ACTTive Living: How Does Participating in A Fitness Group Impact Quality of Life in Clients Receiving Community-Based Mental Health Services?
by
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Dedication

This thesis is dedicated to my amazing family and friends, as I would not be where I am today without all of their unwavering support. Thank you to my mother, Penny, and grandmother, Debbie, for their encouragement and dedication to my success. I would also like to thank my partner, Ryan, for all of the iced coffee and unconditional encouragement. I couldn’t have done it without you all.
Abstract
The construct of ‘quality of life’ is constantly evolving and is a diversely defined term among researchers and service providers who are targeting quality of life (QOL) through interventions. Current research has focused on the debilitating impact persistent mental illness has on an individual’s functioning and life variables, which leads to a decreased QOL. Previous research has demonstrated physical activity not only has a positive impact on physical health but also reduces clinical mental illness symptoms. Assertive Community Treatment (ACT) is an intensive but cost-effective case management service that provides symptom management, recovery support, advocacy, and physical care. Although ACT employs cognitive-based strategies to foster a positive QOL, it is unknown how effective an exercise-based group would be at positively impacting the QOL of clients living with persistent mental illness. This study explores the effectiveness of a group fitness program, the ACTTive Living Group (ALG), on improving the QOL and life satisfaction of clients of ACT. Five participants completed the Social and Activity Satisfaction Survey (SASS), a self-assessment measure of change in QOL by participating in the ALG. Data collected focused on the level of satisfaction with determinants of QOL and highlighted any changes as a result of attending the ALG. Overall, the results demonstrated that the ALG had the strongest impact on participants’ satisfaction levels with how often they were engaging in activities they enjoy and a minimal impact on their satisfaction with their relationships. It was determined that mental and physical health both had an influence on the participants’ subjective QOL, and that relationships and social support were the most influential. Further studies are needed to understand how the implementation of exercise-based programs in addition to psychoeducation could positively benefit clients receiving both community-based and inpatient psychiatric services.

Keywords: Assertive Community Treatment team, exercise-based interventions, quality of life, socialization, physical health, life satisfaction.
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Chapter I: Introduction

Psychopathology has the power to impact all aspects of an individual’s life including relationships, work, and finances (Alptekin et al., 2005). Having a diagnosis of a severe mental illness, such as schizophrenia, can lead to lowered life satisfaction and an overall lower sense of wellbeing due to the cognitive impairments associated with these illnesses (Alptekin et al., 2005). Quality of life (QOL) is a term that has been evolving for over 50 years. The definition varies depending on the view the term is approached from (Post, 2014). A common theme throughout the long list of definitions for QOL is the level of satisfaction that is felt pertaining to social functioning, mental and physical health, other health related factors, and overall wellbeing (Post, 2014). On the other hand, some researchers argue that QOL is simply made up of different lifestyle factors including personal relationships, employment, and emotional responses to life occurrences (Post, 2014).

Two approaches to measure QOL, objective and subjective, have been refined over time (Post, 2014). Post (2014) described how objective QOL considers what an assessor can observe whereas subjective QOL incorporates an individual’s appraisal of their own life and how satisfied they are based on expectations. Objective measures of QOL assume that all individuals have the same priorities, expectations, and determinants of QOL (Hill, Noonan, Sakakibara, & Miller, 2010). Hill et al. assert that subjective measures are more effective as they consider how determinants of QOL and their influence is different among individuals (as cited in post, 2014).

For the current study, the World Health Organization’s (WHO) definition will be referenced when considering the term QOL. As defined by WHO, QOL is:

An individual’s perceptions of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the persons’ physical health, psychological state, level of independence, social relationships and their relationship to salient features of their environment (WHOQOL Group, 1995, p. 1).

Many of the components that are intertwined with QOL are negatively affected by symptoms of schizophrenia. Schizophrenia is a debilitating mental illness that results in impaired cognitive, social, emotional, and/or occupational functioning (American Psychiatric Association, 2013). These impairments in functioning can lower subjective QOL and result in lower self-esteem while impairing day to day functioning (Lu et al., 2018). For example, those living with schizophrenia are often faced with social discrimination and stigma, which impairs relationship building and social functioning (Lu, Zeng, Zong, Rao, Ng, Ungvari, Xiang, 2018). There has been very little research done to further explore how these impairments in functioning impact QOL (Lu et al., 2018). Further exploring and identifying how mental illness impacts QOL will allow interventions to be developed effectively to target these factors (Lu et al., 2018).

Those living with schizophrenia will often experience what are referred to as positive and negative symptoms (American Psychiatric Association, 2013). Positive symptoms include hallucinations and delusions regarding matters that are not real and negative symptoms range from loss of motivation to an overall dull and flat affect (American Psychiatric Association, 2013). Negative symptoms are treatment resistant to both pharmaceutical and behavioural
interventions and pose as a challenging target for future treatments (Packer, Husted, Cohen, & Tomlinson, 1997). As the presence of negative and depressive symptoms increases, QOL will often lower as a result (Lu et al., 2018). A sedentary lifestyle is often an outcome of negative symptoms and it has been demonstrated in research that clients engaging in exercise will not only experience a positive impact on symptoms but overall wellbeing (Dauwan, Begemann, Heringa, & Sommer, 2016).

Research has demonstrated that exercise can reduce the severity of the symptomatology of some mental illnesses, including schizophrenia (Linz & Sturm, 2016). The severity and resistance of negative symptoms of schizophrenia are thought to be related to a lack of physical activity within an individual’s life and can be useful in predicting the onset of diseases and other health problems (Linz & Sturm, 2016). Linz and Sturm (2016) completed a meta-analysis, compiling and critically reviewing various articles that focus on how exercise impacts the symptomology and QOL those living with schizophrenia. Exercise was seen to yield a decrease in negative symptoms and an improvement in QOL (Liz & Sturm, 2016). Past studies have determined that, unlike the recommended prescribed amount of weekly exercise for the average adult, individuals living an inactive lifestyle would benefit from aerobic exercise 90-120 minutes per week (Linz & Sturm, 2016). Mental health teams will often engage clients in group fitness programs to foster socialization and clients connecting with one another (Linz & Sturm, 2016). Further research on the effectiveness of these group fitness programs is imperative to their success. To maximize their effectiveness with regard to increasing QOL, a full understanding of what components of implementation contribute to the success of the therapeutic benefits is needed.

A cross-sectional study conducted by Schmitz, Kruse, and Kugler (2004) describe that engaging in regular physical activity is beneficial to individual’s mental health and life satisfaction. Consistent physical activity is an effective strategy to decrease negative and positive symptoms of schizophrenia (Schmitz et al., 2004). Severe and persistent symptoms can negatively impact QOL, with research demonstrating that exercise is an effective strategy to mediate negative influences on subjective QOL. Often, a diagnosis of schizophrenia is associated with negative perceptions of physical and social domains of their lives. As a result, those who have a diagnosis of schizophrenia may not be satisfied with their current level of exercise, diet, or social activities (Alptekin et al., 2005).

As new treatment approaches and interventions are developed for schizophrenia, the importance of considering QOL as a treatment goal has long since been recognized (Packer, Husted, Cohen, & Tomlinson, 1997). Having a more detailed understanding of the different determinants of QOL allows a more complete understanding of how and to what degree the various determinants and aspects of an individual’s life impact QOL (Packer, Husted, Cohen, & Tomlinson, 1997). Integrating QOL into client service outcomes and delivery will allow physical health, emotional wellbeing, relationships, among other factors, to be considered in relation to an individual’s well-being due to its diversity (Prince & Gerber, 2005).

ACT teams provide clients with support in various areas such as activities of daily living, advocacy, psychiatry appointments, social functioning, and symptom management (Ministry of Health and Long-Term Care, 2005). ACT teams have become the standard model of community
care for those living with severe and persistent mental illnesses. Economically, ACT teams are no more expensive than other mental health services such as case management, making them feasible economically. Decreasing frequency and duration of hospitalizations or psychiatry service use and optimizing functioning within the community are two main treatment goals of ACT teams. Often, ACT teams will provide groups and psychoeducation to clients to help build skills to keep them within the community and better function themselves independently. These groups aim to have a therapeutic benefit and provide clients a chance to socialize.

