exercise was preferred. Ellie touched on the fact that her husband had owned a bowling lane for a long time and how this was both a source of enjoyment for her and an important part of her social life.

Oh, it's very important, because it's things that I enjoyed; they're all things I enjoy. And especially going back to bowling, that's something that I really want to do 'cuz we did that our whole adult life. I did that while the kids were small, once a week but it wasn't the same competitiveness of what I used to do when we were bowling four times a week, and we were doing, we were in tournaments at least once a month. So, in that sense it was, ya know, enjoyable as an adult sport and as a social, a social thing too. — **Ellie, 60**

Faye expressed a similar sentiment related to social connectivity and sport, as ballroom dancing was a way for her and her partner to connect with each other and have fun at the same time.

We were looking for something that would get us active, and something that would also, um, something that we both enjoyed, but also, I took a class, um, or I went to a support group for brain injury, and they said that dancing was the most amazing thing for your brain, um, in keeping you good as you age. So, we thought it was a good combination. – Faye, 55

Beth stated her preference for sport and activity-based exercise:

So I like to exercise, but I still like it activity-based. I'm really not good at going to the gym and lifting weights. It's not going to happen. I keep joining the gym; I just deposit my money every month. — **Beth**, **56**

Ollie was another participant who continuously mentioned the importance that sport had on his life during his interview. Ollie worked in the sports field and played recreational league hockey in the winter and golf in the summer. I found it interesting to hear Ollie talk about sports because he would often compare this experience to more typical gym-based exercises, and this contrast made it clear that sports-based exercise was his preferred way to stay active.

I would rather participate in sport absolutely, ya know. Golf and hockey that's pretty much it these days but yeah. It's, when you don't have to think about actually doing it. The weights, I don't enjoy lifting weights. I don't enjoy like the crunches, I don't enjoy any of that stuff. I don't enjoy working out. I enjoy playing sports, but I don't enjoy working out. — Ollie, 57

It was clear throughout Ollie's interview that sports were not only a fundamental part of how he remained active, but it was also his livelihood as a sports reporter. It was interesting to note how his perceptions changed depending on whether he was engaging in traditional exercise (i.e, "weights and crunches") versus sport-based exercise, which he clearly viewed as being more favourable. In his interview, Will went so far as to rank both sports-based exercise and typical strength training exercise:

Yeah. It's definitely, oh yeah, no I don't like – working out is – working out's a zero, sports a ten. So if it's involved in a sport then it's way better that way. – **Will, 49**

Both Lance and Jenny also said that they viewed sport more favourably and that they believed sport-based exercise was going to be more important in their exercise journey moving forward. For Jenny in particular she enjoyed boxing and I could sense her excitement when she was discussing obtaining future coaching certification and making it a more important part of her life moving forward.

I like the boxing because it's individual and I mean it's not like I'm, I'm not competitive, because, obviously because of my age. So, ya know, I go and I participate in the class. I would like to get my level 2 coaching, even, ya know, in the next year or so if that's possible. Um, just to have it, just because it's interesting, ya know. — Jenny, 52

Lance stated:

I never mastered any sport but I was sorta – I don't wanna say above average – but I could hold my own at most things. I'm not a great golfer but I'm okay. I'm not gonna ever win Wimbledon, but I can give people a good game; and I can lose every time. I don't care, win or lose. And I got away from that; I got away from certain things. I mean it's even made me think about that. I want to get back into things. I got buddies who have joined golf courses and a couple play Pickleball or tennis or this and that. There are things that I know I can do now. Intentional exercise I can get back into the sport aspect of it as opposed to just make it to a treadmill and I think that's gonna be my positive outtake of the whole thing is, I want to get back into doing that. – Lance, 57

It was commonly reported by participants that they consistently engaged in sport when they were growing up and that they also had more opportunity to do it through school-based sports and activities. I think it is important to recognize that the adults in this study never seemed to lose this interest in sport, as the majority of them still described enjoying sport far more than stereotypical exercise. What

I believe happened was that their opportunity to participate in sport was limited when they left school, and the only exercise that they felt they had available to them was gym-based. In saying this, there were examples in my own study of participants that competed in adult recreational leagues as a means to exercise and saw success in doing so. Both Will and Ollie played adult recreational league hockey, and Kendra and Lance were avid tennis players at their local tennis club. Providing these types of opportunities for adults may be important in encouraging activity in middle age. In saying this, the disdain for the gym setting may suggest that there remains a sense of insecurity when it comes to exercising in middle-aged adulthood, so setting up these leagues in a way that promotes safety and comfort should be a priority.

Negative Cases

While it is clear that the majority of adults from this study perceived sports more favourably than traditional exercise, there were two participants who held differing opinions. For instance, Molly stated:

I don't, I don't play any sport. – Molly, 44

When asked what kind of exercise she typically did instead, Molly replied:

Go to the gym for a workout or a hike type of thing. I do like that like in the Spring or Summer when it's not too hot. I do like finding a path or a trail or something that we haven't been to and go for a walk. – **Molly, 44**

Clearly, sport was not her preferred method of exercise, and it is possible that this sentiment may be due to the fact that sport was not an important part of Molly's life growing up. It should be duly noted that Molly did not necessarily express any particular affinity towards gym-based workouts or hiking outside, rather she merely stated that she preferred these activities to sports-based exercise, which was contrary to most others in the study.

Diane was more direct in her expression of love for her preferred mode of exercise:

I love weightlifting, and as soon as I weightlift I'm like back into it, ya know? That's the thing that gets me into that zone, way more than cardio. – **Diane, 49**

Diane was the only participant in the study who expressed a clear and open admiration for a more traditional form of exercise such as weightlifting. This again highlights the importance of individual preferences, and that even though the majority of participants reported that they preferred sport-based exercises, for Molly and Diane, this was simply not the case.

(iii) "I think exercise can be anything you want it to be."

As previously mentioned, the broader theme here entitled *My exercise mindset* is meant to encapsulate how participants in this study mentally approached exercise since making their resolution to exercise. Part of this theme involved looking at how people defined exercise, and I found there to be three main categories that summarized these definitions: physiological markers, purposeful time and a desire for movement and enjoyment. What I found to be particularly striking when looking at the participants' definitions of exercise was how consistent they were. Of the 16 participants, none of them expressed any change in their actual definition of exercise over time. They described how their behaviours had certainly changed over the years, but the ways in which they defined exercise had not. This finding alludes to the possibility that the way in which someone defines exercise may not necessarily be congruent with his or her actual exercise behaviours. This highlights the importance of understanding adults' individual exercise definitions as a means to potentially promote positive exercise behaviour. This emphasis on understanding adults' individual definitions to exercise is the inspiration for this theme, as stated by Will.

Well I think exercise can be anything you want it to be. If you do something that you enjoy, obviously makes it easier for you to do, and if it gets your heart going and works muscle groups, not just one but multiple, to keep yourself in decent health, um, that's what exercise is. It can be anything, you can make anything an exercise if you wanted to right? – Will. 49

By far, the most common way in which these participants defined exercise was in relation to physiological markers. It was often found that things such as increasing your heart rate, breaking a sweat and activating certain muscle groups were rooted in the participants' definitions.

Well for me, it would have to incorporate literally breaking a sweat. For me, exercise, um, is, increasing my heart rate. It is, uh, pushing my, ya know, like doing squats or ya know bicep curls, triceps extensions, whatever; to a point that I'm fatiguing, I guess. I don't consider housework exercise. I don't break a sweat doing that. Gardening, yeah that's a different story. If you're squatting, I do find that if I'm out gardening, yeah definitely that's a different form of ya know, and yeah, a 20- minute walk at a casual pace, yeah that's not exercise. — Cynthia, 50

Something that gets your heart rate up. – Georgia, 61

Well, yeah, I like to, ya know at least break out in a sweat. Yeah, so ya know, I try to push it, I check my breathing, ya know, make sure that it's not, so I'm not, exercising anaerobically. So, as long as I'm, ya know pushing myself a little bit and ya know, I check my heart rate, and then, um, make sure I'm sweating. — Jenny, 52

I would define exercise as working up a sweat, getting your heart rate up, and either cardio or weights. – **Molly, 44**

Probably anything that gets the heart moving, and anything that requires you to use your muscles. Simple as that I guess. – Ollie, 57

I do not find this result to be all that surprising, because I think that exercise and how it is often framed usually has an overwhelming focus on the physiological benefits it provides. Other definitions were more multi-faceted in nature:

I think that we pigeonhole the word exercise into something structured, right? So when we say, are you exercising, people think of the gym first and foremost which is what I would probably think of, are you exercising? I'm not putting into the equation if I'm walking around or any of that. I'm thinking, am I lifting weights, am I purposefully putting aside time for cardio? But I think now, um, I think of it as purposeful, outdoor movement right. So now I think of it as like thru-hikes or section hikes or rock climbing, things like that, on top of weightlifting and treadmill work. — **Diane, 49**

Diane raises an interesting point here when talking about pigeonholing exercise. I think this ties in with the above definitions related to physiological definitions of exercise. Traditionally, exercise seems to be narrowly defined as something that benefits you physiologically, and Diane touches on the point that exercise can vary depending on the person. For her, it is not limited to just weight training and running, but rather it is also about getting outside and participating in purposeful movement, even if it is not intense movement. Will also mentioned that enjoyment is important, and other participants also believed that exercise should be defined based on whether or not you find it enjoyable.

Fun. Because if it's not fun I'm not doing it. I'm not doing it. I'm not, ya know? - Beth, 56

I think exercise is any type of activity that you enjoy, that doesn't put your health at risk. – Jane, 48

The third most common way that people defined exercise related to putting aside purposeful time. It is in this sense that people often look at exercise as being intentional.

To me, exercise is going beyond your normal, everyday jobs and trying to get your heartbeat going faster for more than 15 minutes. – **Abigail, 59**

Well I think we don't take into consideration all the movements that we do throughout the day just in brushing our teeth and getting dressed and all those things; but you can injure yourself just doing silly things like that. As far as exercise, I don't consider that exercise in the term exercise, in the definition of it, but we know that all those movements throughout a whole day they do, they do, ya know, conform to being exercise of some sort because your body's moving, and that's what, to me, exercise is more, um, uh, movement that is, is, um, determined or that you've thought about, that you're consciously doing, for a purpose. The rest of it is just living. — Ellie, 60

It's a regimented thing that's focused, at a certain time that you do certain things for a certain result. – **Kendra**, 58

How I personally define exercise is dedicating time, separate and apart from day-to-day tasks that is separate. – Lance, 57

Just taking time apart from your normal routine to generally work on your, your fitness, yeah. I would say that. – Quinn, 49

What I find to be most interesting about the above definitions is that they remained remarkably consistent. I asked each person whether they felt their definition towards exercise had changed over time, and all but one stated that it had not changed. I think this consistency provides an important

point, because it shows that if you can find a type of exercise that fits people's definition, it may serve valuable in promoting long-term exercise adherence.

Theme 4 - "It's about finding myself again": Exercise and its perceived influence on identity

The fourth theme to evolve from participants' experiences with respect to their resolution to exercise was that exercise was perceived to be linked to identity in middle-aged adulthood. The men and women described a sense of excitement after they had made their resolution to exercise. This excitement seemed to be rooted in their descriptions of how they felt they had previously lost their sense of self somewhere along the way, and they now finally felt they had the time to recapture that lost sense of identity through exercise. For others, they did not necessarily describe their identity as being rooted in recapturing who they once were, but rather using exercise as a means to feel better about themselves. Some participants described their exercise experiences as making them feel like they had accomplished something, and this helped to improve their overall self-esteem and self-confidence.

It is important to note that there were two participants in this study who were at the opposite end of the spectrum when it came to exercise and identity. These two participants described extreme feelings of guilt, stemming from the fact that they felt they were not exercising enough. The rhetoric in these cases is important, because the intensity of their feelings was notable in their word choices. They appeared to describe a genuine anger and deep-rooted shame with respect to how they viewed themselves. Acknowledging these views, which are counter to the majority view, is an important piece of this narrative puzzle and these perspectives need to be understood alongside the rest of the data. As such, this theme was divided into two subthemes, describing the participants' experiences in more detail. These subthemes included: (i) "This is MY time"; and (ii) "I'm accomplishing something.

(i) "This is MY time."

This subtheme is grounded in the perspective of those participants who felt as though they had spent the past 20 or so years solely focusing on the needs of others, and now felt they finally had time to refocus on themselves. Cynthia's story keenly reflected this belief. Cynthia described having grown up on a farm, and how the necessity of exercise had been instilled in her from an early age. After having had kids and caring for her husband who was ill, she described having spent the greater part of her adult life putting the needs of her family ahead of her own. During her interview, Cynthia was asked to describe what exercise meant to her in her past life stages, including childhood, youth and young adulthood. Cynthia perceived having spent her years as a young and early middle-aged adult primarily caring for the needs of others at the expense of herself, and this led to a sense of frustration for the majority of her adult life.

Everyone says after 40 that life comes together, but it seems to be a shitty year or shitty decade. It's not a good time. — Cynthia, 50

It is again important to note that this is reflective of Cynthia's past experiences. Now at 50 years of age, she described being at a point in her life where she felt as though she had earned some time to focus on herself, and exercise seemed to be her chosen means to achieve that. I use the term "earned" here because I interpreted Cynthia's responses as essentially meaning that exercise provided her with a sense of liberation, after having been caring for others for such a long period of time. After having put the needs of others ahead of her own for so long, she was finally at a place where she felt she could deservedly focus on herself again. When asked about how she felt exercise currently fit into the rest of her life, she described it as being a means to recapture who she felt she once was.

