

CUSTOMERS' PERCEPTION OF SERVICE QUALITY AND FUTURE  
BEHAVIORAL INTENTIONS OF A YMCA FACILITY

A DISSERTATION

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## DEDICATION

To my husband, Dexter, your patience and laughter have made this incredibly long and winding path to completion worthwhile. To my three loving kids, Hannah, Hayley, and Dylan, thank you for understanding all the nights and weekends mom had to finish a few more pages. In memory of my beautiful Mama, you were my biggest cheerleader and I know you would smile and laugh with me knowing this journey has finally come to an end. To my grandfather, thank you for asking me every time you called if I had completed my doctorate. Granddaddy, I am finally finished.

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## ABSTRACT

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### CUSTOMERS' PERCEPTION OF SERVICE QUALITY AND BEHAVIORAL FUTURE INTENTIONS OF A YMCA FACILITY

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The purpose of this study was to examine the customer's perception of service quality and behavioral intentions to repurchase membership at a YMCA fitness center in Greenville and Palestine, Texas, using the Service Quality Assessment Scale (SQAS) instrument (Lam, Zhang, & Jensen, 2005) and the Behavioral Intentions model (Zeithmal, Barry, & Parasuraman 1996). The research sought to (1) identify the primary service factors influencing consumer satisfaction, (2) identify differences between participant expected and actual experiences of fitness center service, (3) determine participants future intention to revisit the facility, (4) determine participants future intention to share their experience, and (5) identify differences between perceptions of service quality and customer satisfaction across demographic groups based on BMI (i.e., normal and overweight participant groups). The survey was available to 1189 individuals with a response rate of 6.7%. Regression analysis was used to establish that staff, program, locker room, fitness, and aquatics were suggested predictors of customer satisfaction. One-way ANOVA was used to establish significant differences in actual and perceived service quality among gender, age, education level, and BMI. An analysis of variance showed that the effect of age bands on possession of required

knowledge/skills for staff was significant ( $F(4,74) = 3.05, p = .022$ ), communication with members was significant ( $F(4,74) = 2.88, p = .028$ ), the availability of workout equipment was significant ( $F(4,74) = 3.01, p = .023$ ), and the hours of operation for childcare was significant ( $F(4,73) = 2.82, p = .031$ ). An analysis of variance showed the effect of education level on the availability of workout equipment was significant ( $F(5,73) = 2.66, p = .029$ ). Additionally, an analysis of variance showed the effect of BMI on modern looking equipment was significant ( $F(2,70) = 3.190, p = 0.047$ ).

Although there were items for the YMCA to consider for future service quality improvements, the majority of respondents were either very satisfied (40.5%) or satisfied (38.0%) with the overall customer service of their YMCA. Results of this study showed that participants placed their strongest expectations on the YMCA staff, workout equipment, and child care hours. Surprisingly for these YMCAs, support services and staff skills are the ones that appear to need more attention rather than the core services such as fitness equipment or programs.

## TABLE OF CONTENTS

	Page
DEDICATION .....	ii
ACKNOWLEDGEMENTS .....	iii
ABSTRACT .....	iv
LIST OF TABLES .....	viii
Chapter	
I. INTRODUCTION .....	1
Statement of the Problem .....	3
Research Questions .....	4
Definitions of Terms .....	4
Scope of Study .....	5
Delimitations .....	6
Limitations .....	6
Assumptions .....	6
Significance of the Study .....	6
II. REVIEW OF THE LITERATURE .....	8
Importance of the Health and Fitness Industry .....	8
Health and Fitness Industry .....	11
YMCA Transformation and Competition .....	13
Service Quality .....	16
Service Quality Models in the Health and Fitness Industry .....	17
Customer Satisfaction .....	20
Customer Loyalty .....	21
Behavioral Intentions .....	24
Discussion and Summary .....	25
III. METHOD .....	26
Selection of Subjects .....	26

Instrument .....	27
Demographic Survey .....	28
Service Quality Assessment Scale .....	28
Behavioral Intentions Model .....	29
Procedures.....	30
Statistical Design and Analysis.....	31
IV. PRESENTATION OF FINDINGS.....	33
Description of the Demographic Information.....	34
Participants .....	34
Primary Service Factors that Influence Customer Satisfaction .....	36
Influence of Demographic Variables .....	37
Gender.....	37
Age.....	37
Highest Education Level.....	42
Intent to Revisit and Recommend.....	45
Overall Satisfaction with the YMCA.....	45
Perceptions of Normal, Overweight, and Obese Individuals.....	46
V. DISCUSSION AND RECOMMENDATIONS.....	48
Customer Satisfaction .....	48
Service Quality.....	49
Behavioral Intent to Revisit and Share .....	53
Influence of Body Mass Index on Health Industry Trends.....	54
Strength and Limitations.....	55
Practical Implications and Recommendations .....	56
Conclusions.....	57
REFERENCES .....	59
APPENDICES	
A. Approval from YMCA.....	73
B. Participant Survey .....	76
C. Recruitment email .....	83
D. Reminder email .....	85
E. IRB Approval .....	87
F. Modification to Survey.....	89
G. IRB Modification Approval.....	92