The ACTTive Living Group (ALG) is an addition to the services ACT teams provide and allows QOL to be targeted and positively impact a client’s physical health. The skill development and benefits the ALG yields fits in with many of the areas ACT teams support including physical health, symptom management, socialization, and community integration. The ALG allows group members to potentially benefit from changes in both cognitive and physical wellness in a cost and time effective manner. Instead of individually providing client services to increase QOL, a group approach allows interventions addressing QOL to be delivered in a supportive setting with varying amounts of clients at the same time. Working towards QOL with clients individually may be effective, but by creating a group approach there are various social benefits added.

In 1996, McGrew, Wilson, and Bond further investigated different features and tactics surrounding ACT teams that increase their effectiveness and benefit therapeutic rapport between team members and the client. It was found that recreation, free of cost programming, and education all attributed to making ACT team services more acceptable and effective (McGrew, et al., 1996). Further research is needed to continue finding out what makes support and programming offered by ACT teams appealing to their clients and accessible to encourage client engagement. The AGL encompasses the suggestions made by McGrew et al. to ensure it is effective and meeting the needs of ACT team clients. Social and economic factors have been identified as large determinants in QOL, with these factors varying worldwide and across cultures (Lu, Zeng, Zong, Rao, Ng, Ungvari, Xiang, 2018). Taking into consideration the variance in daily experiences due to culture and geographical location, it is important that individualized interventions and mental health programming be developed to decrease any negative effects of these factors (Lu, Zeng, Zong, Rao, Ng, Ungvari, Xiang, 2018).

**Thesis Overview**

The focal point of this study is to further understand how participating in a group-based fitness program impacts the QOL within already existing clients of an ACT team. The already plentiful research regarding the clinical benefits of exercise on symptoms of mental illness and physical wellness lead the researcher to form the question: How does participating in a group-based fitness program impact the QOL, and various factors that contribute to QOL, for already existing clients of ACT teams. It is hypothesized that the after attending the ALG, participants will have an increased sense of satisfaction with their QOL and the factors in determining it. Additionally, it is hypothesized that participants who attend the ALG will have an overall increased sense of satisfaction with their physical health.

This thesis will provide a relevant literature review of peer-reviewed articles relating to exercise and its potential benefits relating to psychiatric illness, schizophrenia in particular, and
perceived QOL. Chapter III will provide a full understanding of the participants, instruments used to assess QOL, and all procedures in implementing a fitness group. All data will be statistically interpreted and presented in Chapter IV, with discussion on statistical evidence and correlations, if any. Finally, Chapter V will further interpret the results with a focus on the limitations, strengths, barriers, and further direction and recommendations to continue to build on the research relating to exercise based interventions in supporting a positive QOL.
Chapter II: Literature Review

Service Delivery and Assertive Community Treatment

The characteristics and features of service delivery for mental health services are very powerful in determining treatment outcomes and how effective these services are (Addington, Anderson, Kelly, Lesage, & Summerville, 2017). It is of upmost importance that mental health interventions, in particular programs and treatment for those experiencing schizophrenia, are multidisciplinary and client-orientated (Addington et al., 2017). Addington et al. (2017) recommend that mental health treatment for individuals with schizophrenia should be comprised of a variety of social, occupational, pharmalogical, and psychological care and offered in the least restrictive environment. Client-centered care can include the service provider gaining an understanding of the client’s worldview and perspective while promoting the client’s health (Addington et al., 2017). When there is a discrepancy between how the client views presenting problems or treatment goals versus the clinician, it debilitates the ability for the client and clinician to build a positive therapeutic rapport (Ofir-Eyal, Hasson-Ohayon, Bar-Kalifa, Kravetz, & Lysaker, 2016).

The Assertive Community Treatment (ACT) paradigm provides a multidisciplinary approach to rehabilitation, with support surrounding community integration and socialization being a core theme throughout service delivery (Redko, Durbin, Wasylenki, & Krupa, 2004). Redko et al. (2004) evaluated how satisfied existing clients of ACT teams in Ontario are with the services they had previously received. Feedback from participants outlined the need for more social opportunities to allow clients to engage with their community and also build rapport with the various professionals who form their ACT team (Redko et al., 2004). Redko et al. concluded that the want for more programming with socialization as a focus can be connected to the feelings of loneliness and isolation those living with persistent mental illness are likely to experience. Trends are emerging in mental health service delivery that indicate quality of life (QOL) is a key motivator to seek treatment or support for those experiencing mental illness (Diamond & Becker, 1999).

Various Factors Impacting Quality of Life

Encouraging and increasing social support for those experiencing persistent mental illness is often integrated into existing interventions serving to decrease symptoms and increase functioning (Munikanan et al., 2017). Having a strong social support when attaining goals or meeting psychosocial needs can lead to better functioning and a sense of support (Munikanan et al., 2017). Having a diagnosis of schizophrenia often will lead to increased experienced stigma, making social support an even more important aspect of interventions (Munikanan et al., 2017). Munikanan et al. discuss how a positive outlook towards one’s social support system can lead to an increased sense of QOL. In particular, social support from friends and family are of the most importance in determining QOL (Munikanan et al., 2017). Interventions that encourage client’s to create a positive social support systems often include natural opportunities for an individual to learn and apply social skills and interpret others emotions (Siegrist, Millier, Amri, Aballéa, & Toumi, 2015). Practice interpreting other’s emotions during social interaction within a client’s natural environment contributes to adaptive social functioning (Siegrist et al., 2015).
Historically, a disagreement between the social domain of QOL between clients and their mental health worker(s) has been documented (Ofir-Eyal et al., 2016). For interventions targeting improvement of social functioning to be effective, mental health professionals need to have a full understanding of how satisfied or unsatisfied their client is with their socialization and their social needs (Ofir-Eyal et al., 2016). Bias and stigma from the mental health worker may impact the ability for a mental health worker to accurately assess QOL and lead to inaccurate assumptions (Ofir-Eyal et al., 2016). Ofir-Eyal et al. discuss that the impact bias and stigma a mental health worker may have can sway them to estimate their client’s QOL, especially in the social domain, to be lower than in reality.

Socioeconomic status is among other qualities of an individual’s life that impact how a mental health worker assesses an individual with a psychiatric illness’ QOL and the outcome of said assessment (Ofir-Eyal et al., 2016). These life-factors may be viewed differently clinician to clinician depending on an individual’s own thoughts and biases (Ofir-Eyal et al., 2016). Subjective QOL removes the opinions, thoughts, and viewpoints of the general public and others, leaving QOL to be determined by how the individual being assessed feels about their life and the factors interplaying (Post, 2014). Caqueo-Urías, Boyer, Baumstarck, and Gilman (2015) found that individual’s own perceptions and insight towards their functioning has the most powerful impact on QOL when compared to the impact their mental health caregiver’s perceptions have. Therefore, designing interventions surrounding subjective QOL will ensure individualized treatment goals are met and that interventions are effective in meeting needs to improve QOL.

Hansson (2016) conducted a review aiming to identify the most powerful determinants in the QOL of an individual living with chronic and severe mental illness. The constructs measured include occupation, relationships, housing, finances, leisure activities, safety, mental health, and physical health (Hansson, 2016).

**Measures of Quality of Life**

Gill and Feinstein (1994) conducted a review of 25 articles that included the use of a QOL measurement tool to better understand the effectiveness of current approaches to assessing QOL. Currently, there is no agreed upon approach to measuring the construct and no standard definition of QOL (Gill and Feinstein, 1994). Variance can be seen across assessments of QOL in terms of what determines QOL and the constructs measured within these tools (Gill and Feinstein, 1994). The variance in what is measured paired with the differences in the definition create validity concerns for the existing measurements of QOL (Gill and Feinstein, 1994).