It's about finding myself again, I looked in the mirror and I didn't recognize myself, and exercise will have a huge part in being able to look in the mirror and say, 'There you are', ya know? It's not about fighting aging. It's not about that for me. It's not about trying to stop myself from getting older. It's just about, when you give so much to other people and you forget about yourself, you fall into a really, it's not so much a dark place

but it's a very lonely world. And, I think for me, exercise and focusing on myself, all that is about empowerment; and that's what I want to teach myself right now and my children as well, like, ya know, to put yourself first. — **Cynthia, 50**

Cynthia consistently expressed across her interview that exercise for her was rooted in a desire to spend quality time focusing on her own personal needs, after having prioritized the needs of others for years. I noted and admired the tenacity with which she expressed this particular point, and this was even shown by her actions during the interview. Throughout her interview Cynthia's phone was ringing constantly, and on one such occasion she checked her phone and said that it was her daughter. She chose not to answer it and instead was focused on completing our interview. I interpreted her response as being almost symbolic in a way of her choosing to focus on herself and her own needs, during this stage of her life.

Jane expressed similar sentiments with respect to her exercise experiences. Jane is a 48-year old female who recently had back surgery after suffering from chronic back pain for most of her adult life. This meant she was unable to exercise for a prolonged period of time following her surgery. Jane described herself as being a "high functioning person", and this injury and the subsequent inability to exercise after having been active for most of her adult life made her feel as though she had lost her sense of purpose in life.

I was so active before that basically everything just came to a halt right? When I, just before the surgery when I hurt my back, so I was kinda at a standstill, and I kinda felt like I'd lost my sense of purpose." – Jane, 48

Jane further expressed that exercise was one of the fundamental reasons she had recaptured who she once was prior to having her surgery. She became very emotional when discussing the impact exercise had had upon her identity; often having to take breaks to wipe away tears while talking and apologizing for the amount of emotion she was showing.

The pain got so consuming, and then I started to worry about myself, so I was creating my own vicious cycle and I've managed to break it now, since engaging in more exercise,

getting out of the house [said while teary]. Sorry, you have no idea how happy I am, these are tears of joy [said emotionally while laughing]. But I was getting worried because I thought I would never get better, so, it's given me hope that I didn't see, because I was starting to worry. — Jane, 48

The perceived importance of exercise in helping Jane get back to who she once was, was clearly evident in the emotion she displayed throughout the interview. She referred to her genuine sense of relief and hope while she spoke of her exercise journey. I interpreted this last point she made with respect to hope as being particularly impactful for her. The idea that exercise had not only brought her out of a dark period in her life, but that it was now also giving her hope towards a brighter future was a powerful concept that is worth noting. Jane also expressed a desire to get back to how she was, prior to her injury.

I wanted to increase my view of myself, my function, because I've always been a super high functioning person [said emotionally]. But exercising and getting out in society kinda helped me reconnect with who I am. – Jane, 48

Kendra, 58, also experienced a severe health concern that had limited her ability to exercise in middle age. Kendra is a breast cancer survivor, and she discussed the concept of grief in relation to cancer and her exercise experience. Specifically, Kendra expressed a keen interest in resuming tennis, but described her cancer and treatment as having usurped her ability to play the game she loved.

For me it's very sad because it [cancer] has cut me completely out of tennis because I didn't think that - well, I knew that I couldn't [play tennis] because of all the muscles involved in tennis. So yeah, so I had to kinda go through that process. So that's almost like a grieving process right? So you grieve having cancer, you grieve the treatment, you grieve the surgery, then you grieve the fact that you can't do the sport that you finally are getting good at, ya know? – **Kendra, 58**

I believe that Kendra's experience with respect to grief is a powerful example of the role exercise may play within the lives and perceived identities of these participants. Losing one's ability to exercise (for whatever reason) seemed to be closely aligned or interpreted as losing a piece of themselves in the process, and this was particularly apparent in the case of Kendra and how her cancer had impacted her

ability to return to tennis. Kendra also described how she had three daughters and was currently caring for her own mother. She echoed similar sentiments as Cynthia and Jane, recognizing that exercise is something you can do to focus on yourself and to take time to put your own needs at the forefront.

It [exercise] does make me recognize that I need to take time for me. That's an important thing as far as I'm concerned. You can't put everybody else always ahead of yourself. You have to look after you. So if you're committed to make these changes and do this new resolution then you're saying to yourself. 'Okay I care about myself enough that I need to do this because it's good for me'. — **Kendra**, 58

Ellie also expressed this perceived importance of taking time for herself. She stated:

It feels empowering, that's how it feels. It just feels like, nobody's gonna get in the way. There's not gonna be the distractions because I'm not going to allow the distractions, it's going to be my way or the highway so, go away. Don't bother me. I'm not answering the phone, I'm not answering the texts. — **Ellie, 60**

Ellie further elaborated upon this point later in her interview.

It is my time. It's my time and it's, if everybody wants me to be around then they better leave me alone or else I won' be [laughs], because the results of not doing it are obvious, you die. When you stop moving, you die. – **Ellie, 60**

When reflecting upon her personal exercise journey, Hannah stated:

Before my son was born, definitely. Like it was me and exercise, there was definitely a strong identity there. – **Hannah**, 53

I feel this quote illustrates how her exercise identity was lost after other responsibilities came to the forefront. Hannah went on to provide an anecdotal example of how difficult it was to take a step back and realize that now was her time to focus on herself, and how difficult it was for her to ultimately make this decision.

I went to the pool...because I'm doing aquacise and it's a 45-minute class. And I'm standing there and enjoying myself, but not able to relax. So the first like, the first three classes I was looking at the clock every five minutes, and I'm like, I'm enjoying this but I need to get going, I've got other things to do and I've got this and I've got that, and I really – oh when is this going to be over? I'm enjoying it but when is it going to be over? But then at some point in time I got there and I'm like, okay I am enjoying it, and there's no reason for me to want it to be over right now, right? Like I need to slow myself down and actually learn to enjoy the moments, which ya know, it took probably I would say, I'm

not sure that I'm there yet to be honest, but those first few classes I definitely wasn't. And then what I did is after the aquacise class they actually opened the whirlpool for 15 minutes for people who did the classes, and I made myself stay even though I had things to do I'm like, ya know what? No. I'm going to stay, close my eyes and enjoy this. So it's a really – I guess, it's [a] very strange mindset when you're so used to doing something all the time and almost being on the clock, and to step back and say, 'No this is my "me" time and I'm going to take it', right? So, it was very interesting actually, psychologically." – **Hannah, 53**

I think that both Ellie and Hannah's narratives illustrate the difficulty of this decision to put themselves first after always having put themselves last, and I perceived this decision to be a demonstration of their strength. It appeared as if they were taking a stand, feeling empowered to take time for themselves and acknowledging that exercise served as the means for them to attain this sense of empowerment. Even as I was interviewing them, I noticed by their choice of words the importance they placed on exercise with respect to quality time. Ellie in particular was adamant in saying this was "her" time, and that other people needed to leave her alone and finally give her the time to take better care of herself. I believe this is an important finding with respect to exercise because it goes far beyond a superficial understanding of the meaning exercise may have upon one's life. Exercise was being described as much more than just a means towards good health. It was apparently the means towards taking a stand and demanding quality time to focus on oneself.

(ii) "I'm accomplishing something"

A second subtheme with respect to the broader theme of finding oneself related to feelings of accomplishment. Many participants described deriving a sense of accomplishment and pride from their participation in exercise. This was also perceived as coinciding with a stronger sense of function and additionally served as a motivating factor or facilitator towards further exercise participation in the future. Kendra's husband Lance was someone who similarly exemplified this feeling of accomplishment with respect to his exercise experiences. Lance was a 57-year old man who had a busy career. He expressed feelings of frustration stemming from his job and all the time he would spend on the road. He

also described the stress of frequent stays in hotels and his disdain for hotel workout rooms. Since having made his resolution, he described having challenged himself to take small steps towards being more active. He mentioned multiple times in his interview the example of asking for a hotel room on the upper floors of the building, and then forcing himself to take the stairs when entering and exiting the building. More specifically, he described oftentimes intentionally leaving his travel bags in the lobby, and then taking them up to his room one by one. When discussing taking these small steps towards increased exercise, he acknowledged the associated sense of accomplishment:

It [exercise] makes me feel like I'm accomplishing something too, makes me feel a little bit better about myself rather than just, ya know, being a slug. – **Lance**, 57

Lance elaborated further, by saying:

I think when I am doing it, when I do it like two or three times a week, I feel better about myself. – Lance, 57

It is important to consider Kendra's findings alongside those of Lance, because even though they were interviewed separately, they were a married couple who completed this study together. Kendra expressed points that were similar to Lance, and even used similar terminology with respect to "feeling like a slug." When asked about how she usually felt after exercise, Kendra pointed out that she always felt much better and echoed her husband's emphasis on this feeling of accomplishment.

You don't feel like a slug. You feel like you've actually accomplished something. You feel like, how do I describe it — you just feel good. Like you think, wow good I did that, I accomplished that, it makes me feel better, why don't I do it more often?"—**Kendra**, 58

When I read both Kendra and Lance's responses, I was particularly interested in their use of the term "slug", because I felt this term provided an interesting contrast to this overall subtheme related to feelings of accomplishment. Exercise was described as being integral in how they both felt about themselves. Their common choice of words provided an interesting example to highlight the contrasting feelings that stem from either the decision to exercise or not to exercise.

Some participants expressed a more general sense of "feeling better" about themselves after doing exercise. This appeared to be the case for Beth, a 56-year old woman who was now retired.

When I feel better and I look better, I act better. Like, I feel more comfortable and easier to, more confident I think it is. – **Beth, 56**

Jane, who acknowledged that exercise can give one a stronger sense of functionality and improve one's self-esteem, also described this feeling of self-confidence.

Exercise, the more I guess, the more functional you are, the higher your feeling of self-worth, your self-confidence, your self-esteem, higher levels of motivation — which would all equal identity. — **Jane, 48**

There was a point during Diane's interview where she was very excited, talking about how good getting back into weightlifting had made her feel.

So when I did start, I started with just some small stretching routines, because I'm a yoga instructor, so I know what to do. And then I got one day of weightlifting in and that made me feel so good [said emphatically]. Yeah, that's what I really needed to get back to. — **Diane, 49**

Diane talked about her weightlifting with a sense of pride, because that was an area where she felt confident in herself and her abilities. For Diane, it seemed apparent that getting back into weightlifting made her feel good, not only from a health perspective, but also in terms of how she felt about herself overall. Hannah expressed similar sentiments to those of Diane, and mentioned that exercise helped her to feel better about herself all around.

I feel better, so I feel that I'm more functional, right. I definitely, when I went to the pool, like those times when I went to the pool and stuff, I slept better. So yeah, I think physically there's definitely been some positive impacts and I think psychologically as well. It's just very, like it's a good stress release, and it's, it just feels good. So I feel better all around. – **Hannah, 53**

For many people, exercise was viewed as a way to re-gain lost confidence and make them feel as though they were accomplishing something. In an attempt to understand people's lived experiences with making a resolution to exercise, I believe a qualitative study of this nature is helpful in

understanding the depth of this experience. Their expressed feelings of accomplishment and improved self-confidence and functionality were almost palpable in their detailed descriptions. It should be noted that only one male participant, Lance, cited identity as having any type of role in his exercise experience. This could suggest that females may value this sense of quality time and accomplishment associated with exercise to a greater degree than males. However, this finding could also simply be due to the fact that women are more likely to open up and have conversations about their internal self, whereas men may be less likely to have these types of conversations. This finding may also be due to the fact that only a small number of men were involved in this study. Future research could explore this relationship further, addressing the specifics of how exercise has differential effects on identity with respect to men and women.

Negative Cases

While the majority of participants in this study described how exercise had had a positive effect on their identity, there were a few participants who noted that exercise actually had negatively affected how they viewed themselves. Most often, these negative feelings seemed to be derived from feelings of guilt over not exercising enough. Molly was one such participant who held particularly negative views towards herself because of her perceived failure to exercise. Molly was a 44-year old woman who was in the middle of a job transition at the time of the study. She stated that exercise was never really a big part of her life growing up, and that the focus for her family was more upon musicality and the arts. This may be part of the reason that her relationship with exercise never appeared to be consistent and could have contributed to why she felt guilty when she was unable to exercise. While discussing her resolution to exercise, she explicitly mentioned that she felt a tremendous amount of guilt when she was not exercising.

I haven't been good at following through with it. So, I would say the one negative thing about it is that I know what I want and I'm not doing it, so in my mind I'm beating myself

up like, you loser. Why didn't you just get up and do it? Because I would be so far if I stuck with it more. And when I say stuck with it, it's like those workouts that I have in my mind of weights and stuff like that. But at the same time I'm like, ah! Everybody else my age is getting fat too, so what's it matter right? So, I don't know. It's kind of, I'm starting to become accepting of this is the way I am so. – **Molly, 44**

Molly's word choice was worth noting, especially when she referred to herself as a "loser". I think this is a particularly important example to illustrate the sheer significance of how exercise affected the way participants viewed themselves, be it positively or negatively. This harsh terminology provided a path towards understanding the significant guilt and subsequent anger Molly felt towards herself in relation to exercise. She alluded to a sense of general disinterest towards exercise. I interpreted her exercise experiences as being characterized by confusion and uncertainty with respect to the role exercise had upon her life. Near the end of her interview, she mentioned that she was ultimately hoping for some sort of easy solution to be derived from this study that she could then use to improve her exercise behaviours.

I'd like to see what the other people ended up doing and if there's, like I know you're gathering data on what motivates people or gets them to their goal kinda thing. Like if you find out what the magic pill is, I wanna know what it is. — **Molly, 44**

The concept of looking for a "magic pill" was a point that I found to be particularly interesting. This appeared to be indicative of the fact that she did not seem drawn towards exercise like the others but rather, wanted an "easy way out" to minimize the amount of effort she had to put forth towards exercising, moving forward.

The other participant who expressed similar feelings of guilt related to exercise was Faye. Faye was a 55-year old woman who mentioned that her involvement in this study led to negative views of herself because she felt as though she was not doing enough exercise.