## List of Tables

Table	Page
1. Descriptive Statistics for Demographics.....	35
2. Regression Analysis of Service Quality Factors.....	37
3. Factors Influenced By Age Bands.....	39
4. Post-hoc (Tukey HSD) Evaluation of Factors Influenced by Age Bands.....	40
5. One Way ANOVA for Higher Education Levels .....	42
6. Post Hoc (Tukey HSD) Factors for Higher Education Levels.....	43
7. Participant overall satisfaction with the YMCA.....	46
8. Factors Influenced by Body Mass Index.....	47
9. Post Hoc Tukey HSD for BMI Groups.....	47

## CHAPTER I

### INTRODUCTION

The primary purpose of a fitness or recreation center is to provide opportunities for individuals to get fit, have fun, and come back. To do that, organizations need to spend a significant amount of time perfecting customer service, keeping a facility looking good, and offering their guests a little something the place next door does not have. Moxham and Wiseman (2009) argued that while there is extensive literature on service quality, including those that address the fitness industry, there is little agreement on how to consistently deliver high levels of service quality. However, service delivery is important to most organizations.

The reason is simple: research has shown that a relationship between service quality and customer satisfaction does exist and it can impact business profitability because the combination leads to behavioral intentions to repurchase or to recommend the service to others (Tian-Cole, Crompton, & Willson, 2002). Oliver (2003) suggested that there is a high correlation between customer retention and company profitability.

One primary goal for any organization is to maintain competitive advantage in the marketplace. Focusing on factors that influence service quality and customer satisfaction allows organizations in the health and fitness industry to outlive their competitors, while helping to create opportunities for increased physical activity. Organizations that can connect with the customer through emotional ties will have a competitive advantage

because few organizations are able to reach the customer at that level (Haeckel, Carbone, & Berry, 2003).

The challenge for any organization is that service quality and customer satisfaction are often not a linear relationship and can have influences beyond the control of the organization's management. The Young Men's Christian Association (YMCA) is one such organization that has strong consumer emotional response in many communities but experienced the need to transform from a religious organization focused on young men in 1844 to a health facility and program powerhouse in communities across the United States today. While the mission of the YMCA organization has had a strong focus on building healthy communities, many YMCAs across the United States have been viewed as strictly fitness centers and an unwelcomed threat to commercial fitness organizations.

Since the early 1980s, the YMCA has experienced fierce resistance at the national level from commercialized fitness organizations that have banded together to oppose the YMCA's tax-exempt status to provide for a more competitive, fair market (Stern, 2011). James W. Ashley, YMCA National Board Chair; remarked in 1986, "No subject in recent YMCA history has generated as much attention as the so-called 'unfair' competition issue.....The for-profits decree that any YMCA that is not old and beat-up—or one that has a positive cash flow from its health club operation—is illegal and should be taxed." (Stern, 2011). While commercialized fitness organizations continue to feel that the YMCA organization is an unfair threat to market share operating as a nonprofit, the YMCA organization, specifically the YMCA of Greenville, Texas, will need to excel in

service quality to maintain a competitive advantage over current and emerging fitness organizations in the local market.

### **Statement of the Problem**

The problem of this study is fitness center retention and its potential impact on the health of U.S. citizens. Retention in the fitness center setting is challenging for organizations. The International Health, Racquet & Sportsclub Association (IHRSA, 2013) has reported retention rates as high as 72% recently, but prior research has shown that the fitness industry loses 40% of its client base each year (Rascher, 2008; Theodorakis, Alexandris, Rodriguez, & Sarmento, 2004). Additional research is needed to determine which service quality is most important for customer retention in the fitness industry. And, the opportunity for fitness center facilities to assist in combating the U.S. increase in overweight and obese individuals is limited if members do not stay. The YMCAs in Greenville and Palestine, Texas, have the ability to aid in weight management and physical activity programs to help reduce the concerning rates of overweight and obesity in Hunt and Anderson County.