The Wisconsin QOL Index (WQOL) is a questionnaire that takes a multidimensional approach to measuring nine determinants of QOL: life satisfaction, occupational activities, psychological well-being, physical health, relationships, socioeconomic status, activities of daily living, symptoms, and goals that the client considers relevant (Diamond & Becker, 1999). Subjective QOL, which is created based on one’s own perceptions and thoughts towards their life and the social, psychological, and physical aspects (Diamond & Becker, 1999). This being said, the WQOL allows each weight of the nine dimensions the WQOL measured to be individualized based on clinician, family/support, and client views (Diamond & Becker, 1999). There are varying factors relating to the clinician, such as gender, that may impede on assessment of a client’s QOL. For example, interpersonal relationships are a strong determinant
of QOL across both genders, whereas occupation has a stronger impact on males’ QOL. When clinicians assess a client’s QOL, it is likely they are approaching QOL with different values and roles of the determinants (Diamond & Becker, 1999). This tool allows a standardized, inexpensive way for clinicians to accurately evaluate and effectively incorporate QOL into treatment goals and service delivery (Diamond & Becker, 1999).

It is recognized that life satisfaction with various life aspects is not the exact same as QOL, but rather complementary to it (Hansson, 2006). These external and internal variables are strong determinants of QOL and by measuring the satisfaction inferences can be made regarding QOL (Hansson, 2006). By approaching QOL through this lens, needs and treatment targets can be identified for interventions targeting QOL (Hansson, 2006). QOL measurements that are currently available have issues with their psychometric properties, high cost to use them clinically, and are long in length (Hansson, 2006). Researchers often do not know what domains and factors to measure within the assessment which contributes to the variance among the constructs measured within QOL assessment tools (Hansson, 2006).

**Impact of Physical Activity**

Previous research has documented how an individual engaging in physical activity potentially leads to an improvement of psychiatric symptoms and QOL (Dauwan, Begemann, Heringa, & Sommer, 2016). Negative symptoms of schizophrenia have been linked to living a sedentary lifestyle and can result in health problems (Dauwan, et al., 2016). Positive symptoms respond well to medication and other pharmalogical interventions, such as injections, but negative symptoms are relatively untouched by antipsychotics (Dauwan, et al., 2016). Clinically, exercise has successfully decreased the severity of negative and positive symptoms, ultimately leading to better functioning (Dauwan, et al., 2016). Negative symptoms are the strongest determinant in how an individual with schizophrenia functions independently and are typically treatment resistant (Dauwan, et al., 2016). After completing a meta-analysis regarding group exercise and QOL, it has been suggested by Dauwan, et al. that 90-120 minutes of regular aerobic exercise weekly is the most beneficial to individuals experiencing psychiatric illness. In addition, Dauwan et al. suggest that those living a sedentary lifestyle may benefit from a shorter duration of exercise. Current exercise programming in place may not be sufficient in producing a relevant impact on those experiencing symptoms and poor QOL and is often hosted in group settings for cost and time saving purpose (Dauwan, et al., 2016).

**Exercise-Based Interventions**

Previous research takes a look at how interventions incorporating physical activity can impact broad symptoms associated with mental health diagnoses (Callaghan, 2004). Selected studies have sought to demonstrate the effectiveness of exercise-based interventions on decreasing factors that contribute to poor or low QOL (Callaghan, 2004). Exercise was found to decrease symptoms while allowing participants to build their self-confidence, set goals, and feel a sense of achievement or purpose (Callaghan, 2004). Individuals who possess these traits and skills are more likely to have a more positive rating of how satisfied they are currently with their life (Callaghan, 2004). For example, D’Silva (2002) concluded that martial arts has shown to significantly decrease symptoms associated with depression and boxing or tennis as a strategy to cope with anger (as cited in Callaghan, 2004). Team sports were found to encourage social skill
Two male participants in recovery from a severe and persistent mental disorder allowed an exercise component to be integrated into their treatment plan (Carless & Douglas, 2008). For some individuals, physical activity is an outlet of improving their health and for others, sports and group physical activity is integrated into their identity (Carless & Douglas, 2008). Motivation may vary for participants to engage in physical activity, as well as physical activity taking various forms, but benefits were reported across participants (Carless & Douglas, 2008). The researcher conducted a semi-structured interview with 11 male participants with an existing diagnosis of a serious mental illness which sought to identify underlying themes across their responses (Carless & Douglas, 2008). Questions within the interview inquired about participants’ experience level and perceptions of exercise (Carless & Douglas, 2008). These men reported valuing exercise in different ways but did not report different benefits experienced (Carless & Douglas, 2008). Participating in an exercise program in addition to mental health treatment allows a “hands on” approach to improving mental and physical health and encouragement (Carless & Douglas, 2008).

Depending on the goal and reason for exercising, the structure of physical activity may vary. Decreasing depression or anxiety, weight loss, or improved physical health are common goals and motivators for individuals with mental illness to participate in exercise (Morgan et al., 2013). It has been found that engaging in physical activity in an environment alongside others increases the chance of an individual successfully attaining their goal (Morgan et al., 2013). After completing a study to further explore the parameters surrounding exercise to benefit mental health, Bertheussen et al. (2011) argue that how long an individual performs physical activity for and the amount of effort an individual exerts have the strongest impact when compared to how often an individual is engaging in exercise.

A behavioural-based treatment, the Nanta-program, was designed to increase and positively impact the QOL, socialization, and symptoms experienced by individuals who have a diagnosis of schizophrenia and are incarcerated (Jeon, Gang, & Oh, 2017). Over the course of 12-weeks, the Nanta-program sought to provide offenders with skills that contribute to them functioning socially and integrating back into the community through playing musical instruments (Jeon et al., 2017). It was found that by attending the Nanta-program, participants experienced a decrease in the intensity of their symptoms and an increased QOL while incarcerated (Jeon et al., 2017). Jeon et al. agree that the physical aspect of playing musical instruments, such as drums, has a therapeutic effect. Previous research has consistently found that musical therapy has little to no therapeutic effect on QOL. Social interaction, a component of the Nanta-program, was seen to be successful in increasing QOL in forensic patients, who lack socialization (Jeon et al., 2017).

Social interaction, which is intertwined throughout the ALG’s framework, has been empirically proven to have a positive impact on the QOL of those living with schizophrenia. Through hosting the ALG at a community centre within client’s local community, it is hoped that community integration and socialization within the community is encouraged. Clients with severe and persistent mental illness often experience higher isolation rates, with symptoms and
stigma making it hard to build connections within their community. Similar to the NANTA Program, the ALG will foster and put to practice the skills and coping strategies needed for client’s to adaptively engage with their communities and others.
Chapter III: Methods

Setting

**Assertive Community Treatment team.** Assertive Community Treatment (ACT) teams have gained clinical significance as research continues to expand regarding its effectiveness in supporting those with severe and ongoing mental illness live within their community. ACT teams serve adult clients who access hospital psychiatric services frequently and have not previously benefited from traditional approaches, resulting in their mental illness interfering with their functioning (Ministry of Long-Term Care and Health, 2005). This approach to treatment for mental illness is often recommended for its intensive level of service and support and the low service delivery cost (Ministry of Long-Term Care and Health, 2005). Treatment plans for ACT clients could include participation in psychoeducational groups offered, medication and symptom management, assistance with activities of daily living, and physical health care (Ministry of Long-Term Care and Health, 2005).

**YMCA.** The ACTTive Living Group (ALG) was hosted at a local YMCA agency equipped with a fitness centre. An application was submitted to the service delivery manager along with relevant research pertaining to the benefits of a fitness program to secure funding for a group membership, which was accepted. Addictions and Mental Health Services – Kingston, Frontenac, Lennox, and Addington provided funding for a group membership which allowed clients access to all services at the YMCA. Clients must be with an ACT team member to attend the YMCA and use the membership. Clients had full access to use the pool, sauna, basketball court, fitness centre, ping-pong table, and all classes offered. Group was held on Tuesday and Friday afternoons during regular hours of the YMCA, alongside other YMCA members or customers who are not in the ALG.