So, with this gentle reminder every week, it was constantly on my mind. And as the reminders came in I started feeling worse and worse about myself because I wasn't doing it. So although I looked forward to the accountability, it made me feel poorly because I wasn't doing it, because of all the excuses and travel and sickness. – Faye, 55

Faye's point here was similar to Molly's in that she experienced feelings of failure when she didn't participate in enough exercise on a regular basis, and the accountability piece of this study did not seem to make a difference beyond making her feel badly. In the case of Faye, the reminders that characterized the study procedure continued to exacerbate this negative view.

It is important to recognize that while the majority of participants perceived exercise as having a positive effect on how they viewed themselves, for a select few it had the opposite effect. I think this theme gave rise to some of the extreme cases seen in both directions. In the cases of Cynthia and Jane, exercise meant recapturing who they once were and served as an empowering factor to get to a better place. This was also found with Kendra and Lance who both described deriving a sense of accomplishment and pride from exercise. While the majority of participants involved in this study described exercise as having a positive impact on how they viewed themselves, it is critical to acknowledge those situations in which this was not the case. Molly and Faye described how failing to meet a certain level of exercise led to feelings of guilt and inadequacy. Although they were among the minority, acknowledging and taking steps towards supporting those individuals whose self-identity is damaged due to these negative associations to exercise may be important in promoting long-term adherence in middle-aged adults and may be an important topic pertaining to future research.

Theme 5 – "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise

The purpose of this study was to explore people's lived experiences since having made a resolution to exercise and these participants described how health was the common denominator, every step of the way along their exercise journey. Not only was health a number one motivating factor for people having made their resolution to exercise, but it was also cited as the area of life that was most positively affected by exercise. I felt that Cynthia summarized this point nicely when she stated:

Taking care of your health is the best thing you can do for yourself." – Cynthia, 50

Cynthia here echoes the sentiment that many other participants in this study similarly discussed, that health was a fundamentally important component of their exercise experiences since having made their resolution to exercise. The importance of health may seem obvious, but this study allowed me to better understand the participants' perceptions of health along their exercise journey and at a key transitional point on this journey. It allowed me to directly observe just how health served as both the cause AND effect for exercise. The cause was evident in that it was often what motivated people to get active in the first place. The effect was evident in that it was the area of life that they cited as being most impacted after following through with their resolution to exercise. Health, in and of itself, is a broad construct and can mean different things to different people, so this theme explored the specific health-related factors that people cited as being important along their exercise journeys.

Both Diane and Lance seemed to have a fear of losing their life to illness. For them, exercise provided a means to make the years ahead of them the best they could possibly be.

I feel like crap. And like I described to you earlier, it's either you absolutely hand your life over to illness and you just spiral down and you die. Or you fight for your life basically, for your health through changing your mind I guess. — **Diane, 49**

Number one would be health for sure. I mean, I'm going to be 58 this year. My line would be, I have more years behind me than I have ahead of me, but the ones ahead of me I might as well try and make the best I can make them, so. – Lance, 57

In the case of Diane, she also discussed that her cardiovascular health was a motivating factor for her getting more active.

My cardiovascular health, it kinda scares me. Having trouble breathing and my heart is doing weird shit. – **Diane**, **49**

The previous observation made by Diane of either handing over your life to illness or fighting for your health, also demonstrates the huge value she places on exercise and her resolution to exercise. She further described the other ways in which her resolution has positively impacted her life:

Yeah, and the weightlifting too. I mean the food has definitely cleaned up, which is a huge, huge, kinda motivator to get the second portion of it done, which is the working out. — **Diane, 49**

It is in this sense that we can clearly see that for Diane, health was both a number one motivating factor and an area of life that had been positively impacted by exercise.

Lance cited health as his number one motivating factor to getting active, and after making his resolution he found that exercise had a positive effect on him mentally and physically.

I sleep better, I feel physically better, I feel mentally better - and I can tell when I'm not doing it, because I'm a little sluggish, don't sleep as well, and that kinda stuff. - Lance, 57

Lance again describes how health serves as both the motivating factor, as well as a significant area of his life that was positively impacted by exercise. Others had more specific health-related goals that motivated them to exercise, such as weight loss.

I would say my number one goal when I'm working out is weight loss. That's always on my mind, is to lose weight. – **Molly, 44**

Probably my weight, probably, um, my age, because I'm bordering on 60. – Kendra, 58

It's not about feeling good – well it is about feeling good, it's just - you don't like what you see in the mirror and you have to do something about it. – **Ollie, 57**

It would have been weight loss, yeah. Looking better, feeling better. – Faye, 55

Yeah I think I just wanna get more toned, lose a few pounds. – Quinn, 49

For each of the quotes above, people recognized that weight loss meant being in better health and feeling better about yourself.

Looking at Faye specifically, it was seen that she followed through on her resolution and lost weight, and this served as a positive impetus in encouraging her to move forward with continuing to participate in exercise to improve her overall fitness. In the case of Faye, her motivation was rooted in wanting to lose weight, and now that she had, that then impacted her exercise experiences by encouraging her to continue exercising into the future.

So what has really got me going is that I've lost eight pounds, and that in itself is a great kick-start. So looking forward I'm looking forward to not just losing that fat, but turning it into muscle, right? - Faye, 55

People also described how their excess weight was related to other medical conditions, and they saw exercise as a means to prevent the development of potential worsening of these ailments. Quinn, who had diabetes, stated the practical ways in which exercise could benefit his health:

Yeah, my doctor said you got to do a little bit more activity. Your blood pressure's a little high, cholesterol's a little high and you got diabetes, so, you got to just be a little bit more active than how you've been. — Quinn, 49

Kendra had a unique perspective, in light of her personal health experiences and exercise. When she was battling breast cancer, she described being told by her doctor that exercise was one of the healthiest things she could do for her cancer. Part of the motivation was that she did not want to feel the impact of cancer and exercise provided a healthy way to offset some of the mitigating effects of her illness.

Well I know, I know for me it's the healthy thing to do with my cancer. Our doctor said, "Kendra, exercise is gonna be the best thing for you to keep the cancer at bay". – **Kendra,** 58

Kendra also mentioned an interesting point with respect to health and exercise near the end of her interview. During her interview, she was knitting, and she mentioned that to her, this is a type of exercise, because it is therapeutic in offsetting the finger rigidity associated with her cancer. This was poignant for me, as it expressed the sheer importance of health and exercise overall, and that it is the unique health problems that people face that may drive what exercises they ultimately choose and the resulting impacts of this exercise on their lives. Even if knitting per se is not typically defined as a form of exercise, it was for Kendra because it served a greater purpose to help strengthen a part of her body that had been affected by her illness.

Well I'm just thinking, the one thing that – this sounds so stupid, but this is so important to me because this is keeping my hands active [gestures towards her knitting]. I mean if you

were asking me about exercise in relation to knitting, it wouldn't seem to be an exercise but for me it's exercise because it's keeping my hands going and making my joints not hurt. So that's a motivation, right? – **Kendra, 58**

Each participant in this study had different health-related factors that motivated him or her to exercise in the first place, and that were also then subsequently affected by exercise after having made their resolution. This to me, suggested that one of the first things that should be established prior to working with middle-aged adults in terms of exercise is asking them whether or not they have specific health problems they may be experiencing. If that problem is serving as a motivating factor to exercise, gearing exercise towards addressing that issue may encourage them to exercise regularly, even if it does not meet the traditional definition of exercise. In the case of Kendra, she viewed knitting as an exercise. This understanding reflects the idea that the need for exercise is going to vary for people, depending on any health-related ailments they may be experiencing, and a personally tailored approach may be well-advised and warranted.

Jenny, too, cited health as being a motivating factor for getting her active. She had surgery that left her immobile, ultimately leading to weight gain. It was the desire to lose this weight that encouraged her to make a resolution to exercise.

I gained a lot of weight before and after my surgery, so ya know, I need to lose about 30 pounds, 'cuz ya know that's what I'm carrying, and I feel it [says emphatically], like I can feel it in my joints, I can feel it in how I move. So it's not just aesthetic, it's, I can feel it on me, I don't feel like, I don't feel like I'm walking around in my body. — Jenny, 52

Jane shared a similar experience of surgery within the past year that limited her ability to exercise. She got emotional when discussing the impact that exercise had had upon her life, and how it had helped her in offsetting the mental and physical health issues that would have likely accompanied her surgery.

Exercise has been completely, like, supreme. It's what I needed to just kinda get me out of that. When you plateau, it's very difficult to break that, get over that next hurdle, you're kinda in a holding position. So, I knew that if I stayed doing the same thing that I was doing, even in December, at that same level of low activity, I knew further down the road that it was going to cause other physical problems, or maybe mental health issues. So I

finally, because I had the ability to foresee possible disaster, if I didn't make a change, I knew I had to make the change to avoid running into other problems, like physical, high blood pressure, I don't have any of those, but I knew if I didn't there'd be weight gain. – Jane, 48

For others, exercise was not as much about losing weight or preventing an illness, as it was about simply not feeling physically well. Exercise provided a means to strengthen their muscles, their joints and provide better overall physical wellness.

So I know I've brought it on myself, but I know that I have to stay at it and keep going in order to regain some of that muscle strength that I've lost over the years as part of the aging process too. Um, so I know that I have to just keep doing it as best that I can. – Ellie, 60

For my wellbeing, my muscles, my joints, everything. – Faye, 55

First of all physically, I really was not feeling well, and I think the problem is because I know what it feels like to feel good physically, I can really, really see a huge, uh, drop in my physical wellbeing. — **Hannah**, 53

Many participants also referenced exercise as improving their overall energy levels and degree of functionality. Not only was exercise seen to prevent the development of illnesses, but it was also seen as a way for people to become better versions of themselves. This also meant sleeping better and being stronger when fighting off potential ailments such as colds.

I feel better, so I feel that I'm more functional, right. I definitely — when I went to the pool, like those times when I went to the pool and stuff, I slept better. So yeah, I think physically there's definitely been some positive impacts and I think psychologically as well. It's just very, like it's a good stress release, and it's, it just feels good. So I feel better all around. — **Hannah, 53**

Definitely I sleep better. – Cynthia, 50

Let's say you just get a random cold. Being more physically fit is gonna help you with that, and I know that. I just don't do it. But this has kinda brought it a little more into perspective for whatever reason. — **Georgia, 61**

It always makes me feel good, um, ya know, it makes me want to go back and do more. And ya know, I'm always, I always just feel like I have more energy, and I've been really tired, like after a week or so of not going, like doing anything at all, ya know I was just exhausted. — Jenny, 52

For Beth and Cynthia, part of their motivation related to their health was derived from seeing other people in their lives who were not particularly healthy. Exercise, therefore, was seen as a way to improve their own health and avoid the alternative.

It's my age, and I'm looking around thinking, oh my God, my husband's very sick, I don't want to be like him. He's 10 years older than me, I don't want to be like that, not even at 90, I don't want to be like that. – **Beth, 56**

I don't want to, ya know, my mother's battling obesity, my Aunt's battling obesity; I don't want to be there. That's not - I don't want that. So yeah, yeah, that's a drive. - Cynthia, 50

The above responses provided concrete examples of how overall health was perceived as a primary motivating factor in why people made a resolution to exercise and also demonstrated the specific ways in which people's health was positively impacted by following through on their personal resolution. The construct of health is broad, but what this study has highlighted is that adults may be affected by many illnesses throughout their lifetimes, and it is possible to view exercise as a vehicle to circumvent these illnesses to some extent. Asking people their motivations to exercise allows for the ability to better tailor this exercise experience and meet the needs of the individual, possibly affecting their long-term adherence. While this finding pertaining to health is fundamentally important, it is an extension of previous findings discussed in the literature review. It is well known that health is an important factor in encouraging people to exercise, and future research should aim to go beyond these health-related motivational factors and further explore other factors that may encourage exercise in the middle-aged adult population.

Theme 6 – Putting my best foot forward: Insights and intents regarding future exercise

In addition to learning about participants' lived experiences with exercise after having made a resolution to exercise, I also wanted to touch on the potential role they felt exercise would play on their lives in the future. Nearly every participant involved in this study stated that they believed exercise

was going to be a more important part of their life moving forward. The reasons for having a more pronounced role for exercise varied, but many people cited a desire to incorporate exercise into their daily routine more effectively. I felt this was similar to how these participants described activity as children, in that it was just a natural part of life. In this way, I believe that many participants in this study seemed to come full circle, in that after making their resolution to exercise, exercise started becoming a more natural part of their lives and they almost began to re-experience exercise as they did when they were children. Despite the overwhelmingly positive finding that most people felt exercise would be a more important part of their life moving forward, one participant did not feel this way. This participant seemed to come from a place of indifference and a feeling that inevitably, other variables will come into play that will distract him from exercise in the future.

Abigail mentioned an interesting point that was reflective of her life stage. Middle-aged adults will soon be reaching or are at the age of retirement, and Abigail cited this as being a reason why exercise will become more important for her:

Well, because I've gotten past the part that I don't need someone to tell me what to do, obviously it's got to get better. And because now I'm retired from the nursing home, I'm obviously going to have more time on my hands. So now I'm realizing that I can, um, do some things that I want to do now. And I don't have to be committed to other people around me. – Abigail, 59

I want to highlight Abigail's point when she says she can do what she wants to do. It seems that exercise is always something that she has had a desire to do, but her career has often stood in her way. Her point here suggests that retirement age may be a time when exercise can be re-introduced and can almost serve as a source of liberation for those leaving the workforce.

Cynthia, who was mired down with caregiving responsibilities for most of her life, stated that she was very determined to continue exercising into the future. Part of this desire possibly stemmed from the fact that she had continually sacrificed her own time in order to look after other people.

Moving forward, she described how exercise would serve as a means for her to spend more time on herself.