To address this problem, this study examined customer's perception of service quality and behavioral intentions to repurchase membership at a YMCA fitness center in Greenville, and one in Palestine, Texas. Prior service quality research in both marketing and sport has led to the development of multiple scales and dimensions to determine service quality and customer satisfaction. The instruments selected to determine factors to aid in retention at the YMCA of Greenville were the Service Quality Assessment Scale

([SQAS] Lam et al., 2005) and the Behavioral Intentions model (Zeithmal, Barry, & Parasuraman, 1996).

### **Research Questions**

This research examined the relationship between service quality, consumer satisfaction and intent to repurchase. The following research questions were examined for this study:

1. What are the primary service factors that influence customer satisfaction?
2. What differences, if any, exist between the expected service and the actual service experience among participants?
3. What are the intentions of participants to revisit the facility?
4. What are the intentions of participants to share their experience?
5. Are there significant differences in service quality and customer satisfaction between normal and overweight individuals?

### **Definition of Terms**

The following terms are defined as they relate to this study:

Behavioral intention is the act of repurchasing or sharing positive commentary on a good or service (Zeithaml & Bitner, 2003).

Fitness Center is a facility that maintains cardiovascular, strength training, and recreational equipment that acts a resource for a participant's physical activity goals.

Customer loyalty “is a deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior” (Oliver, 1997, p. 392).

Customer Satisfaction is the level at which a person has experienced an event or obtained a product that produces a psychological appreciation (Ko & Pastore, 2007).

Customer retention is the act of the firm engaging the consumer to make an ongoing commitment (Dhurup & Surujlal, 2010).

Obesity is defined by the Centers for Disease Control and Prevention as an adult who has been determined to have a body mass index, a height to weight ratio, 30kg/m<sup>2</sup> or above.

Service quality is a form of attitude, related but not equivalent to satisfaction, that results from the comparison of expectations with performance (Parasuraman, Zeithaml, & Berry, 1988), the difference between the expected service and the actual service a consumer receives (Dhurup, Singh, & Jhalukpreya, 2006)

Young Men’s Christian Association (YMCA) is a nonprofit organization with a mission to build healthy communities through facilities and programs.

### **Scope of the Study**

The facilities that were selected for this study included the YMCA of Greenville/Hunt County in Greenville and the YMCA of Palestine in Palestine, Texas. Both facilities represented a full-scale fitness and recreation center in each of their

respective cities. Participants included members of the fitness and recreation center who were age 18 years and older.

### **Delimitations**

1. The survey was distributed to members of the YMCA of Greenville/Hunt County and to the YMCA of Palestine.
2. Participants under 18 were not selected for the purposes of this study.

### **Limitations**

1. The YMCA facilities in the study were located in Greenville, and Palestine, Texas, and cannot be generalized to all locations and demographics.
2. The YMCA listserv may not contain all primary members with email addresses.
3. Participants may not have understood the survey questionnaire as expected.
4. Participants may have responded only for an opportunity to receive an incentive.

### **Assumptions**

1. Participants responded to the survey honestly.
2. YMCA member responses were representative of those members not surveyed.

### **Significance of the Study**

The significance of this study was threefold. First, the YMCA staff and Board of Directors in Greenville and Palestine, Texas may use the results of this research to determine customer segments and design targeted marketing strategies to attract consumers that would prefer their services. This may assist those facilities in purposefully increasing customer retention and profitability. Second, YMCA facilities

of similar population and demographics may be able to use the results to benchmark areas where service quality could be improved within their own facility and subsequently, they may reap the benefits of customer retention. Third, as this research established perceptions of service and behavioral intention to repurchase memberships at select YMCA (non-profit) facilities, fitness industry researchers may use these results and expand to examine for-profit facilities and their subsequent influences on the impact of service quality on retention and behavioral intention.

## CHAPTER II

### REVIEW OF THE LITERATURE

The nationwide cost of physical inactivity and excess weight in American adults has risen to over \$500 billion annually making a significant impact to the health care system, employers, and communities (Chenowith & Leutzinger, 2006). Physical inactivity and excess weight are both noted as risk factors for leading diseases in the country including cancer, heart disease, diabetes, musculoskeletal, and mental health disorders such as depression. The ever-increasing cost of health care has Congress, Federal and State agencies, and employers looking for solutions to reduce the cost and expense for individuals. While employers have looked to incentivize health and fitness programs to encourage employees to reduce risk factors (Patel et al., 2011), the decrease of physical activity coupled with an increase in the size of American waist lines has contributed to higher rates of chronic conditions.