Participants

To be considered eligible to participate in this research study, participants must have attended the ALG at least one time between September 30th 2018 and December 14th, 2018 while being a client of a community treatment team. All participants must have been at least 18 years of age. The ALG includes clients of the Frontenac Assertive Community Treatment Team (ACT) who have no existing health issues that engaging in exercise may worsen or impact and are able to adaptively function within a local community agency setting.

In order to be eligible, participants were an existing client of ACT and be diagnosed with a severe and persistent mental illness that was interfering with their ability to live independently in the community through case management and assessment. Staying in agreement with the program standards of ACT, clients already had existing diagnosis of schizophrenia or a related psychotic disorder and over the age of 18 years old. Clients who were actively going through the discharge from receiving ACT services process were excluded from participating. Participants must not have been already engaging in a fitness program regularly.

Facilitators

A fourth-year Honors Bachelors of Applied Arts in Behavioural Psychology student facilitated the delivery of the ALG under the supervision of a Behaviour Science Technician and long-term ACT team member. As the facilitator, the student researcher aided in reminder calls, transportation (i.e. bus training) and leading the group each week in various sports and physical
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activity. Additionally, the student researcher provided support to clients if needed to combat anxiety or other stressors or issues that occurred. Over the course of the 12-week course, other team members of the ACT team volunteered as guest facilitators. These facilitators also aided the student in ensuring clients had a full understanding and capacity to consent to participating in research and help with test administration. Additionally, a nurse did a seminar at the first Healthy Living Learning Session to incorporate a variety of health-related disciplines.

ACT team members encouraged clients to attend the ALG during treatment contacts and other educational and recreational groups and events within the ACT services and community. Transportation was provided by ACT team members which varied from team members providing rides to and from the local YMCA and bus passes, including transit use.

Selection Procedures

After receiving approval from the St Lawrence College Research Ethics Board (REB), facilitators of the ALG advertised the upcoming research study at the Healthy Living Learning Session on week 12 of the ALG Session. A brief overview of the inclusion/exclusion requirements, what would be required if they volunteered to participate, and the potential uses of data collected utilizing the Social and Activity Satisfaction Survey (SASS). Clients who agreed to complete the SASS agreed to complete this measure during a regularly scheduled contact with ACT team staff.

Informed Consent Procedures

An informed consent form was drafted and approved by the St Lawrence College Research Ethics Board prior to the final Healthy Living Learning Session for week 12 of the ALG (Appendix A). The informed consent served to not gain consent for participants engaging in the ALG, but rather to gain consent to administer the survey created, the SASS, with participants who are already group members. The Informed consent form was reviewed with participants in laymen terms and in a manner appropriate to the client. The limitations of consent, uses of information, and data storage practices were explained and participants are provided with an opportunity to ask any questions they have had.

Research Design

The research conducted follows a non-experimental research design. Quantitative data is collected by the SASS through Likert scales (Appendix B). At the completion of all SASS questionnaires, the student researcher will input data into Microsoft Excel and use statistical computer software to analyze the descriptive statistics and create graphs.

Measures

Social and Activity Satisfaction Scale. The student researcher compiled selected questions from the Wisconsin QOL Index Client Version (WQOL) and modified the rating and scoring procedures to keep consistency throughout the measure. The WQOL is an extensive questionnaire that inquiries about life satisfaction, symptoms, health, and relationships in hopes of creating an individualized, full understanding of an individual’s quality of life (QOL) (Becker & Dawn, 1999). The WQOL is a great tool for identifying goals that hold importance in the client’s life and focuses on the client’s perspective of QOL and satisfaction with aspects of life (Becker & Dawn, 1999). As mentioned in Chapter II, subjective QOL will allow the data
collected to be relevant to the individual and to aid in guiding an effective, client-centered intervention.

Sixteen questions from the WQOL were selected and formatted to create the SASS (Appendix B). The SASS is a 16-question measure divided into four sections: Activities and Occupations, Psychological Well-Being, Physical Health, Social Relations and Support, and Activities of Daily Living. Each subsection has questions that use a Likert scale. The first structure of the Likert scale included a scale ranging from 1 (very dissatisfied) to 7 (very satisfied). Other Likert scales within the other subsections use ratings from 1 (poor) to 6 (excellent) and 1 (not at all important) to 5 (extremely important). Finally, there is one question that asks for a specific rating of functioning and health.

**Procedure**

**ACTTive Living Group (AGL).** The AGL is an unstructured, open group that was offered beginning September 30th, 2018 and is continuously offered. The AGL is offered at a local YMCA and provided participants with free access to the services and amenities available at the location. Group members would meet at the YMCA every Tuesday and Friday from 1:00 PM to 3:00 PM and engage with each other while exercising. Group members used the various fitness apparatus and machines, basketball courts, pool and ping-pong table. Facilitators were present to encourage socialization, provide guidance and support, and to help with any symptom management or concerns that occurred.

During week 7 and week 14 of the AGL, a ‘Healthy Living Learning Session’ was hosted to provide clients with an educational session regarding a healthy life style. During the first Healthy Living Learning Session, a nurse was a guest speaker and shared alongside the student researcher about coping skills that are helpful when in social settings and other adaptive methods that are appropriate for other times. The final Healthy Living Learning Session focused on healthy eating and explained Canada’s food guide. These sessions aim to target other areas of life other than physical health and activity that may be having a negative effect on QOL. To encourage clients to attend these sessions, refreshments and snacks were provided. Within these sessions, content was delivered by the facilitators through the use of interactive activities requiring physical movement, team work, and discussion.

**Social and Activity Satisfaction Survey (SASS).** The SASS is a 16-question assessment tool built based on the WQOL. This measure was printed along with the informed consent on standard paper, allowing clients to physically write their responses to the measure’s questions. Clients were given the choice of environment to complete the survey and completed the informed consent prior to beginning. After reviewing consent and ensuring the participant was informed, the level of verbal or written support from the test administrator was determined by asking the participant. Individualized support was provided to each participant to ensure completion of the test. Participation in the research and completing the measure independently may be too challenging of a task or unmotivating. It is hoped by increasing the level of support given in answering the measure, participation and completion of the SASS increases.
Chapter IV: Results

Three male and two female clients of an Assertive Community Treatment (ACT) team who attended the ACTTive Living Group (ALG) at least once completed the Social and Activity Satisfaction Survey (SASS). The average age of the participants was 46.2 years old, with all participant ages being listed in Table 1. Participants were predominately older males who attended on average 6 sessions of the ALG. Attendance rates varied among the participants from 2 sessions up to 10 sessions. Notably, two clients attended 10 sessions of the ALG over the course of 14-weeks.

Table 1
*Age and Gender of Participants*

<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Age</th>
<th>Gender</th>
<th>Sessions Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>55</td>
<td>Female</td>
<td>10 sessions</td>
</tr>
<tr>
<td>Participant 2</td>
<td>34</td>
<td>Male</td>
<td>4 sessions</td>
</tr>
<tr>
<td>Participant 3</td>
<td>30</td>
<td>Female</td>
<td>3 sessions</td>
</tr>
<tr>
<td>Participant 4</td>
<td>60</td>
<td>Male</td>
<td>10 sessions</td>
</tr>
<tr>
<td>Participant 5</td>
<td>52</td>
<td>Male</td>
<td>2 sessions</td>
</tr>
</tbody>
</table>

All data collected through the SASS was organized into tables presented in Appendix C. Questions were divided into groups based on the Likert scale and construct or life aspect they were measuring. The five different areas the SASS collects data regarding satisfaction level include: Activities (*questions 1, 2, 3, 11, 12, 13*), Mental Health (*question 4*), Physical Health (*question 5, 6, 7, 8*), Relationships (*questions 9, 10*), and Quality of Life (QOL) (*questions 14, 15, 16*). Grouping the questions based on similarities of the construct they measure allows ease of analysis and to evaluate the impact of the ALG on each construct. Excel was utilized to organize and analyze data and create graphs displaying data.