I am, very determined. On a scale of 1 to 10, I'm like at a 10. I'm not going to give up on this. - Cynthia, 50

For Cynthia, there was a clear determination that demonstrated the importance exercise now had upon her life. The hardest part for Cynthia seemed to be getting started. Others set specific goals related to what they wanted to do for the future. In some cases, the focus was on a tangible outcome, such as completing a race, however others expressed a desire to simply integrate exercise into their daily routine more effectively.

My plan is, to get that routine nailed down; and on the days that I don't work, I was saying to you that I'd like to do weightlifting one day, cardio the next day. I'd like to reduce weight through my caloric intake, and I would like to run that 5k this year. So that's my goal. – **Diane, 49**

My expectations are to not just do, try to do it three days a week. My expectations are to incorporate it more into our daily stuff. – Ellie, 60

I would hope that I would start to like get out and walk everyday. And then start to feel better and then maybe, ya know, try and do something else. What yet I don't know. I pulled out an exercise video, blew the dust and cobwebs off. — **Georgia, 61**

I'd like to get down to my, my regular weight. I'd like to get back to going to boxing class at least once or twice a week. — **Jenny, 52**

I think just trying to make it more apart of the daily routine and making it more, making me an important part of the daily routine and do that. – **Kendra**, 58

A lot of participants expressed the same point, in that they wanted to make exercise a more part of their daily routine. Faye also introduced an interesting point after she stated that she had already begun taking active steps towards incorporating exercise into her daily life more and to prioritize her health:

I always have short-term dates that I'd like to be at, and a wedding coming up in April. Long-term goals, yeah, you know what, it's also, this research has got me thinking about my health in general and I've booked a physical with my doctor, which I haven't had in five years. So, it's really given me a broad spectrum of taking a good hard look of where I'm at and where I want to be. I also was in Europe in September, and, and kept remarking on these older people who were just walking everywhere [said emphatically] and how able-bodied people were and the obesity factor was, was less in Europe and it was quite enlightening to think, ya know what you don't have to be old and overweight and sedentary, that is not the way to go because that causes disease, get moving. — Faye, 55

Molly also began taking active steps during her study involvement to prepare for integrating exercise into her daily life more effectively in the future.

Well, partly with moving the elliptical upstairs and partly with Spring around the corner and partly because of my job, I feel like my evenings are free now to have to myself to work on myself, and I think I'll – I'm, I wanna get into a new groove of this is just what I do when I come home from work. I'll go on the elliptical or after supper and everything's cleaned up and we don't have anymore homework, watching a show – like they were watching Frozen last night and I jumped on the elliptical, because it was there [says emphatically] right, so. So that's kinda – I just want to make it not a big – I don't want to detract from anything else I'm doing. If I'm gonna be sitting on the couch while they're watching a movie, might as well get on the elliptical. It's [referring to the elliptical] whisper quiet. That's kinda my goal is to incorporate it into my life instead of making it another chore. – **Molly, 44**

For Jane, exercising in the future was rooted in a feeling of momentum. After going through major back surgery, she credited exercise for pulling her out of a darker place.

Now I'm on a really – I have a really good momentum going, and, I'm more encouraged to exercise because I experienced what happened when I didn't, right? I kinda was in, I guess a lower place. – **Jane, 48**

Jane continued on in recognizing that she now had a better sense of control moving forward, and she expressed similar sentiments to Georgia, in that she felt she was on a better path moving forward.

I didn't wanna go another year like I had the year before. I wanted to do it differently; I wanted to be like a normal 48-year-old woman, that hadn't had back surgery. When something's traumatic you want to leave it in the past and move forward. You can't when it's always affecting you. The exercise has kinda brought me out of that. So I'm able to look back and separate myself from something that was horrific because it – that's behind me, and I'm kinda, I'm on a path – better path. – **Jane**, **48**

Given that this theme is about the role people feel exercise will play on their lives in the future, I also felt it was important to discuss a factor that some participants discussed, that being the weather.

Specifically, data generation for this study took place from January to April 2020, and some participants felt that they would exercise more in upcoming summer months.

Well I think I'm gonna get back to my tennis, and I consider that exercise. I think in the summer there'll be more swimming and more walking. – **Kendra**, 58

Oh for sure continue, if not a little bit more, ya know. I think it will be easier once the weather gets a little warmer, um to be more active, for sure. — Quinn, 49

For Lance in particular, the weather seemed to play an important role in his future relationship with exercise.

I expect – I want to get to two to three times a week. I think it's gonna – I believe in my heart of hearts it's going to get better through the summer months once I can start hitting the tennis ball, doing some things outside, I'm looking forward to that. We were away a couple weeks ago and it was nice to be in the warm weather, and walk places, and ya know, just enjoy. – Lance, 57

This is an important point to highlight and may be a limitation of this study. Some participants stated that they felt more positive exercising in the warmer weather compared to the colder weather, so this positive future relationship people seemed to be expressing towards exercise may be due to the fact that data was collected during winter and early spring. However, it is important to mention that most participants expressed that they believed exercise was going to play a more important part in their lives moving forward, and many cited other factors beyond just the warmer weather as being an encouraging factor. Similarly, as seen in the case of Jane, the momentum made since having made their resolution provided an additional sense of motivation towards moving forward. While the majority of participants recognized exercise's future importance, there was one participant who did not feel their future behaviour and the subsequent role of exercise in their life would change.

Negative Case

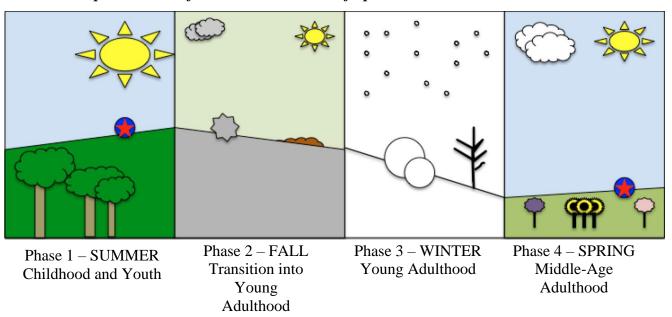
There was one participant who did not feel that exercise would be a more important part of his life moving forward. Will stated:

It's been like this a long time so, it's gonna be hard to change. - Will, 49

It's important to note that Will felt especially drawn to sport-based exercise, and he played recreational hockey every week. His case suggested the importance of tailoring exercises so that they match the unique person's definition of exercise, and what they find most enjoyable. For Will, promoting long-term exercise adherence would likely be better rooted in the availability of sports leagues and sporting opportunities. While the majority of participants described having started to exercise and felt that it would have a positive effect on their life in the future, Will shared a different perspective, conveying that it would be difficult for him to change these current behavioural practices long-term.

Figure 3

A Pictorial Representation of Exercise Across the Lifespan



The above pictorial representation is meant to represent each of the significant life stages that participants described navigating up to middle-aged adulthood, and how exercise figured into their experience at each phase. Specifically, what is meant to be highlighted in this representation is the transition between different life phases and the subsequent impact on people's exercise behaviour. I

felt it was particularly apt to represent each of these life phases using the four different seasons: summer, fall, winter and spring. Generally, participants appeared to follow a similar trajectory, in that exercise was a huge part of their life during childhood and was associated with genuine fun and enjoyment, and few (if any) barriers. The transition into young adulthood meant that people were still fairly active, but there were future barriers to exercise that would soon become prevalent along this journey. Young adulthood was when people cited their exercise as really dropping off (or going downhill), usually because of caregiving and career responsibilities that had built up and intensified.

Upon entering middle-aged adulthood, participants felt more established and seemed to have a desire to incorporate exercise into their life more consistently, and their experience leveled out or plateaued. Each phase will be discussed in more detail below, with an explanation of how the details of the picture represented my participants' journeys with exercise during that life phase. The bigger and more weighed down the object becomes, the harder exercise was for them during that life phase. The surrounding environmental factors in each phase were meant to represent the facets of life during that life stage that played a role in participants' exercise behaviours. The slope of the hill for each season is meant to represent the role exercise played in participants' lives during that phase, with a downward slope indicating that exercise was harder to attain during that phase and an upwards slope indicating exercise was more prevalent.

Phase 1 – Childhood and Youth

During childhood and youth (0 to 17 years of age), exercise was seen as something that was fun and was ingrained in everyday life. This is represented by a ball rolling on a hill, with no clear obstacles or barriers in the way of its momentum. The large sun and the surrounding trees are meant to signify that exercise during this stage was easy and natural. There are no distant clouds in the sky or obstacles that could stop people from exercising during this stage. It was simply part of being.

Phase 2 – Transition Into Young Adulthood

The transition into young adulthood was really meant to capture the ages of 18 to 22. It was during this time when people were still able to exercise, but there were current or future barriers on the horizon that would soon affect their ability to exercise consistently. In this phase, it is no longer a ball that is meant to represent people's exercise experiences, but rather it is a larger rock, because exercise has become a little bit harder to navigate and the terrain is not nearly as smooth. Similarly, the direction and slope of the hill has changed, so that the rock is now picking up speed and heading in a different direction. It is not as ingrained in everyday life, and there are obstacles that will soon affect people's ability to regularly exercise. These obstacles are represented by the bumps in the hill that the ball will soon hit and the grey clouds that are lurking in the sky. The sun has also shrunk, signifying that some of the joy or spark may have left this particular activity for participants.

Phase 3 – Young Adulthood

The third picture here is meant to represent young adulthood, because it is during this time (22 to 43 years of age) when exercise seemed to really slow down for participants involved in this study. There are barriers in the way that have made exercise that much more difficult, and this is represented by the large snowball that is picking up more and more snow as it rolls down the hill, which is now substantially steeper. Notice there is a dead tree standing in the way of the snowball's path, meant to signify the massive exercise barriers people described facing during this particular life phase, primarily caregiving responsibilities and career strain. The sun is completely gone, and there is more snow falling that is continually adding to the weight of this snowball. Exercise during this life phase seems to be a last priority, and there are many different factors that affect people's ability to exercise consistently.

Phase 4 – Middle-Aged Adulthood

It is during middle age (44 to 64 years old) when people seem to have come out of the dark days of winter and are ready to focus more on themselves again and prioritize their health. The ball has returned, unencumbered by the previous weight and/or layers of past seasons. Participants now describe being in a position to start taking active steps to becoming healthier and to enjoy a more active lifestyle. The slope of the hill has changed and is now upward once again, as exercise during middle-aged adulthood seems to be a time when people can focus on themselves more and re-introduce it into their lives. It is in this sense that I almost feel this life phase is rooted in potential, as seen by the blooming flowers in this picture. The sun has also returned, not as big as it was during childhood and youth, but the natural feel for exercise seems to have somewhat returned and is certainly a desired end goal that is aspired for adults in middle age. This is also why the first and last picture here are similar, because I interpreted people's experiences as them almost wanting a desire to return to what exercise meant to them previously, when they were younger. Participants are also more established in this life phase, as children are more independent and they are more settled in their careers. There are no clear barriers in the way, and the future seems brighter. In essence, this pictorial representation shows that the participants involved in this study seemed to come full circle, much like the seasons, in their exercise experience.

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Chapter 5: Discussion

The purpose of the current study was to explore the lived experiences of middle-aged adults as they initiated and engaged in exercise as part of a New Year's resolution to exercise and to understand the meaning that this newfound exercise had upon their lives. This study was comprised of 16 participants, 12 females and 4 males, between the ages of 44 and 61 years. There were six main themes that emerged from the analysis of the data, including: (1) "We never even called it exercise, 'cuz it was natural": Insights on exercise from childhood and youth; (2) "They're winning, I'm losing": Insights from a time when exercise was not the priority; (3) My exercise mindset: General perceptions towards exercise; (4) "It's about finding myself again": Exercise and its perceived influence on identity; (5) "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise; and (6) Putting my best foot forward: Insights and intents regarding future exercise. Throughout this discussion, I will review each theme and subtheme and connect them to the existing literature. I will also discuss some of the practical implications of this research and how it can be potentially useful in guiding the future exercise behaviours of middle-aged adults.

Theme 1 – "We never even called it exercise, 'cuz it was natural": Insights on exercise from childhood and youth

This first theme reflected the near universal essence that exercise was more naturally ingrained in the participants' lives during childhood and youth. This theme was exemplified in the three subthemes; (i) Exercise?! – The term didn't even exist when we were kids; (ii) How my childhood environment encouraged "natural" activity; and (iii) The significance of sport and activity growing up. A recent longitudinal study was conducted on 43 839 Dutch citizens aged 8 to 80 years old. The study was specifically interested in looking at three different dimensions of leisure-time activity: whether it was team-based or isolated, whether it was competitive or non-competitive and whether it was externally

paced or internally paced (van der Zee et al., 2019). I feel it is important to discuss this study because the results that were found seemed to align closely with the subthemes discussed in my first theme:

The prevalence of engaging in voluntary exercise behaviour, especially competitive, team-based and externally paced sports increases during childhood, to reach its peak during mid-adolescence, around age 16. The total volume of exercise behaviour starts a decelerating downward trend, which is largely explained by the decline in participation in competitive, team-based sports (van der Zee et al., 2019, p. 7).

van der Zee et al. (2019) utilized a line graph to give a pictorial representation of what exercise behaviour looked like across the lifespan and similarly showed that exercise was highest during childhood and youth. However, this line graph also showed that when people surpass the age of 40, the rate of deceleration decreases and begins to plateau, before decelerating at a higher rate once again upon entering their 60's. This trajectory was similar to the path participants' seemed to describe in my study, in that middle-aged adulthood seemed to be a potential period of exercise rejuvenation where people had a desire to increase their level of activity. This pictorial representation was meant to highlight the idea that as people transition to different life phases, there was a common trajectory seen with respect to exercise behaviour. Specifically, the pictorial representation presented as part of my study showed that exercise was more prevalent in participants' lives during childhood and youth, decreased upon entering young adulthood, and then began to increase again upon entering middle-aged adulthood. A review by Biddle et al. (2012) highlighted physical activity levels across different stages of life, including childhood and adolescence (0 to 20), adulthood (20 to 60) and older adulthood (over 60). Their results similarly showed that exercise behaviour peaks during childhood and youth and then decelerates upon entering adulthood.