#### **Importance of the Health and Fitness Industry**

Physical activity has been identified as a contributing factor to the prevention of heart disease, cancer, diabetes, and osteoporosis in addition to other co-morbidities (Warburton, Nicol, & Bredin, 2006). The American Heart Association (2014) has determined that physical activity is a necessary component to preventing cardiovascular disease and has set recommendations for adults to achieve at least 150 min of moderate

physical activity each week. Research by the American Cancer Society has concluded that the combination of regular physical activity, as defined by the American Heart Association (2014), and a healthy diet could prevent over 30% of cancer deaths each year. The American Diabetes Association (2013) has also concurred that physical activity aids in the prevention and management of diabetes by lowering blood glucose. However, physical inactivity is largely present in the United States and is evident through staggering numbers of overweight and obese American children and adults.

According to the Centers for Disease Control and Prevention (CDC), over 72 million American adults are obese and 17% of U.S. children are obese (Centers for Disease Control and Prevention, 2011b). The CDC defines obesity in adults as those individuals who have a body mass index  $30 \text{ kg/m}^2$  or greater, while those who have a body mass index between 25 and 29.9 are defined as overweight. In 2010, the Texas Department of State Health Services (DSHS) reported that 66.8% of adults residing in the state were either overweight or obese. Recent Texas DSHS reports were not included since the data singles out obesity rates and does not include overweight rates. During 2011, the Institute for Health Metrics and Evaluation reported the obesity metrics for Hunt County and identified the percentage of obese females was 41% and males was 38%, both 2% higher than the Texas rates for each gender. The Institute of Health Metrics and Evaluation (2011) also reported on the obesity metrics for Anderson County and identified the percentage of obese females and males were 38% with only males being 2% higher than the Texas rate. The national obesity average in 2011 was 36% for females and 34% for males. The need to reduce the national and local rates of

overweight and obesity provides an opportunity for organizations, like the YMCA, to aid in weight management and physical activity programs.

Results of a university physical activity and nutrition study indicated a high need for programs to overcome the current levels of obesity and sedentary lifestyles (Topp et al., 2011). Overweight fitness center members have reported a greater value than normal weight individuals on the role exercise plays in the improvement of appearance, self-esteem, and overall health even when they are “embarrassed, intimidated, and uncomfortable” when exercising among “young and fit people” (Miller & Miller, 2010).

Miller and Miller (2010) suggested that by designing a facility that changes the experience of overweight individuals to reduce the negative impact of those emotions, an organization will increase the retention rates of these individuals. Research has attempted to bridge the gap between theorizing motivations to exercise and the implementations of fitness programs by determining the participant’s motivation to participate in a particular fitness activity while assessing the specific program design and exploring the marketing strategy that engaged the consumer (Davey, Fitzpatrick, Garland, & Kilgour, 2009). The level of inactivity combined with increasing obesity levels in the United States continues to provide researchers opportunities to explore tools that would assist in service improvement in the health and fitness industry. Kravitz (2011) identified a number of reasons people participate in exercise programs and identified five reasons why they are motivated to continue exercise which include the following: (a) demographic and biological factors, (b) psychological, cognitive, and emotional factors, (c) behavioral attributes and skills, (d) social and cultural influences, and (e) physical

environment. The health and fitness industry has set out to combine perceived individual benefits of physical activity with the looming need to prevent chronic conditions in our society to create an experience that engages participants and provides sustainability.

### **Health and Fitness Industry**

The need for a focus on fitness began long before the phrase “couch potato” emerged in American culture and can be traced to the Industrial Revolution in the late 1800s, a period of more urbanization and less movement (Dalleck & Kravitz, 2002). President Theodore Roosevelt promoted fitness during his presidential term and issued executive orders for required physical fitness testing for military officers (East, 2013). Following World War II, research on the declining fitness level of American children compared to Europeans generated political concern and led President Dwight D. Eisenhower to the development of the Presidential Fitness Council for Youth, known today as the President’s Council for Fitness, Sports, and Nutrition (2012).

Dr. Kenneth Cooper conceptualized the importance of physical activity through his 1968 book entitled *Aerobics*. The impact of that material and the desire of Dr. Kenneth Cooper to improve fitness levels of Americans led to the development of the Cooper Institute and ultimately the publication of a study in 1989 that concluded physical activity could decrease risk of deaths from all causes by 58% (Blair et al., 1989; Cooper *Aerobics*, 2015). Over the next 15 years, manufacturers developed stationary fitness equipment which sparked public interest in more indoor fitness options. As a result, the

industry quickly revolutionized previous elite men's health clubs into family friendly fitness centers and continues to grow at a rapid rate.