Table 2
*Grouping of Questions from the Social and Activity Satisfaction Scale*

<table>
<thead>
<tr>
<th>Group</th>
<th>Question(s)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>1, 2, 3, 11, 12, 13</td>
<td>Questions gathering information regarding the client’s main activities and how they spend their time.</td>
</tr>
<tr>
<td>Mental Health</td>
<td>4</td>
<td>Questions gaining insight regarding a client’s mental health and their views/attitudes towards it</td>
</tr>
<tr>
<td>Physical Health</td>
<td>5, 6, 7, 8</td>
<td>Questions aimed at gaining data regarding an individual’s thoughts and attitudes towards their physical health</td>
</tr>
</tbody>
</table>
Group Analysis

Data collected from various questions demonstrated the level of satisfaction each participant attributes to various areas of functioning and the impact attending the ALG has on these areas. Questions 1, 2, 3, 6, 9, 10, 14, and 15 all ask participants to rate their satisfaction level with specific characteristics of their activities, physical health, relationships, and QOL on a Likert scale (1 = very dissatisfied, 7 = very satisfied). For ease of understanding, responses from the Likert Scale were grouped into ‘satisfied’ (Likert rating 1-3), Neither, and Dissatisfied (Likert rating 4-7). Overall, the participants’ average satisfaction level after attending the ALG was at “a little bit satisfied” as indicated by their Likert score (M_total = 5.68). Participants’ before-and after-group ratings all increased at a similar rate, varying between 0.43 and 1.58 points (M_total = 1.14). Interestingly, participants’ reported lower satisfaction levels after attending the ALG with the activities they engage in day to day when compared to the reflective rating provided for before attending their first session (M_pre = 4.467; M_post = 3.64). Question one and two, which inquire about the participants’ satisfaction level with their main activity they do daily and how they spend their time, showed little variance in ratings.

Participants’ ratings of level of independence when completing task did not change after attending the ALG, with all but one participant admitting to needing assistance with completing tasks occasionally. Three participants reported trying one new activity, with most individuals reporting that they had tried a sport for the first time after attending at least one session of the ALG.

Aside from activities of daily living, the participants’ ratings of relationships and QOL increase at a very similar rate with scores increasing on average 0.7 points (relationship questions 9 and 10) and 0.6 points (QOL questions). Three participants, two older individuals and one younger, did not change their ratings when considering their satisfaction and thoughts of their QOL. Participant 3, who attended the least amount of sessions, reported the lowest satisfaction with their current QOL.

Question 16 of the SASS identifies areas of life, such as occupation, physical health, and friends/family, and how relevant and important they are in determining each participant’s QOL. Each participant, aside from one who did not complete this question, rated occupation or school as holding a different level of importance to them and their QOL, ranging from 1 (not at all important) to 4 (very important). The participants results demonstrated that they place an equal importance on both physical and mental health in determining the level of their QOL. One participant is an exception to this, with less importance being placed on mental or physical health and instead placing a higher importance on personal relationships. Self-esteem, or how the participant feels inwards towards themselves, also has a high rating of importance among the participants. The participants varied on how important independence is in determining their
QOL, but they all agreed that relationships with friends and family have the strongest impact on QOL.

Data collected from question five asking “Circle the number that best describes your overall physical health” highlighted that the ALG had no impact participants ratings overall. Figure 3 in Appendix D displays the participant responses regarding their satisfaction with their physical health, with post ratings increasing in Likert scale ratings for all clients but participant three. Sixty percent (60%) of participants reported an increase by two Likert points in the level of importance they personally place on their physical health after attending the ALG, as demonstrated in Figure 4 in Appendix D. Additionally, 20% of participants also moved up one rating, meaning they placed a stronger importance on their physical health and wellbeing after attending the ALG. Participant 4, an older male, reported a larger change in the level of relevance of physical health within his life. Participant 4 attended the highest amount of ALG sessions, 10 in total. This participant’s increase in rating may be partly due to attending sessions consistently, in turn, increasing the importance this participant placed on physical health.
Chapter V: Discussion

This research sought to further understand how participating in a group-based fitness program impacts the quality of life (QOL) of individuals already receiving intensive case management mental health services. The researcher’s first hypothesis, which was that the ACTtive Living Group (ALG) would have a positive benefit on participants’ QOL was rejected, with ratings for satisfaction in regard to relationships and activities increasing after attending the ALG measured, with physical health being the exception. The participants felt less satisfied with their physical health after attending the ALG sessions. Additionally, the participants did not report a change in their QOL, or the satisfaction level they felt towards their current QOL.

Results in the Context of the Current Literature

The results of this study will allow clinicians a better understanding of the various factors that impact QOL for the population of those living with persistent and chronic mental illness. Munikanan et al. (2017) discuss how social support is mindfully woven throughout interventions for those living with severe and persistent mental illness to decrease symptom severity and increase functioning. Munikanan et al. (2017) also discuss that when an individual living with a persistent mental illness has a positive outlook on their close relationships and socialization, they are more likely to have an increased sense of QOL and life satisfaction. As mentioned, all five participants that completed the SASS rated their relationships and socialization as being the strongest indicator of QOL. Minikanan et al. (2017) argue that those living with mental illness, especially schizophrenia, are at an increased risk for experiencing stigma. This highlights the importance and protective nature of having a strong support system and relationships has when it comes to QOL. Participants may also value relationships highly due to being aware of the support they receive from these relationships. The participants may be aware of how beneficial these familial and close relationships are to their overall functioning and socialization, leading them to place a higher value on these relations.

To date, researchers have documented the positive impact physical activity can have on an individual’s symptoms associated with a mental illness, self-perceptions, physical health, independence, and QOL (Bize, Johnson, & Plotnikoff, 2007). Rejecting the hypothesis, three of five participants who completed the SASS reported no change in their satisfaction levels with their physical health before and after attending the ALG. Engaging in exercise has been considered a powerful intervention that impacts self-perceptions and attitudes towards QOL and self-identity (Johnansson, Lingfors, Golsater, Kristenson, & Fransson, 2019). This being said, it has been shown in research that engaging in physical activity can override other negative life aspects that are interfering with QOL (Johnansson, Lingfors, Golsater, Kristenson, & Fransson, 2019). For example, if a client has low socioeconomic status, it will negatively impact their QOL (Johnansson, Lingfors, Golsater, Kristenson, & Fransson, 2019). Clients who experience this low status and engage in physical activity, are just as likely, if not more, to report a high sense of QOL and positive view of themselves.

Ratings regarding satisfaction level with physical abilities and overall wellness among the five participants that completed the SASS may have lacked change due to the researcher being unaware of other variables inflicting negatively on participants QOL or do to lack of consistency in attending. Although exercise-based interventions have been proved to decrease
clinical symptoms, those living with severe and persistent mental illness may require pharmacological interventions or a more cognitive-based approach. Callaghan (2004) found effectiveness in utilizing exercise-based interventions to decrease factors that are impeding on an individual’s QOL, but participants may be experiencing a common factor impeding on their physical health and physical-health related satisfaction or QOL.

Selected studies have sought to demonstrate the effectiveness of exercise-based interventions on decreasing factors that contribute to poor or low QOL (Callaghan, 2004). Exercise was found to decrease symptoms while allowing participants to build their self-confidence, set goals, and feel a sense of achievement or purpose (Callaghan, 2004). Those living with schizophrenia experience moderate to severe cognitive symptoms, with these symptoms impacting all areas of one’s life and functioning (Dauwan, Begemann, Heringa, & Sommer, 2016). All participants that completed the SASS reported no change in independence levels pre- and post-attending the ALG, demonstrating that the ALG had little impact on community integration or socialization. Question 3’s pre- and post-ratings demonstrate that the ALG impacted the participants satisfaction with how often they are engaging in activities, with minimal impact on an individual satisfaction with their activities of daily living.