I believe these findings can be directly attributed to the frequently cited barriers towards exercise, primarily caregiving responsibilities and career stress. Specifically, middle age is commonly viewed as a period of life where children are typically becoming more independent and people are more established in their careers. This provides the opportunity for middle-aged adults to spend more time focusing on themselves, and exercise provides a means through which to do this. This pictorial representation also highlights the significance pertaining to the transition between different life phases. When reflecting on their past experiences, participants in this study expressed that there were defining moments that seemed to represent the transition to different life phases where exercise behaviour subsequently changed. This was seen with Ollie, who realized he only had to start thinking of exercise upon entering college. A similar transition effect was seen with Molly, who saw exercise activity decline after starting a family.

This idea of transitional periods subsequently affecting exercise behaviour change may also be related to self-determination theory. Self-determination theory suggests that human behaviour is motivated by three basic needs: autonomy, competence and relatedness. Autonomy essentially refers to feeling as though you have control over your behaviour (Deci & Ryan, 2008). Participants in this study seemed to have more control over exercise during their childhood years, and this may be largely related to the natural integration of exercise into the daily lives of children. Participants simply stated that exercise was engrained in everything they did, and with that came a sense of control and few barriers that prevented them from participating in activity.

The second psychological need that makes up self-determination theory is competence, and this essentially refers to a feeling of success (Deci & Ryan, 2008). The findings above suggest that people's levels of confidence and the perceived success they attribute towards exercise are drastically different when looking at childhood compared to middle-aged adulthood. Many participants used

demeaning language to refer to their exercise habits during middle-age, including Georgia who called herself "lazy", and Kendra and Lance who called themselves "slugs". This type of language was not seen by participants when they talked about their childhood, and this suggests that there may be a lack of self-confidence towards exercise during middle-aged adulthood for some adults, which was not apparent in childhood.

The third and final need discussed in self-determination theory is relatedness, and this refers to a sense of belonging (Deci & Ryan, 2008). This highlights the importance of social relationships with respect to exercise behaviour and this socialization during childhood was frequently discussed by participants. Many participants stated that they were always outside with friends as a child running around and being active, but this was not the case during middle-aged adulthood. This suggests that focusing more on establishing social relationships during middle-aged adulthood could further encourage exercise behaviour change in this population. In essence, the different ways exercise was experienced during childhood highlighted self-determination theory and the three basic constructs that comprise this approach to motivation. There were clear examples of how autonomy, competence and relatedness were experienced differently during the different phases of people's lives, and becoming more aware of these differences could help in changing this trajectory for the better, as one ages.

van der Zee et al. (2019) also highlighted the importance of having opportunities for sport, as a decline in the availability of competitive sport was cited as being one of the primary reasons a downward trend is seen during the transition period upon entering adulthood. This points to the potential benefit of incorporating more sports-based community leagues geared towards middle-aged adults in order to encourage exercise in this population. For many participants in my study, sport remained the preferred method of exercise, and I feel that more opportunities for sport-based exercise in this age group may positively influence people's exercise levels. In saying this, there were a few

participants in my study who engaged in adult recreational leagues, including Ollie and Will who both played recreational hockey. As seen in the case of Molly, she was part of a recreational volleyball league, but quit the league after having kids and then never re-joined. Current research suggests that developing a sense of social community may be important for participation in adult recreational leagues (Legg, 2015). Future studies could look at how to promote this sense of social community and could further aim to better understand middle-aged adults' experiences when participating in these leagues.

After reviewing participants' responses for this theme, I believe that there was a desire for them to recapture what exercise once meant to them when they were children. The period of middle-aged adulthood provided an opportunity to re-frame how exercise was approached, and specifically created the opportunity for them to re-introduce exercise into their lives. It is interesting to note that the exercise trajectory that was revealed in this study was similar to that which has been reported in other studies across the literature. Knowing that middle-aged adults are interested in exercising more during this phase of their life again emphasizes the potential in better understanding behaviour in this population and researchers should focus on ways to encourage these adults to re-capture what exercise meant to them during childhood when it was naturally ingrained in everyday life.

Theme 2 – "They're winning, I'm losing": Insights from a time when exercise was not the priority

The second theme that emerged from the data was the idea that upon entering young adulthood, other areas of adult life seemed to take over, and exercise levels subsequently plummeted. The common barriers for preventing exercise in the adult population are well established, and the responses from these participants aligned well with current findings in the literature. There were three commonly reported types of barriers, namely: i) The caregiving burden; ii) The career burden; and iii) Generally unmotivated – but can accountability help? Similarly, Kelly et al. (2016) conducted a systematic

review of the key barriers that prevented people in mid-life (aged 40 to 64 years) from engaging in healthy behaviours such as physical activity. They found that caregiving responsibilities, career strain and a general lack of motivation were amongst the top barriers cited by middle-aged adults. The results from my study are closely aligned, but also contribute by extending these findings and providing more substantial detail and context when discussing these barriers. Specifically, this study was able to investigate the specific facets of these barriers that limited their ability to engage in exercise. In the case of Cynthia, it was seen that caregiving was not limited to just looking after her kids, but it also included caring for her husband who was ill. Similarly, Ellie cited that when her kids started doing their own activities that was when her own activity level dropped off. The unequal representation of males and females makes it difficult to draw any conclusions with respect to gender, but it is interesting to note that of the four males who participated in this study, three of them provided quotes that supported the idea that caregiving responsibilities was a major barrier to exercise. The fourth male, Ollie, does not have any children and therefore did not have anything to contribute with respect to this subtheme. This finding suggests that caregiving responsibilities may serve as a significant barrier to exercise for participants of both genders.

In the case of Lance, it was seen that travel associated with work was the primary reason exercise slowed down upon entering young adulthood. Jane cited that it was the nature of her work in healthcare that affected her health and activity. The point here is not to review each participants' individual findings, rather it is to show that part of the contribution of this research was the desire to understand people's individual lived experiences that ultimately provided more context in understanding these frequently cited barriers in the literature. The importance of individuality is highlighted by Danielsen et al. (2015) who said, "[a]n exploration of individual experiences is essential for programs to serve individual participants" (p. 694). I would argue that my study went beyond

simply listing common barriers associated with exercise for adults, but it also provided additional context to these barriers that may be useful in developing individualized programming and informing future research.

Better understanding this context was also beneficial in this study because I interpreted it as giving rise to a second important point related to barrier self-efficacy. Mailey et al. (2016) refer to barrier self-efficacy as people's confidence to overcome exercise-related barriers and suggest that this may be important in promoting exercise behaviour change. In the case of my study, there were examples of how the different exercise-related barriers that participants discussed were connected to each other. I argue that this suggests that addressing one key barrier related to exercise has the potential to subsequently mitigate or affect other barriers and approaching exercise in this systematic way may improve people's barrier self-efficacy. For example, people in my study cited that a lack of motivation often stemmed from long days at work and that the last thing they wanted to do after working all day was come home and exercise. A specific example of this can be seen in the case of Diane, who said that standing on her feet at work for six hours straight caused her significant pain and hampered her from finding the motivation to exercise. If Diane were to address this career barrier first and foremost, by taking more periodic rest breaks or limiting her standing at work for example, this may limit her pain and improve her exercise motivation to exercise once she got home. Similarly, focusing on one key barrier may improve her barrier self-efficacy because it is a less intimidating task, and this may provide additional motivation to continue to engage in positive exercise-related behaviour change.

Theme 3 – My exercise mindset: General perceptions towards exercise

This theme addressed how these participants described mentally approaching exercise during this phase of life. Specifically, there were three main subthemes that were expressed: (i) "It [exercise]

always makes me feel good", (ii) "I would rather participate in sport, absolutely" and (iii) "I think exercise can be anything you want it to be." It was in this theme where alternative forms of analysis were used to bring to light participants' general perceptions towards exercise. The utilization of word clouds was beneficial in providing a visually appealing representation of participants' general perceptual responses, "[w]ord clouds have emerged as a straightforward and visually appealing visualization method for text" (Heimerl et al., 2014, p. 1833). Similarly, word clouds have the potential to present data in an effective way for readers to easily read and understand presented data (DePaolo & Wilkinson, 2014). I believe that the word clouds in my study provided supplementary evidence in understanding participants' perceptual responses and were used in such a way that readers could clearly see the message that participants were trying to convey.

Upon my review of exercise behaviour change literature, I did not find any studies that utilized word clouds to assess middle-aged adults perceptions towards exercise. One study looking at older adults used two different word clouds, one that meant to capture the health benefits participants attributed towards an exercise program following medical discharge and another that cited common barriers to program participation (Burgoyne, 2015). I believe that the use of word clouds in my study served as an effective visual tool to convey my findings, and the novelty of this approach may be used to inform future qualitative methodologies. Similarly, I feel it is also important to highlight the population of participants who were involved in my study. Specifically, by utilizing the tradition of making a New Year's resolution, I was able to understand people's perceptions and experiences during a time of behavioural transition as they were moving from a state of inactivity to a more active one. I have not seen a similar approach to exercise behaviour change research in the existing literature, and this provides a new perspective pertaining to both exercise behaviour change and the New Year's resolution literature.

The word clouds revealed that people generally held favourable perceptions towards exercise after making their resolution, in that the term "positive" was the most common response across each week's journal entries. Similarly, participants' one-word responses, when asked to summarize their exercise experiences as a whole since making their resolution to exercise were largely positive with 37 responses deemed positive and 26 deemed negative. Further analysis of participants' semi-structured interviews suggested that participants in this study had overwhelmingly positive perceptions towards exercise. I feel it is important to discuss this finding in relation to other studies in the literature. I found this perceptual finding to be similar to the results of a systematic review of 13 qualitative research articles conducted by Winterbotham and du Perez (2016) that was aimed at understanding active adults' (over the age of 55) individual exercise experiences. Specifically, this review looked at these adults' exercise experiences and compared adults who did traditional exercise to those who competed in sport. This review similarly found that both traditional exercise and sport were viewed favourably because they were seen as contributing towards healthy aging. However, adults who engaged in traditional exercise were found to have a broader view of what successful aging looked like and saw aging as a positive process that exercise can ameliorate. Those in the sport group however, tended to participate in sport to delay the process of aging, rather than viewing aging as being inherently positive. Nevertheless, both groups emphasized the importance of being active in helping them age healthier. Winterbotham and du Perez (2016) also found that adults who participated in sport were less inclined to describe themselves as being old.

In my study, the importance of sport was also emphasized by participants but was primarily rooted in the fact that participants felt it was a more enjoyable way to exercise. I feel it is important to discuss my own findings in relation to Winterbotham and Perez's (2016) review because of the degree of similarity in our results. Specifically, both my study and their review suggest that middle-aged

adults generally hold favourable perceptions towards exercise and that sport remains fundamentally important in middle-aged adults' exercise behaviours. As discussed by van der Zee et al. (2019), sport is most commonly engaged in as children and youth, but the findings from my study suggest that providing more opportunities and prioritizing sport in the middle-aged adult population may be an important step in encouraging long-term activity within this population. Additional recreational sports leagues specifically tailored to meeting the needs of middle-aged adults may be an important step in encouraging positive exercise behaviour change. These sports leagues could also be designed to mitigate some of the common barriers seen in middle-aged adults, such as ensuring all games and activities fall outside of traditional work hours or setting up some sort of accountability program to assist in motivating members.

Theme 4 – "It's about finding myself again": Exercise and its perceived influence on identity

A common finding in this study was that middle-aged adults frequently cited exercise as being important with respect to their identity. Specifically, there were two subthemes that encompassed the relationship between exercise and identity; i) "This is MY time"; and ii) "I'm accomplishing something". The participants described how their newfound exercise generally provided a means for them to reconnect with who they once were, after a period of having cared for others or focusing their attentions on other areas of life, such as their careers. This suggests that exercise served as an important way for adults to feel internally connected with who they feel they truly are.

The concept of identity and how it relates to exercise has been cited in existing literature, and the actual term exercise identity is described by Anderson and Cychosz (1994), "[t]hus, exercise identity is defined as when an individual's self-concept includes an emphasis on previous exercise behaviour and allowing this self-concept to direct future exercise behaviour" (p. 195). In essence, exercise identity seems to pertain to the degree to which one identifies as an exerciser (Ntoumanis et al., 2018). I would

argue that in my study, many participants seemed to develop a sense of exercise identity, as it was seen that exercise not only impacted how they viewed and felt about themselves, but they also perceived it to be a more important part of their lives after making their New Year's resolution. Similarly, the majority of participants also suggested that they believed exercise was going to become a more important part of their lives in the future.

Vlachopoulos et al. (2011) had this to say with respect to identity and exercise, "[i]n the context of identity theory, activation of an identity would lead to greater effort into enacting the identity while self-verification through performing the role well would increase self-esteem and self-efficacy" (p. 266). This quote seems to suggest that the activation of an exercise identity would lead to following through on positive exercise-related behaviours to attain said identity. Not only did exercise become a more significant part of my participants' lives, but they also seemed to adapt to that role by engaging in continual exercise and stating that they believed exercise was going to be a more important part of their life in the future. It is in this sense that I believe my research serves as an extension of previous work pertaining to exercise behaviour change and exercise identity, because it shows examples of participants who went through exercise behaviour change, felt an impact on their identity and subsequently acted on this newfound identity to ultimately guide their exercise behaviours.

It is also important to acknowledge that not all participants' associations with identity and exercise were positive in my study. As seen in the findings, Faye and Molly felt guilty for not exercising enough, and this subsequently led to them feeling badly about themselves and especially in the case of Molly, this seemed to discourage her further. This theme points to the importance that exercise has on identity and provides practical examples of participants that saw their exercise identity affected after making their resolution to exercise. This again points to the benefit that a qualitative

study of this nature aimed at middle-aged adults brings to existing research, in that it allows for a deeper understanding of participants' exercise related experiences.

Theme 5 – "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise

This theme is meant to highlight the importance of health and how this influenced the participants' exercise experiences. Health was frequently cited as a top motivating factor in why people made their resolution to exercise. These responses were usually reflective of people's unique health circumstances, and this stresses the importance of individuality when looking at health as a motivating factor for exercise. Box et al. (2019) looked at exercise participatory motives across the different age groups and found that a desire to attain positive health was the number one motivating factor to exercise for every age group in the study, including college-aged people (18-24 years old), young adults (25-32 years old), middle-aged adults (33-49 years old) and older adults (over 50 years old) (Box et al., 2019). This shows that the importance of exercise and health is not only seen in middle-aged adults, but rather participants from all age groups recognize positive health as being fundamentally linked to healthy and consistent exercise behaviours. Another systematic review of barriers and facilitators to physical activity participation also cited health as being a key motivating factor for exercise participation in middle-aged adults (Kelly et al., 2016).

While health is recognized as being an important motivating factor for exercise, I feel this study provided a unique contribution to the existing literature because it followed people during a time of behavioural transition. This allowed for an understanding of not only seeing health as a motivating factor, but also looking at how people's health was subsequently impacted by the exercise in which they participated in. In this sense, I was able to understand health as being a more dynamic factor pertaining to exercise than I was previously aware of. Health was not just important in getting people to exercise, but it was also important in helping people see the rewards exercise has brought to their

lives to encourage long-term exercise adherence. It is in this sense that I believe the name of this theme, "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise, is reflective of participants' responses in the study. They described how the concept of health was consistently present throughout the entire duration of their exercise journey, during this time of behavioural transition.

It is also important to recognize that this theme again highlights the importance of focusing on people's individual health circumstances. To approach this subject by simply stating that health is important, fails to represent the full picture of what this theme is trying to represent. O'Connor (2020) stressed the importance of considering people's personalities as well as individual life circumstances when assessing their ability to effectively engage in health-related behaviour change. Knowing that health is both a motivating factor and an area of life that is positively impacted by exercise means that recognizing the individual health circumstances that may influence people's exercise experience is fundamentally important.

As seen in this study, different people had very different health conditions that affected their exercise experiences, including breast cancer, a significant hip injury, severe back surgery and diabetes. This focus on individuality provides an avenue for those designing exercise programs for middle-aged adults and suggests that understanding people's specific health circumstances is fundamentally important for ensuring adults get the most out of their exercise-related experiences. The gathering of this information could include personal trainers having consultation meetings before working with clients to understand their specific needs, having gym classes tailored towards people experiencing a common health issue or even designing specific home-gym workouts that are geared towards helping people with specific medical conditions. The emphasis here is on people's individual health circumstances as a means to promote the most positive exercise-related experience possible.

Theme 6 – Putting my best foot forward: Insights and intents regarding future exercise

This study revealed an interesting pattern with respect to participants' exercise trajectories over the lifespan. The themes discussed thus far have alluded to each significant life stage, including how exercise was experienced during childhood and youth, the barriers to exercise upon entering middleaged adulthood, and current middle-aged adulthood exercise experiences and perceptions. However, part of this trajectory also includes people's future exercise behaviour and the role they feel exercise may play on their life moving forward. A common finding that emerged was the idea that since having made their resolution, these participants overwhelmingly expressed that they believed exercise would be a more important part of their life moving forward. While this is an encouraging point, there is certainly a drastic difference between people saying they want to exercise long-term versus them actually doing it. Pienta (2011) makes this point clear when looking at people who make New Year's resolutions, citing that 88% of all resolutions fail within the first two months. However, of the five participants who completed the member check process for this study, four of them stated that exercise had remained a significant part of their lives since making their resolutions. Similarly, GLTEQ scores showed that a majority of participants remained at least relatively active during their study involvement. I would argue that these points suggest that at least for participants in this study, a verbal desire to exercise was subsequently acted upon through their exercise behaviour, at least during the data generation process.

The importance of recognizing people's individual life circumstances is relevant when discussing this theme, because participants cited numerous different reasons as to why they felt exercise would continue to be an important part of their lives moving forward. As Abigail mentioned, middle-aged adults are coming up on the age of retirement, so having exercise programs that directly target recent retirees may be an effective way in encouraging people to get active as they enter

retirement. Similarly, many participants expressed that they wanted exercise to be a more significant part of their daily routine. This finding suggests that adults should begin to take active steps to integrate exercise into their daily lives. Examples of this integration were already being seen by participants involved in the study, as Molly moved her elliptical machine upstairs and Faye booked a physical with her doctor to inquire about future steps pertaining to health and exercise. Research suggests that these types of small steps may be an effective way to promote positive behaviour change pertaining to exercise (Arena et al, 2018; Hills et al., 2013).

The COVID-19 pandemic created a situation whereby participants' daily routines were likely significantly affected, and I felt it was important to ask a question about whether or not this had impacted their exercise behaviour in any way. Of the five participants who responded to the member check process, two of them reported that the pandemic had had a positive effect on their exercise behaviour in general, two indicated a negative effect and one participant felt the pandemic had no effect. Jenny mentioned that her level of exercise had greatly increased since study involvement and that her improved health had motivated her to keep moving. She also mentioned that she had been doing boxing classes via video during the COVID-19 pandemic. Hannah said that she had continued to walk with her dog nearly everyday, and that the better weather had motivated her to exercise. Hannah also mentioned that the COVID-19 pandemic had limited her stress because she did not feel as rushed to do so many things, and she was enjoying her time at home. Diane described her participation in exercise as being "patchy". She did, however, mention that she had a gym in her basement where she had been doing some weightlifting and cardio, and she was working towards getting into the "exercise zone". Lance felt that COVID-19 had not had any significant effect on his exercise behaviours. Kendra described a "general sense of sadness" because of the pandemic and recognized that it had affected her both physically and mentally.

It is also important to mention the importance that momentum seemed to have on the participants' future exercise journeys, as both Jane and Georgia mentioned that they felt they were stepping in the right direction and they wanted to maintain that positive momentum moving forward. I think this is an important point that was raised, and it suggested that the hardest part with respect to exercising for middle-aged adults is simply taking the first steps to get started. Once the decision to exercise had been made and they had acted upon it, they seemed to be motivated by a continuous desire to keep up with that level of activity. Some sort of accountability program specifically designed to check in periodically with active, middle-aged adults may be an effective method in encouraging regular exercise, so adults can continue to ride their momentum, without halting exercise.

Chapter 6: Limitations and Future Directions

The purpose of this phenomenological study was to explore the lived experiences of middle-aged adults as they initiated and engaged in exercise as part of a New Year's resolution to exercise and to understand the meaning that this newfound exercise had upon their lives. The focus of this study was on developing a holistic understanding of exercise behaviour change, and the culturally sanctioned tradition of making a New Year's Resolution provided a practical way to recruit people in this state of behavioural transition. There were some limitations with this research that do need to be addressed. Firstly, there was an unequal representation of participants. Purposive sampling was used in an attempt to get a diverse sample of people with equal representation across the middle-aged adult age range (44 to 64) and with respect to gender. It ended up being difficult to recruit males, and therefore only four males were recruited as compared to twelve females. Despite the unequal representation of males and females, I felt it was still important to include male participants' data because the primary goal of this qualitative study was to develop a deeper understanding of middle-aged adults' (both men and women) newfound exercise experiences. Any omission of the male participants' data would ignore their unique perspectives that may inform future additional research pertaining to exercise behaviour change within the male population.

As part of my literature review, I discussed that previous research has suggested that ethnic diversity may play an important role in how exercise is experienced for different populations. The sample for this particular study was not ethnically diverse, as there was only one participant who did not identify as Caucasian. This lack of ethnic diversity is an additional limitation to the study at hand.

Another important limitation to address relates to the effect that the research study itself may have had on people's behaviour. Many participants cited that this research served as a good reminder to get them active, and similarly stated that this had a positive effect on their exercise behaviour overall. This

is concerning due to the fact that the documented responses may not be entirely based on people's actual behaviours had they not been involved in the research study. This does, however, still serve as a potentially important finding in that it is reflective of the importance of accountability and how this may relate to overall motivation with respect to exercise.

The COVID-19 pandemic also presented a unique challenge and affected aspects of the research process. While the majority of data collection was completed prior to the shutdown of in-person research, three of the sixteen interviews had to be completed over the phone. Along with this, the pandemic may have had an effect on the unusually low response rate with respect to the transcript verification and member check processes. This was particularly disappointing, because it would have been interesting to see whether more individuals remained active after completion of the study period, especially to see whether exercise did in fact become a more important part of their lives since having participated, as stated in Theme Six: Putting my best foot forward: Insights and intents regarding future exercise. The COVID-19 pandemic also likely had an effect on people's exercise behaviours following study completion, so the member checks that were completed may not be entirely representative of their actual exercise behaviours, had this pandemic not occurred.

In terms of future study directions, this research allowed for a firsthand perspective of the lived experiences of middle-aged adults since having made a New Year's resolution to exercise. The value in this is especially rooted in better understanding the role exercise has on people's lives during a behavioural transitional state. Potential areas of future research include further exploration in middle-aged adults' exercise identities and how these may impact long-term exercise adherence for individuals moving from an inactive state to a more active one. A broader research study could solely focus on this relationship in a more in-depth fashion.

Future research could also look at the notion of middle age as being a potential point of liberation where exercise could be re-introduced into people's lives in a more consistent manner, and in also helping to change people's mindsets towards exercise being a part of everyday life, similar to how it was described when these participants were children. In saying this, future research could look at how children perceive exercise, and determine effective methods to apply that naturalistic mindset more effectively to middle-aged adults.

Additional research may also be beneficial in exploring health as both the means and the end in relationship to exercise, and in recognizing that the specific health needs of the individual should be acknowledged and incorporated as part of any exercise plan that is meant to encourage long-term adherence in middle-aged adults.

Conclusion

From their descriptions, it was evident that middle-aged adulthood was perceived to be a time where one's desire to exercise increases. Exploring the perceptions of participants who had made a New Year's resolution to exercise revealed that middle-aged adults had a desire to recapture a sense of lost identity, improve their overall health and wellness, and felt that exercise would be a more important part of their lives in the future. Similarly, this study showed that participants experienced exercise as a more natural part of their lives as children and youth, and there seemed to be this desire to recapture that same sense of natural integration of exercise into daily life, since having made their resolution to exercise during middle-aged adulthood. It was also found that participants generally had positive perceptions towards exercise, and that sport was their preferred method of staying active.

Some major barriers to exercise prior to making their resolution to exercise were caregiving responsibilities, career stress and a general lack of motivation that seemed to be somewhat counteracted through accountability measures. An overarching finding for each of these themes was

the importance of looking at people's individual life circumstances, in order to truly understand the unique nature of their personal exercise journey and acknowledging this could serve as an effective way to encourage both exercise enjoyment and long-term exercise adherence.

Future studies should aim to better understand exercise identities in middle-aged adults who have recently begun activity following a period of inactivity and should also look at the degree to which middle-aged adulthood may be viewed as a potential period of life that allows for exercise to be effectively re-introduced into one's life. Future research should also look at encouraging middle-aged adults to adopt a more natural approach to exercise, and this could be done by first better understanding how exercise is naturally integrated into children's lives.

The simple, overarching essence discussed at the start of these findings was that exercise is not always easy. As participants in this study pointed out, there will be times where it will not fit in the day and there will be other times when you might feel discouraged about where you are at in your exercise journey, but the simple fact is that the majority of participants from this study said that making their resolution to exercise had been an overwhelmingly positive experience and that they are encouraged moving forward. My hope is that this work gave middle-aged adults a platform to share their stories related to exercise such that their voices can extend current literature and others can learn from their perspectives firsthand, similar to how I had my participants share their stories with me. If I had to summarize this study in one word it would be hopeful, because these adults clearly saw the value of exercise and were determined to continue doing it despite their past challenges, and that determination is not only admirable, but it also paints an encouraging picture moving forward.

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<u>APPENDIX A – Recruitment Flyer</u>

RESEARCH PARTICIPANTS NEEDED

Researchers from Wilfrid Laurier University are looking for middle-aged adults (ages 45 to 64 years old) to participate in a research study.

The study purpose is to explore the lived experiences of middle-aged adults as they initiate and engage in exercise as part of a <u>NEW-YEARS RESOLUTION</u> to exercise and to understand the meaning that this newfound exercise has upon their lives.

WHO ARE WE LOOKING FOR

- Adults ages 45 to 64 years old
- Individuals who have made a New Year's Resolution to exercise
- Individuals who were previously inactive six months prior to making this resolution



This study will require the completion of multiple questionnaires, four journal entries and one interview. Additional measures to enhance overall study rigour related to the data generated will also be completed.

*TOTAL TIME COMMITMENT = 4 to 5 hours (estimate)

All participants will receive a 50\$ gift card to their local mall as a token of appreciation for their participation in the study

CONTACT INFORMATION

For more information and study details, feel free to contact the primary researcher using the information below:

Name: David McIlwraith

Phone: (519) 884-0710 ext. 4214 Email: <u>mcil8520@mylaurier.ca</u>

Research Ethics Board File Number: 10009262

Appendix B - Social Media Posts in Online Neighbourhood Community Groups

Hi Everyone! My name is David McIlwraith, I am currently completing my Master's Degree in Kinesiology at Wilfrid Laurier University. For my thesis project this year, I am looking for middle-aged adults who have made a New Year's Resolution to exercise. Specifically, I'm looking for individuals who are 45 to 64 years old who have previously been inactive. If you or anyone you know meets this criteria and would like to be involved in this study, feel free to contact me for further discussion using the email address below or send me a direct message through Facebook. Thank you!

mcil8520@mylaurier.ca David

Appendix C – Social Media Post on Personal Facebook Page

Hi everyone,

As many of you know, I am currently completing my Master's Degree in Kinesiology at Wilfrid Laurier University. For my thesis project this year, I am looking for middle-aged adults who have made a New Year's Resolution to exercise. Specifically, I'm looking for individuals who are 45 to 64 years old who have been previously inactive for six months prior to making this resolution. If you or anyone you know meets this criteria, feel free to contact me for further discussion using the email address below. Thank you!