According to Hansson (2006), psychopathology, characteristics of social support and system, and personality factors (i.e. self-esteem) are all relevant determinants of those living with severe and persistent mental illness. Results from the SASS indicate that participants placed relationships and friendships as having the strongest influence on their QOL, in agreeance with Hansson and many other researchers. Ratings of level of importance of mental health symptoms in determining QOL may have varied across SASS results due to individual’s attitudes and thoughts towards their symptoms and illness as well as functioning level. These indications should encourage future interventions targeting QOL to intertwine building a positive, supportive social support for an individual paired with a cognitive or pharmacological strategy aimed at symptom management.

**Strengths**

**Participants.** Existing policy that all Ontario Assertive Community Treatment teams must abide by states that client’s receiving services must have an already existing diagnosis of a psychiatric disorder, in particular Schizophrenia or Bipolar Disorder, that inhibits frequent emergency healthcare access and impaired functioning in day to day life (Ministry of Health and Long Term Care, 2005). All participants had an existing diagnosis of Schizophrenia or Bipolar Disorder, allowing the selected sample to be homogenous.

**New area of interest.** There is sparse literature that explores how the integration of an exercise-based program would positively impact QOL and other constructs related to clients of an Assertive Community Treatment team. This study may encourage research to move forward with the implications of physical activity being incorporated into treatment of mental illness.

**Instrument selection.** By re-designing an already existing measure to better suit the purpose of this research, it allowed the data collected to be a true description of the impact physical activity leaves on an individual in terms of satisfaction levels of determinants of QOL. The Social and Activity Satisfaction Survey (SASS) asks a variety of questions regarding
numerous constructs and life aspects to obtain a full understanding of how physical activity can impact the many facets of QOL.

The survey required a pre- and post-rating, which allows a time of reflection over the course of joining the ALG. This measure will allow a clear demonstration of how the QOL of an individual living with a severe and persistent mental illness transforms after attending a fitness group while receiving Assertive Community Treatment team.

**Limitations**

**Environment.** Most clients attending the ALG had little to no experience with going to a fitness centre regularly, rendering the YMCA a new environment that required certain adaptive skills for clients to be successful within the group. Clients needed to be somewhat mentally stable and experiencing minimal psychiatric symptoms to be most successful at the YMCA. Schizophrenia is an illness with many highs and lows and as a result clients may not be able to attend consistently or at all due to level of functioning and intensity of symptoms.

**Sample.** Selection procedures utilized in this research study do not allow the sample to be representative of the population. Group members included were not selected using random sampling or assignment. The lack of variable control hinders the ability to generalize the results to other populations. Clients were predominately older in age, with the youngest client being 30-years old and then clients ages falling on the other end of the spectrum. We also had a lack of control of previous experience with fitness and going to the gym, which may impact a client’s success and the outcome of attending the ALG. This lack of control over previous experience negatively impacts the student researcher’s ability to conclude effect of the ALG on QOL.

Due to the demographics and features of the population Assertive Community Treatment teams serve, clients may have varying issues and concerns. Clients were all in different stages of their mental illness, varying from maintenance to those who are experiencing increased symptoms. This being said, it is hard to generalize the results to a specific population and the results garnered from the research study are very general to those living with a psychiatric illness.

**Test format.** The format of the created measure, the Social and Activity Satisfaction Scale (SASS), impeded the quality and honesty of the results provided. The measure is comprised of 16 questions, some of which have multiple parts and sub-questions. In particular, clients of Assertive Community Treatment teams experience intense symptoms that impair their functioning, impeding on their ability to complete a long paper-copy of a questionnaire. Clients may be unable to focus for a long enough period of time to be able to complete the measure. As a result, recruitment was difficult as most clients are already weary about completing required paperwork relating to their treatment and services. Many participants were not enthusiastic about completing another questionnaire.

**Test administration.** The structure of the SASS impeded the ability of clients to complete the measure independently and as a result many clients required support from Assertive Community Treatment team staff to complete the measure. Having a scribe and a prominent member of your treatment team involved in completing the test may result in a bias as clients may be answering untruthfully to avoid the ACT member having negative perceptions towards them or expected stigma.
Surveys were completed at a location of the client’s choice to ensure the client felt comfortable with the environment the test is completed in. It is hoped that by increasing the client’s level of comfort with their surroundings, the more honest the results.

Contribution to the Field of Behavioural Psychology
This thesis adds to the already plentiful research regarding how physical activity impacts the determinants of quality of life, such as mental health and physical health. This research pairs how an exercise-based intervention paired with ACT services impacts QOL, with hopes that services providers may be able to better prepare effective programs involving physical activity. For future research, it is recommended that a larger sample size be used and implementation of exercise-based intervention for quality of life be further understood in both outpatient and inpatient services and across disorders.

Multi-Level Challenges

Client. A notable barrier for clients to participate in the ALG and the research was the client finding reliable transportation they felt comfortable with to and from the YMCA. It was seen early on that clients did not want to attend unless they were offered agency-provided transportation, which includes a bus or taxi ticket or a ride in the ACT workers personal vehicle. Due to concerns for the staff, the option of using personal vehicles for transportation declined greatly and clients were required to use public transportation, walk, or obtain their own ride. The YMCA location was selected due to its accessibility and central location, allowing a large number of clients to be close by but require a 15-30-minute bus ride. Clients often disclosed not feeling comfortable using public transportation, even after attending various bus training sessions. As a result of the lack of provided transportation, attendance declined, and the group had lower numbers.

Program. Committing to something that is twice weekly, for an hour and a half, is asking a lot of participants, especially given this population’s history. Clients of ACT services are typically hard to engage and have previously not benefitted from traditional service delivery. Due to individual factors creating barriers to accessing service, committing to a long-term, intense group can be a daunting task and not beneficial for clients. Clients with persistent mental illness may be more unstable and committing to attending may not be realistic for this client group, making the open group structure most effective to eliminate any feelings of guilt or shame that may arise within the client when missing the group.

Additionally, facilitators and the student researcher had no formal training in physical exercise, stretching, or anatomy/health. This being said, lack of knowledge and experience impeded on how helpful facilitators were in guiding and teaching exercise strategies.

Organization. Due to staffing shortages, on occasions the student researcher would be the sole facilitator providing support as needed to clients. This strained the support provided to the client and the accessibility of that support within the YMCA during the ALG. Due to this, clients may not feel comfortable attending the group due to feeling uncomfortable or the fear of what could go wrong without their usual supports in place. This resulted in a decrease in attendance for those feeling less comfortable. Additionally, this staff shortage impeded on the student researcher’s ability to offer support in transportation such as bus training or a bussing group. Additionally, some weeks numerous clients were interested in bus training but there were
not enough staff to provide support to these clients. A partnership within the agency or the start of a collaborative bus training program would be beneficial for all of the community-based programs offered out of this agency, including the ALG, to relieve some of the stress regarding means of transportation on the clients and facilitators.

**Society.** Stigma within our society is inevitable and it is usually experienced by those living with mental illness. When engaging in physical activity within the YMCA, there is a chance that clients experience stigmatizing behaviours from the other clientele of the YMCA. Due to client’s income level and other factors, client’s have visible differences than the norm for how the typical individual would behave and look within the particular setting of going to a gym or fitness centre. How much client’s experience this stigma depends on how internalized it is. Furthermore, it is important to implement measures and protocol to provide support in decreasing this stigma and it’s possible detrimental impacts.