Please refrain from commenting on this post to ensure confidentiality of all potential participants. Email: mcil8520@mylaurier.ca

APPENDIX D WILFRID LAURIER UNIVERSITY INFORMED CONSENT STATEMENT

Investigators: David McIlwraith, MKin Student, Department of Kinesiology & Physical Education Dr. Margaret A. Schneider PhD, Department of Kinesiology & Physical Education

You are invited to participate in a qualitative research study. The purpose of this study will be to explore the lived experiences of middle-aged men and women as they initiate and engage in exercise as part of a New Year's Resolution to exercise and to understand the meaning that this newfound exercise has upon their lives.

INFORMATION

It is expected that there will be approximately 8 to 15 participants taking part in this study. Should you meet all study inclusion criteria, the researcher will contact you to set up a time to complete the following:

- 1) A background questionnaire, which will be used to collect basic demographic information about yourself.
- 2) The Godin Leisure-Time Exercise Questionnaire to evaluate various characteristics related to your exercise participation. This questionnaire will be administered during a rapport meeting, at each journal entry time point, and during the interview that will be completed as part of this study.
- 3) Weekly journal entries over a 4-week period. These journal entries will be geared at understanding your perceptions related to exercise and how you feel exercise has impacted your life over a weekly period.
- 4) A face-to-face interview will occur after the completion of the four journal entries. This interview will look to provide a deeper understanding of your reasons to exercise, your perceptions towards exercise and how exercise has impacted your life. Similarly, this interview will also explore how you feel your current engagement in exercise will impact future participation. The interview will be audio-recorded in order to ensure that your exercise experience is accurately documented. This recording will be transcribed verbatim.
- 5) A process of transcript verification (upon interview completion). Transcript verification simply refers to a process where you will be able to review the transcript developed after your interview. You will have an option to receive this transcript either via email or paid-postage package. This will allow you to provide any further points of clarification you feel is necessary.
- 6) A one-time interpretive member check (following preliminary analysis completion). An interpretive member check refers to an opportunity for you to receive study results and evaluate how well these results are reflective of your experiences. This member check will provide you with the opportunity to read your transcript and make any clarifications you feel is necessary. You may also remove any statements you do not wish to be included in the final analysis. In addition to this, the researchers may

add questions/comments in the margins that they would like you to answer/clarify. Likewise for the interpretive verification, you will be asked to provide feedback on the emergent themes identified during the preliminary analysis of the data. Following completion of this, you will return the member check document in the same manner as it was originally sent to you (i.e., via email or in the self-addressed, postage-paid envelopes provided).

The total time commitment for this study is estimated to be between 4 and 5 hours total.

RISKS

The interview portion of this study will ask you to discuss details surrounding exercise experience. This may be upsetting for certain individuals who may have had difficult experiences in the past related to physical activity and exercise. To minimize this risk, the interviews will be conducted in a supportive and non-judgmental environment in which you are not obligated to discuss any experiences or answer any questions that make you feel uncomfortable. In the event that you wish to stop the interview, the tape recorder will be turned off and you may leave at any time.

BENEFITS

This research study will provide you with the opportunity to discuss your personal experiences with exercise, as well as help to address research gaps in the current literature pertaining to behaviour change and middle-aged adults exercise experiences. This research may also be beneficial in guiding future qualitative research related to exercise and middle-aged adults. Research findings could be valuable in guiding future program development aimed at eliciting positive exercise behaviour change within this population.

COMPENSATION

For participation in this study, you will receive a \$50.00 gift card to your local mall as a small token of appreciation for your time and involvement. You will receive this gift card following the completion of your interview. Should you be unable to complete parts of this study for any reason, you will still receive the full \$50.00 gift card as an expression of thanks.

CONFIDENTIALITY

Your name will be removed from any/all data sources and replaced with a code number in order to ensure confidentiality. All information will be kept in password-protected files on the investigators' computers. David McIlwraith, and Dr. Margaret Schneider will be the only people who will have access to the raw data. Any paper materials will be kept in a locked cabinet in Dr. Schneider's research space at Wilfrid Laurier University. All raw data (either digital or hard copy) will be stored for a minimum of one year and a maximum of five years, after which time it will be destroyed by the researchers. The results of this study will be used in written publications. These publications may contain quotations from your interviews, however there will be no information revealing your identity in any of the quotations used.

CONTACT

If you have any questions at any time about the study and its procedures, or you experience adverse effects as a result of participating in this study, you may contact David McIlwraith at (519) 884-0710 ext. 4214 and at mcil8520@mylaurier.ca or Dr. Margaret Schneider mschneider@wlu.ca at any time

throughout this process. This project has been reviewed and approved by WLU Research Ethics Board. If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Jayne Kalmar jkalmar@wlu.ca, Chair of the WLU Research Ethics Board, Wilfrid Laurier University, (519) 884-0710 extension 3131. Additionally, you may contact Wilfrid Laurier's faculty of graduate and postdoctoral studies at (519) 884 0710 extension 3127 or using the email address fgps@wlu.ca.

PARTICIPATION

Your participation in this study is completely voluntary; you may decline to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed. You have the right to omit any questions/procedures you so choose.

FEEDBACK & PUBLICATION

The results of this study will be disseminated via conferences and written in other publications. An executive summary will also be provided to interested parties, including the participants and the participating facilities used for recruitment purposes. You may obtain a copy of the results by contacting either of the researchers at the email addresses stated above. It is estimated that the final copy of the results will be made available after July 2020.

Name:	Phone Number: ()
	Email address:
	Home address:
	CONSENT
☐ I have read and understood the all agree to participate in this study	bove information. I have received a copy of this form. I
Participant's signature	Date
Investigator's signature	Date

☐ I agree to the aud	dio recording of my personal in	terviews.
Participant's signature _		Date
Investigator's signature		Date
•	is quotations from my journal end/or presentations of the study	entries and/or personal interview ma results.
Yes □	No □	
Participant's signature _		Date

APPENDIX E - BACKGROUND QUESTIONNAIRE

The following questionnaire will be used to collect some basic demographic information. Your information will be kept confidential and you will not be identified personally in any reports resulting from this research. Participation in completing this questionnaire is voluntary, and you may refrain from answering any questions. In advance, thank you for your time and help in completing this part of the study.

1.	Please write the month and year you were born on the line provided (MM/YY).
	What is your Ethnicity?
a.	European Origins
b.	Asian Origins
c.	African Origins
d.	Latin, Central or South American Origins
e.	Caribbean Origins
	Oceania Origins
	Other North American Origins (please specify)
h.	North American Aboriginal Origins (please specify)
i.	Other (please specify)
3.	Gender: What is your gender?
a.	Male
b.	Female
c.	Transgender
d.	Other (please specify)
e.	Prefer not to respond
	Education: What is your highest level of education completed?
	Less than a high school diploma
	High school degree or equivalent
	Trade certificate or college diploma
	University Degree
	Masters degree
f.	
g.	Other (please specify)

a.b.c.d.	What is your current employment status? Employed full-time (40+ hours a week) Employed part-time (less than 40 hours a week) Unemployed Student Retired Other
	What is your marital status?
a.	Single (never married)
b.	Married or common-law relationship
c.	1
	Divorced
	Widowed
f.	Other (please specify)
a. b. c.	In general, how would you rate your current health status? Excellent Good Fair Poor
8.	Please describe the main reasons why you decided to make a New Year's Resolution to exercise?
9.	Since making your resolution, how many times per week would you say you are participating in exercise (on average)?

10. How long does a typical exercise session last (in minutes)?
11. Do you feel you were previously in an inactive state prior to making your resolution to exercise? a. Yes b. No
c. Don't know
12. If yes, how long do you think you were in this inactive state? Estimate the number of months.

Appendix F - Godin Leisure-Time Exercise Questionnaire

INSTRUCTIONS:

The Godin Leisure-Time Exercise Questionnaire asks participants to complete a self-explanatory, brief four-item query of usual leisure-time exercise habits.

CALCULATIONS

For the first question, weekly frequencies of strenuous, moderate, and light activities are multiplied by nine, five, and three, respectively. Total weekly leisure activity is calculated in arbitrary units by summing the products of the separate components, as shown in the following formula:

Weekly leisure activity score = $(9 \times Strenuous) + (5 \times Moderate) + (3 \times Light)$

The second question is used to calculate the frequency of weekly leisure-time activities pursued "long enough to work up a sweat" (see questionnaire).

EXAMPLE

Strenuous = 3 times/wk Moderate = 6 times/wk

Light = 14 times/wksep. Total leisure activity score = $(9 \times 3) + (5 \times 6) + (3 \times 14) = 27 + 30 + 42 = 99$

1. During a typical **7-Day period** (a week), how many times on the average do you do the following kinds of exercise for **more than 15 minutes** during your free time (write on each line the appropriate number).

	, basketball, cross country skiing,	PIDLY) (e.g., running, jogging, hockey, judo, roller skating, vigorous swimming,
TIMES PER V	VEEK:	
	· ·	Signification (e.g., fast walking, baseball, tennis, easy skiing, popular and folk dancing)
TIMES PER V	VEEK:	
bowling, horseshoes, go	SEP (MINIMAL EFFORT) (e.g. olf, snow-mobiling, easy walking) WEEK:	, yoga, archery, fishing from river bank,
	ay period (a week), in your leisur ough to work up a sweat (heart b	e time, how often do you engage in any beats rapidly)?
OFTEN	SOMETIMES	NEVER/RARELY
1	2	3

Appendix G - Weekly Journal Entry

Q2. For days this week whe	n you were unable to exercise, please describe the reasons why did you no
	Click all that apply
No time	•
ack of motivation	
oo tired	
elt nervous about it	
Family responsibilities	
Bad weather	
Career responsibilities	
Didn't feel like it	
Pain/injury/sickness	
ack of interest	
Didn't see the value of it	
ou had exercised enough already ately and didn't see it necessary	
ther	
O3. What term best describes y Very positive Positive Neutral Negative	our perceptions towards exercise over the past week?
 Very Negative 	

Q5. If you had to use one word to describe your feelings towards exercise over the past week, what word would you use?
Q6. Can you think of one specific example whereby exercise has positively impacted your life over the past week?
Q7. Can you think of one specific example whereby exercise has negatively impacted your life over the past week?

If you are filling this journal out online, please take a few minutes now to fill out the Godin-Leisure Time Exercise Questionnaire attached to this email.

*If you are filling this journal out using the pencil and paper version provided during your rapport meeting, please pull out one of the 4 Godin-Leisure Time Exercise Questionnaire's provided as part of your Journal Entry Package and complete it now. The four completed journal entries and Godin Leisure-Time Exercise Questionnaires will be collected at your scheduled interview date.

<u>APPENDIX H – Weekly Journal Entry Email Notification Reminder</u>

<DATE>

Dear < NAME>:

This email pertains to your study participation in my research project. Just a reminder that your weekly journal entry will be due on <DATE>. You may access the entry using the pasted link below. The Godin Leisure-Time Exercise Questionnaire is also attached and is required to be completed as part of your journal entry. Should there be any issues, please do not hesitate to connect with me. Thank you for your ongoing participation.

David McIlwraith

Primary Researcher, Wilfrid Laurier University

<LINK TO ENTRY>
<GODIN LEISURE-TIME EXERCISE QUESTIONNAIRE ATTACHMENT>

APPENDIX I - Semi-structured Interview

(Note: This guide is flexible and additional probes may be added dependent on the participant's responses to the questions)

Introductory statement to the interview process:

I would like to thank you for meeting with me today to discuss your experiences related to physical activity. The purpose of this interview will be aimed at further understanding your reasons for making the resolution to exercise, exploring your perceptions of how this participation in exercise has impacted your life, and lastly, how you feel this engagement may influence your future exercise participation. There are no right or wrong answers to these questions, I am simply looking for your individual thoughts and perceptions related to your recent exercise experiences.

If at any point during the interview you have questions, comments or concerns, please do not hesitate to let me know. If there are any questions you do not feel comfortable answering, you have the right to refuse to answer. You may stop the interview at any point.

Before we begin, are there any questions you have for me about the interview or the research process in general? (Pause for response). May I begin to record? (Wait for affirmation). Okay, let's begin.

Opening Questions

Tell me what exercise you have completed in the past week?

What about the past 4 weeks?

Probes:

How did you feel after doing this exercise? What self-perceived intensity was this exercise completed at? Are these activities you would engage in during a typical week?

Did you participate in any other forms of physical activity besides structured exercise? (e.g. yard work, walking flights of stairs, household chores). Please describe.

Probes:

What self-perceived intensity were these activities completed at?

Personal Questions

Take a moment to consider all of the physically active things you do in your day-to-day life. If you had to explain to someone how you personally define exercise, what would you say?

Probes:

Do you feel your personal definition has changed since beginning your resolution to exercise? Please elaborate.

Can you describe any gaps or lulls you have had in exercise over your lifetime?

Probes:

What were some of the contributing factors to this time in your life that resulted in this inactivity? How did you feel about exercise during times of inactivity?

What exactly was your resolution related to exercise?

How have your perceptions towards exercise changed since making this resolution?

Exercise Experiences

Can you tell me a bit about your past experiences related to exercise?

Probes:

Has exercise always been an important part of your life?

What types of exercise did you participate in when you were a child? Teenager? Young Adult? Did it differ depending on stage of life? What factors contributed to these differences? (i.e. school, work, family, hobbies, etc.)

Can you describe for me, in as much detail as possible, your current feelings towards exercise?

Probes:

Do you generally have positive perceptions of exercise? Negative?

What do you like? Dislike?

What factors do you feel specifically contribute to these perceptions?

Are workouts something that you look forward to doing? If not, what keeps you going back?

Since you have made the resolution to exercise, in what ways do you feel other areas of your life have been impacted?

Probes:

Have these perceived effects from your participation in exercise been generally positive? Negative? Can you think of any specific examples where exercise has had a positive impact on your day? Can you think of any specific examples where exercise has had a negative impact on your day?

What does a typical day look like for you in terms of your exercise experience? Please elaborate.

Probes:

What sorts of activities do you do? Where does exercise fit in? How do you typically feel during your exercise sessions?

Please describe in detail what made you decide to make the resolution to exercise?

Probes:

What factors do you feel led to this decision? Was there any one factor that was particularly important?

Were there any factors that may have worked against your decision to make the resolution to exercise?

Probes:

How did you circumvent these barriers?

What are your expectations in terms of your exercise participation in the future?

Probes:

How successful do you think you will be in maintaining this consistent exercise, long-term? Do you have set long-term goals?

Do you feel exercise is now a particularly important part of your life since having made your resolution?

Closing Question

If you had to encapsulate into one word, your exercise experience since having made your resolution, what would it be?

Probes:

Do you have any specific examples to support the use of this word in particular?

Do you have any questions for me about this interview and or the research study process?

Closing Remarks

Thank you for completing this interview. You will have the opportunity to see the interview transcript during the transcript verification process. Similarly, the member check process will allow you to provide additional insight and clarification of preliminary themes developed. Should any additional questions or concerns arise, please don't hesitate to get in contact with me at anytime.

<u>APPENDIX J – Transcript Verification Form</u>

<date></date>		
<address></address>		
Dear < NAME>:		

Please find enclosed a copy of your verbatim interview transcript from your interview on <DATE>. Although your copy includes the actual names of people mentioned, please be advised that these names have been replaced with pseudonyms in my personal copy.

The reason I am sending you this transcript is to provide you with the opportunity to review, clarify, and add or remove any of the issues discussed throughout the interview. You may decide whether or not you feel the issues discussed require any further clarification. If you do decide to make comments, you may write them directly in the margins of the transcript [or through track changes on the electronic transcript], but please do not make any editorial changes to the data itself. You may also remove anything that you do not wish to be analyzed, simply by drawing a line through it on the transcript [or making a comment on the emailed electronic transcript]. These statements will then be removed altogether. All written comments on the transcript will be considered in the final analysis.

Please return the transcript in the envelope provided [or via email at mcil8520@mylaurier.ca] by <DATE>. If you are unable to mail or email the transcript to me by this day, please call (519) 884-0710 ext. 4214 to get in contact, otherwise I will assume that you accept the transcript as is. If you'd prefer to speak directly with me about any clarifications or changes, please phone me prior to the date listed above. If you have any questions at any time, please do not hesitate to contact me.

Sincerely,

David McIlwraith (MKin student) Wilfrid Laurier University

Appendix K

A distillation of participants' responses and how they address the proposed study research questions

The purpose of this section is to address how each theme effectively answered the research questions that ultimately served as a guide for this study.

1. What did participants describe as their main reasons for making the resolution to exercise?

The first research question was rooted in a desire to understand the main reasons people made their New Year's resolutions to exercise in the first place. This question was largely reflected in themes one and five. For many of the participants, they described how their motivation to begin exercise was derived from a desire to focus on themselves. Theme Two: "They're winning, I'm losing": Insights from a time when exercise was not the priority, revealed that caregiving and career strain were among two of the most prominent barriers these participants cited for not exercising. Middle-aged adulthood was described as a time where these participants perceived a welcome opportunity for people to focus on themselves, and herein lay the importance that identity had on motivating people to make their resolution. Exercise served as a means to spend quality time with themselves, often after many years of prioritizing the needs of others (particularly their children), ahead of their own. This identity piece was an important finding, and also demonstrated the value that qualitative findings can add to this particular area of research. A phenomenological study of this design allowed for an in-depth exploration of the meaning of exercise for these participants, and allowed this finding regarding identity to emerge from their stories. The other key motivating factor appeared to be the maintenance or improvement of their overall health. It was reported that this focus on one's health served as both the cause and effect for exercise. Health as a motivating factor manifested itself in different ways, including the participants wanting to make their remaining years better, a desire for weight loss to prevent current ailments from worsening, and generally wanting to

strengthen their bodies through exercise. I think these findings highlight the importance of specifically understanding the particular health issues that middle-aged adults may be managing and then shifting our program design towards addressing these particular concerns. Understanding one's specific health issues and finding relevant exercise-based solutions may better motivate them to exercise effectively. The best example of this was when Kendra described how knitting was a therapeutic exercise for her rigid finger movement that had resulted from her cancer treatments. Having a detailed understanding of one's specific health-related factors seemed to be a fundamental point for not only getting adult to exercise in the first place, but to also foster more positive outcomes as a result.

2. How did participants perceive their lives had been impacted since initiating and engaging in more exercise?

This was mostly answered again with Theme Five: "Taking care of your health is the best thing you can do for yourself": Health as the cause AND effect for exercise, in that improved health was described as the main outcome of having made their New Year's resolution to exercise. Many people cited themselves as sleeping better, losing weight, having better mental health and recognizing exercise as being the means to age healthier. I do think it's important to reflect on Theme Four: "It's about finding myself again": Exercise and its perceived influence on identity, as well though, because exercise was attributed by many as a means to rediscover themselves. Especially in the case of Jane and Cynthia, exercise was described as having helped them to recapture who they once were, and this was described as having a significant impact on their lives, but also on their identity. It is interesting to note that both these themes are fundamentally important for answering research questions one and two related to motivating factors and the perceived impact that exercise has had upon the participants' lives.

3. How did participants' perceptions towards exercise evolve since making this resolution?

This may be the most difficult research question to answer, because the term "perceptions" is broad. In this case, "perceptions" was essentially defined as the participants' general feelings towards exercise and how they subsequently approached exercise. I was curious to see if these perceptions changed since having made their resolutions, and I inadvertently found another finding to this point that touched on the consistency with respect to how people defined exercise. This question is really answered in Theme Three: My exercise mindset: General perceptions towards exercise, and I felt that the word clouds did a good job at addressing this. I think the results generally showed that people felt favourably towards exercise over the course of the study. It is hard to say whether or not these perceptions evolved at all, because there simply were not enough participants to draw any conclusive findings in this regard, however the word cloud that shows people's one-word responses (Figure 2) towards exercise showed that the terms used by the participants were overwhelmingly positive. These positive perceptions were also found throughout these interviews further supporting this positivity. From this point, I believe that at least for the participants involved in this study, positive perceptions towards exercise was rooted in having the opportunity to engage in exercise that that they felt was both enjoyable and they could benefit from. This seemed to be reflected in people's definitions, as many expressed that enjoyment was a key factor to defining exercise. The consistency of these definitions was an interesting finding, and I maintain the belief that this consistency over time could be potentially beneficial, especially if you want to tailor an exercise program to meet the specific needs of the individual in question. Theme Six: Putting my best foot forward: Insights and intents regarding future exercise, can be interpreted as playing an important role in this research question as well, because most participants described feeling that exercise was going to be a more important part of their lives moving forward. I think this in and of itself means that exercise was viewed as being a positive part of their lives. In short, when answering this question of whether the participants' perceptions towards exercise

evolved since having made their resolutions to exercise, my personal view would be that yes they did. In general, these previously inactive individuals described feeling more empowered to exercise moving forward, and that to me seems to indicate that they developed more positive feelings towards exercise as they continued with it.

4. What impact did participants feel their current engagement in exercise would have upon their future participation?

Theme Six: Putting my best foot forward: Insights and intents regarding future exercise, addressed this particular point, as it described how the majority of these participants perceived exercise as being a more important part of their life, moving forward. Many individuals set specific goals they wanted to attain and began taking small steps to integrate exercise fully into their lives on a daily basis. I also feel that Theme One: "We never even called it exercise, 'cuz it was natural": Insights on exercise from childhood and youth, contributed to answering this question too, because many participants expressed that they wanted to make exercise a more important part of their daily routine, and I think this is in line with how exercise was perceived when they were younger. Theme One addressed that exercise was an integral part of people's lives and that it was embedded in their daily routine, it was not something they consciously thought of doing as children. I felt that many people were unknowingly trying to recreate that emphasis on making exercise part of their daily routine, so I see a strong connection between these two themes in the context of answering this research question with respect to future exercise participation. I think that exercise in the future means trying to recapture what it was in the past, an everyday part of life that people looked forward to.

 $\label{eq:appendix L} Appendix \, L$ $\label{eq:Godin Leisure-Time Exercise Questionnaire - Weekly Leisure Activity Scores}$

Participant	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Jane	0	35	22	24	17	38
Beth	0	56	41	41	15	15
Cynthia	0	28	9	19	23	22
Diane	0	18	12	15	15	9
Ellie	6	16	0	12	18	9
Faye	10	20	29	21	26	30
Georgia	0	0	12	6	9	0
Hannah	0	0	10	15	15	6
Abigail	0	10	15	21	3	6
Jenny	30	18	9	18	26	26
Kendra	13	24	19	68	21	77
Lance	6	6	15	23	21	9
Molly	0	24	27	31	34	24
Will	9	15	18	35	31	22
Ollie	36	45	36	18	27	27
Quinn	3	66	58	48	38	38

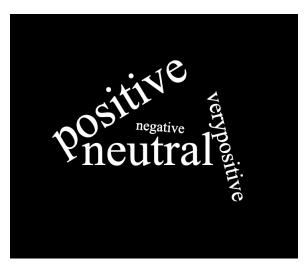
Godin Leisure-Time Exercise Questionnaire

CALCULATIONS

For the first question, weekly frequencies of strenuous, moderate, and light activities are multiplied by nine, five, and three, respectively. Total weekly leisure activity is calculated in arbitrary units by summing the products of the separate components, as shown in the following formula:

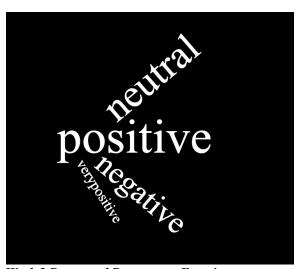
Weekly leisure activity score = $(9 \times Strenuous) + (5 \times Moderate) + (3 \times Light)$

Appendix M – Word Clouds Showing Week-by-Week Perceptual Responses Towards Exercise



Week 1 Perceptual Response to Exercise.

The textual representation from Week One illustrates that upon initiation of the study, "positive" and "neutral" perceptions were dominant. Of the 17 participants involved in this study, only 2 indicated "negative" perceptions this first week, and none indicated that they had, "very negative" perceptions. The interpretation of this word cloud suggests that participants generally felt either "positive" or were indifferent towards exercise at this initial stage of the project.



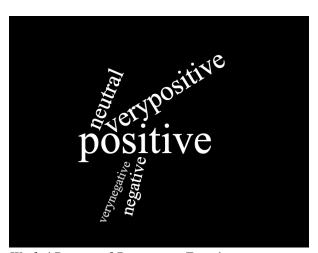
Week 2 Perceptual Response to Exercise.

In week Two, "positive" responses remained moderately dominant, with "neutral" responses close behind. There was, however, a notable increase in "negative" responses relative to Week One. The general takeaway from Week Two was that the majority of participants described feeling "positive" or "neutral" towards exercise.



Week 3 Perceptual Response to Exercise.

In the third week, "very positive" perceptions became more prevalent, and were equivalent with "neutral" perceptual responses. However, "positive" perceptions remained the moderately dominant response overall. In line with this trend towards a more positive overall perceptual response, only one participant described their perceptions as "negative" during Week Three.



Week 4 Perceptual Response to Exercise.

Week Four once again showed that "positive" perceptions were dominant. This was also the first week where "very positive" responses surpassed "neutral" responses. However, this was the only week where a "very negative" response was present, and "negative" responses also increased slightly compared to Week Three.

Appendix N - Participants' One-Word Responses when asked, "If you had to use one word to describe you feelings towards exercise over the past week, what word would you use?

Participant	Week 1	Week 2	Week 3	Week 4
Jane	Optimistic	Optimistic	Excellent	Tiring
Beth	Improving	Energized	Needed	Desire
Cynthia	Optimistic	Slow	Missing it	Missing it
			(Desire)	(Desire)
Diane	Apprehensive	Discouraged	Hopeful	Determined
Ellie	Satisfied	Defeated	Satisfied	Optimistic
Faye	Disinterested	Disappointed	Anxious to start	Apathetic
			(Eager)	
Georgia	Guilty	Guilty	Disappointment	Desperate to do
				it (Eager)
Hannah	Great	Positive	Disappointed	Encouraged
Abigail	Should	Frustrating	Amazing	Work
Jenny	Wishful	Excited	Satisfied	Pumped
Kendra	Guilty	Absent	Motivated	Motivated
Lance	Needed	Good	Positive	Happy
Molly	Trying	Unmotivated	Blah	Chore
Will	Chore	Time	Done	
Ollie	Improving	Frustrating	Ouch	Ouch
Quinn	Satisfying	Good	Good	Good

Words interpreted to be **positive** = YELLOW
Words interpreted to be **negative**= RED

After reviewing each of these words, I did some work on combining certain words that were essentially the same so that people's thoughts were adequately represented in the word cloud that characterized their experiences. For example, some individuals put down "disappointed" while others used "disappointing", in this case, these responses were combined into one word when making the word cloud ("disappointed"). Some participants also put down two words instead of one, in which case these responses were summarized into one word deemed appropriate and reflective of said responses. For example, one term that was used was "missing it", which was changed to "desire." Other responses that were combined included "anxious to start" and "desperate to do it", with both of these responses being changed to "eager". Other than these exceptions, all other responses were taken directly as is. Will did not answer this question during his week 4 journal entry, and therefore this response in the table was left blank.