**Implications for Future Research**

This research study focused on identifying and understanding how an unstructured exercise group impacts existing adult clients of an Assertive Community Treatment team (ACT). Despite the small sample size, the results from the survey completed can be useful in identifying the impact physical activity has on the subjective QOL of those living with a severe and persistent mental illness receiving ACT services. In addition, these results could be useful in identifying potential factors that should be considered in ACT service delivery and design.

In the future, research regarding the impact physical activity has on existing clients’ of Assertive Community Treatment teams QOL should be conducted utilizing a bigger sample. A larger sample will allow a in depth statistical analysis, deeper understanding of QOL and allow the results to be potentially generalized. In addition, a focus on populations who have been diagnosed with psychiatric disorders would be beneficial. Further research would allow a competent and detailed understanding of the factors that have the most influence on determining an individual diagnosed with a mental illness’ QOL. This knowledge will allow clinicians to better incorporate QOL as a consideration or target in treatment.
References


Appendix A
Consent Form

Project title: ACTTive Living: How the Addition of a Community-based Fitness Program to an Assertive Community Treatment Approach Impacts Clients Perceived Quality of Life and Socialization?

Principal Investigator: Shawnacee Loxton
Name of supervisor: Hal Cain
Name of Institution: St. Lawrence College
Name of institution/agency: Frontenac Assertive Community Treatment (FACT) Team

Invitation
You are being invited to take part in a research study. I am a student in my 4th year of the Honours Bachelor of Behavioural Psychology at St. Lawrence College. I am currently on placement with the Frontenac Assertive Community Treatment (FACT) Team. As a part of this placement, I am completing a research project (called an applied thesis). I would like to ask you for your help to complete this project. The information in this form will help you understand my project. Please read the information carefully and ask all the questions you might have before you decide if you want to take part.

Why is this research study being done?
I am conducting research on how being a part of a fitness group impacts a person’s quality of life. The reason you are receiving this letter is because you have been invited to participate in the ACTive Living Fitness group and research. By agreeing to be a member of the ACTive Living group you are also agreeing to be a participant in my research study.

What will you need to do if you take part?
All participants must be at least 18 years old and be a client of the FACT team. All participants must have a psychiatric diagnosis that impacts how an individual is able to be independent within the community. If you have a history of health issues or have not been physically active in a while, we advise to consult with your physician before beginning this program. If you choose to participate in this study, it is expected that you attend the ACTive Living group at the YMCA at 100 Wright Crescent on Tuesdays and Fridays from 1:00 PM to 3:00 PM for 9-weeks. At the first group meeting, you will be asked to set a fitness goal that you will work on over the course of the 9-week program. Facilitators from the FACT team are happy to help you choose a goal.

At the beginning and end of the ACTive Living group you will be asked to complete the Wisconsin Quality of Life Index. The Wisconsin Quality of Life is a self-report questionnaire with 10 sections for different aspects of a typical life that uses rating scales. FACT team staff or FACT team facilitators can provide you with support in completing this questionnaire. This tool will help me understand how attending the group may affect thoughts and feelings regarding quality of life.

FACT team facilitators will also be hosting two Healthy Living Learning Sessions that you must attend during week 3 and week 7. These sessions will provide education, support, and encouragement in making healthy life style choices. You will be expected to attend these
sessions at the Addictions and Mental Health Services – Kingston, Frontenac, Leeds, and Addington offices at 385 Princess Street. These sessions will have guest speakers and healthy snacks for you to enjoy.

You are encouraged to attend as many sessions as possible, but if you cannot make it, you can contact me, Shawnacee, or any other FACT team member at (613)-544-1356 ext. 2310 to let us know you will not be attending that day.

When at the YMCA, we ask that you are respectful of the YMCA staff, their facilities, facilitators of the group, and other volunteer participants.

What are the potential direct benefits of taking part?

The potential direct benefits of taking part in this research study may include an improvement in your overall health and well-being from being active. You might also experience weight loss and an increase in your self-esteem.

What are the potential disadvantages or risks of taking part?

There are risks associated with being physically active. You might feel muscle pain after being physically active. If you have a pre-existing medical condition or are taking medication, or have not been physically active in a while, then you should speak with your physician before agreeing to participate in this research.

Will the information you collect from me in this project be kept private?

Your privacy and confidentiality is important. I will make every attempt to keep any information that identifies you strictly confidential. You will not be identified by name in any reports. All identifiable information collected will be removed during data analysis. Informed Consent Forms will be stored securely at the FACT office at Addictions and Mental Health Services for 10 years. All other research data will be stored securely at the FACT office at Addictions and Mental Health Services for 7 years, after which time the data will be destroyed. Data will be stored on Addictions and Mental Health Services – Kington, Frontenac, Leeds, and Addington’s secure data base. The results from the research are part of my thesis, will be made available at the St. Lawrence College library, and presented at the St. Lawrence College Behavioural Psychology Poster Gala. They may also be published in professional journals or presented at professional conferences, but any such presentations will be of general findings and will never breach individual confidentiality.

Do you have to take part?

Taking part is voluntary. It is up to you to decide whether to take part in this research project or not. If you do decide to take part, you will be asked to sign this consent form. If you do decide to take part in this research project, you can change your mind at any time during the 9-week span and up to 1-month after this study ends. You can stop participating by contacting me, Shawnacee, or Lori-Jo at (613)-544-1356 ext. 2310 or by email at sloxton01@student.sl.on.ca. If you choose to no longer be a part of the ACTive Living group study, all copies of data collected regarding you are disposed of by shredding and are not included in the thesis or results.

Contact for further information

This research project has received ethical clearance from the Research Ethics Committee
for Behavioral Psychology (RE-P) under the authority of the St. Lawrence College Research Board (SLC-REB). Lori-Jo Whitfield, placement supervisor and FACT team member, has kindly provided supervision throughout developing the ACTive Living group and will be providing supervision for me and will be acting as a co-facilitator for the group. Your participation is greatly appreciated. If you have any additional questions about this study, please direct them to myself, Shawnacee, at sloxton01@student.sl.on.ca. You may also contact my college supervisor at St. Lawrence College, Dr. Hal Cain, at halcain.phd@sympatico.ca. If you have any concerns about the way this research is conducted or about your rights as a participant, you can contact the St. Lawrence College Research Ethics Board Chair, Dr. James Morris-Pocock at reb@sl.on.ca.
Consent

If you agree to take part in this research project, please complete the following form and return it to me as soon as possible. A copy of this signed document will be given to you for your own records. The original will be retained at the agency.

By signing this form, I agree that:

☐ The study has been explained to me.

☐ Any questions I had were answered.

☐ Possible harm and discomforts and possible benefits (if any) of this study have been explained to me.

☐ I understand that I have the right not to consent to participate and the right to withdraw from the study at any time.

☐ I understand whom to contact if I have any questions or concerns about the study.

☐ I have been told that my personal information will be kept confidential.

☐ I understand that I will receive a signed copy of this consent form.

☐ I understand that the data from this study will be presented at the St. Lawrence College Behavioural Psychology Poster Gala, and may be reported at other conferences or published in a scientific journal. No identifying information will be included in these reports or at any conferences.

I hereby consent to take part.

________________________________________________________________________________________

Participant Name  Signature of Participant  Date

________________________________________________________________________________________

Student Printed Name  Signature of Student  Date
Appendix B

Social and Activity Satisfaction Survey
(Based on Selected Questions from the Wisconsin Quality of Life Client Questionnaire)

By Shawnacee Loxton for undergraduate honour’s thesis

Name: ________________________________________________
Age: __________
Gender:       Male       Female Choose to not identify

Date: _______________________________________________

Note: If this form was filled out by someone other than you, please indicate who helped you:

Name: ________________________________________________

Relationship: ____________________________________________
When answering the following questions, please think about your life before and after you joined the ACTTive Living Group. Mark your answers where indicated as before and after for each question.

A. ACTIVITIES AND OCCUPATIONS

1. Circle the number that best describes how satisfied or dissatisfied you are with how you spend your time.

<table>
<thead>
<tr>
<th>How satisfied or dissatisfied are you with the way you spend your time?</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Now</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

2. Circle the best number that describes how satisfied or dissatisfied you are with the main activity that you do.

<table>
<thead>
<tr>
<th>How satisfied or dissatisfied are you with the main activity that you do?</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Now</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
3. Circle the best number that describes how satisfied or dissatisfied you are with how often you are doing things.

<table>
<thead>
<tr>
<th>How satisfied or dissatisfied are you with how often you engage in different activities?</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Now</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

B. PSYCHOLOGICAL WELL-BEING

4. Circle the number that best describes your overall mental health:

The four (4) weeks before joining the ACTTive Living Group

<table>
<thead>
<tr>
<th>-3</th>
<th>-1.5</th>
<th>0</th>
<th>1.5</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

After Joining the ACTTive Living Group

<table>
<thead>
<tr>
<th>-3</th>
<th>-1.5</th>
<th>0</th>
<th>1.5</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

C. PHYSICAL HEALTH

5. Circle the number that best describes your overall physical health:

The four (4) weeks before Joining the ACTTive Living Group

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

After Joining the ACTTive Living Group

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
<td>Very Good</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
6. Circle the number that best describes how satisfied or dissatisfied you are with your overall physical health.

<table>
<thead>
<tr>
<th>How satisfied or dissatisfied are you with your overall physical health?</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Now</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

7. Circle the number that best describes how important your physical health was to you before joining the ACTTive Living Group.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Moderately Important</td>
<td>Very important</td>
<td>Extremely important</td>
</tr>
</tbody>
</table>

8. Circle the number that best describes how important your physical health is to you right now.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Moderately Important</td>
<td>Very important</td>
<td>Extremely important</td>
</tr>
</tbody>
</table>

D. SOCIAL RELATIONS / SUPPORT
Circle the number that best describes how satisfied or dissatisfied you are with the number of friends you have and how you get along with others.

<table>
<thead>
<tr>
<th>9. How satisfied or dissatisfied are you with the number of friends you have?</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Now</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
10. How satisfied or dissatisfied are you with how you get along with other people?

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Now</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

E. ACTIVITIES OF DAILY LIVING

Circle the best answer that describes how you have been able to do things independently.

11. Before joining the ACTTive Living group:
   3 have been able to do most things on your own (such as shopping, getting around town, etc.)
   2 have needed some help in getting things done
   1 have had trouble getting tasks done, even with help

12. After joining the ACTTive Living group:
   3 have been able to do most things on your own (such as shopping, getting around town, etc.)
   2 have needed some help in getting things done
   1 have had trouble getting tasks done, even with help

13. Below are activities that you may have participated in recently. Please check Yes or No to indicate whether you have done the activity before joining the ACTTive group or done the activity since joining the ACTTive Living Group.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before</th>
<th>Yes</th>
<th>No</th>
<th>After</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Gone for a walk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>1</td>
<td>0</td>
<td>Now</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>B. Gone to a movie or play</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>1</td>
<td>0</td>
<td>Now</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>C. Watched TV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>1</td>
<td>0</td>
<td>Now</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>D. Played cards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td>1</td>
<td>0</td>
<td>Now</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>F. Gone to a social group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td></td>
<td></td>
<td>Now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Read a newspaper or magazine</td>
<td>Before</td>
<td></td>
<td></td>
<td>Now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Gone to church, synagogue, mosque</td>
<td>Before Joining</td>
<td></td>
<td></td>
<td>Now</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. Listened to a radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before</td>
<td></td>
<td></td>
<td>Now</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
E. Played a sport **Before** | 1 | 0  
---|---|---
**Now** | 1 | 0  
J. Gone to a library **Before** | 1 | 0  
**Now** | 1 | 0  

14. Circle the number below to indicate how satisfied or dissatisfied you were with your quality of life before joining the ACTTive Living group.

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

15. Circle the number below to indicate how satisfied or dissatisfied you are with your quality of life currently.

<table>
<thead>
<tr>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither satisfied or dissatisfied</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

16. Circle the number that best describes how important each of the following are to you in determining your quality of life.

<table>
<thead>
<tr>
<th>Work, school, or occupational activities</th>
<th>1 Not at all important</th>
<th>2 Slightly important</th>
<th>3 Moderately Important</th>
<th>4 Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>How you feel about yourself</td>
<td>1 Not at all important</td>
<td>2 Slightly important</td>
<td>3 Moderately Important</td>
<td>4 Very important</td>
</tr>
<tr>
<td>Your physical health</td>
<td>1 Not at all important</td>
<td>2 Slightly important</td>
<td>3 Moderately Important</td>
<td>4 Very important</td>
</tr>
<tr>
<td>Friends and Family</td>
<td>1 Not at all important</td>
<td>2 Slightly important</td>
<td>3 Moderately Important</td>
<td>4 Very important</td>
</tr>
<tr>
<td>Ability to take care of yourself</td>
<td>1 Not at all important</td>
<td>2 Slightly important</td>
<td>3 Moderately Important</td>
<td>4 Very important</td>
</tr>
<tr>
<td>Your mental health</td>
<td>1 Not at all important</td>
<td>2 Slightly important</td>
<td>3 Moderately Important</td>
<td>4 Very important</td>
</tr>
</tbody>
</table>
## Appendix C

### Table C1

<table>
<thead>
<tr>
<th>Question</th>
<th>Very Dissatisfied</th>
<th>Moderately Dissatisfied</th>
<th>A Little Dissatisfied</th>
<th>Neither</th>
<th>A Little Satisfied</th>
<th>Moderately Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-ratings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Question 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Question 3</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Question 6</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Question 9</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Question 10</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Question 14</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Post-ratings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Question 2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Question 3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Question 6</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question 9</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question 10</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question 15</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table C1. Raw Data for Likert Scale 1 (Questions 1-3, 6, 9, 10, 14-15) that rates the level of satisfaction with life domains such as activities of daily living, physical health and socialization.
Table C2

Likert Scale 2 Ratings for the SASS

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre-ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 4</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Question 5</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Post-ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 4</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Question 5</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Table C2. Raw Data for Likert Scale 1 (Questions 4 and 5) that rates the overall wellness of an individual’s mental and physical health.

Table C3

Likert Scale 3 Ratings for the SASS

<table>
<thead>
<tr>
<th></th>
<th>Not At All Important</th>
<th>Slightly Important</th>
<th>Moderately Important</th>
<th>Very Important</th>
<th>Extremely Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 7</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Question 8</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Table C3. Raw Data for Likert Scale 3 (Questions 7 and 8) that rates the level of importance of physical health to an individual.

Table C4

Likert Scale 4 Ratings for the SASS

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Some</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 11</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Question 12</td>
<td>-</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Table C4. Raw Data for Likert Scale 4 (Questions 11 and 12) that rates the participants independence.
Table C5

<table>
<thead>
<tr>
<th>Likert Scale 5 Ratings for the SASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Activities</td>
</tr>
<tr>
<td>Question 13</td>
</tr>
</tbody>
</table>

Table 5. Raw Data for Question 13 which asks how many new activities the client participated in since joining the ACTTive Living Group.

Table C6

<table>
<thead>
<tr>
<th>Likert Scale 6 Ratings for the SASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not At All Important</td>
</tr>
<tr>
<td>Activities</td>
</tr>
<tr>
<td>Self-Esteem</td>
</tr>
<tr>
<td>Physical Health</td>
</tr>
<tr>
<td>Family/Friends</td>
</tr>
<tr>
<td>Independence</td>
</tr>
<tr>
<td>Mental Health</td>
</tr>
</tbody>
</table>

Table 6. Raw Data for Question 16 regarding how important each factor is to each client in determining their quality of life.
Appendix D

Figure 1. Satisfaction Level With Areas of Functioning

Figure 2. Satisfaction Ratings for Sub Groups
Figure 3. Rating of Physical Health Before and After Group

Figure 4. Group Impact on Importance of Physical Health