The number of memberships at fitness facilities grew by 20 million worldwide between 1987 and 2002. (Woolf, 2008). Additionally, the International, Health, Racquetball, and Sportsclub Association (IHRSA) reported that health clubs in the United States have sustained revenue and subsequently facility managers continue to prepare for expanded growth (Halvorson, 2010). By 2012, memberships in the U.S. had reached over 50 million and industry revenues have topped \$21 billion annually (IHRSA, 2013). While IHRSA has reported retention rates as high as 72% recently, prior research has shown that the fitness industry loses 40% of its client base each year (Rascher, 2008; Theodorakis, et al., 2004) and 50% of the people who start a fitness program will quit after 6 months (Mullen & Whaley, 2010). Frew and McGillivray (2005) have even criticized the sustainability of the health and fitness industry because of noted attrition rates as high as 80% and have pointed out the value of focusing on the factors that leave members dissatisfied.

Oliver (2003) identified the health and fitness industry as a saturated market with intense competition. Therefore, fitness centers are constantly competing to recruit new members and retain current ones in order to increase their market share, profitability, and competitive advantage. For the YMCA in Greenville and Palestine to achieve these goals, the purpose of the organization and the services offered will need to be addressed to select the appropriate assessment tool to identify consumer perceived service quality and intent to repurchase.

## **YMCA Transformation and Competition**

The Young Men's Christian Association (YMCA) was founded in 1844 in London as a refuge for young men who needed more adequate living spaces which evolved into gyms, auditoriums, and hotel-like rooms. By the 1920s, YMCA facilities spread across the globe including the United States. Their program offerings varied from swimming lessons, camps, to other social programs for adults and children. The adaptability of the YMCA to transform from religious focused programs for men to leisure-time activities for all, enlarged their membership base 150% by the 1950s (Zald & Denton, 1963). Today, the YMCA has expanded its mission to put Christian principles in practice through programs that build a healthy spirit, mind, and body for all.

While the mission of the YMCA organization has a strong focus on building healthy communities, many YMCAs across the United States have been viewed as fitness centers and direct competitors to commercial fitness organizations. Since the early 1980s, the YMCA has experienced fierce competition within the fitness industry. At that time, commercialized fitness organizations banded together to oppose the YMCA's tax-exempt status to provide for a more competitive, fair market (Stern, 2011). According to the Internal Revenue Code, an organization that seeks tax-exemption must be organized and operated exclusively for exempt purposes and none of the organization's earnings may benefit any private shareholder or individual; and, the organization is also limited from participating in influential legislative activities and prohibited from political campaigns (Internal Revenue Service, 2015).

Since commercialized fitness organizations continue to feel that the YMCA organization is an unfair threat to market share operating as a nonprofit (Stern, 2011), the YMCA organization, specifically the ones in Greenville and Palestine, Texas, must excel in service quality to maintain a competitive advantage over current and emerging fitness organizations in the local market. Tskitskari, Tsiotras, and Tsiotras (2006) confirmed prior research that suggested the evaluation of service quality in the sport industry is a multidimensional structure and that dimensions vary between countries and service sectors. The two service sectors identified in sport were businesses in the profit sector and businesses in the nonprofit sector.

The YMCA of Greenville, Texas, has a history that extends back to 1895, when local citizens recognized a need within the community and formally organized creating the fifth YMCA in Texas. The YMCA Brotherhood continued to grow in membership and activities through World War II; however, the Greenville YMCA struggled for many years to establish a dedicated facility. In 1956, Greenville's Mayor, the late Col. John H. Miller, discussed this issue with community leaders and gained support which led to the formal incorporation of the Greenville YMCA and a charter from the National YMCA Council in 1957. The ground-breaking ceremony for the current 20,000 sq. ft. facility was held in 1961. During the next decade, the YMCA provided year-round activities and programs for children and adults. By the early 1980s, the evidence of wear to the building prompted the implementation of a fundraising campaign. In 1986, the funds raised were short of the \$1.5 million needed to complete 100% of desired renovations. Since that time, the YMCA has made minor improvements with annual

fundraising campaigns, but the 50-year-old building was wearing down and much less attractive to members. As a result, in 2013, the citizens of Greenville passed a bond election to allow the City of Greenville to build a new YMCA/City Event Center facility on city property (YMCA, 2013).

The current facility, built in 1961, is experiencing the wear and tear of eras without appropriate funding to fully repair the building. Additionally, a declining neighborhood location and new competition from a variety of emerging markets including youth sport organizations, store front fitness centers, and specialized fitness programs popping up in the community are challenging. While there are plans to rebuild in the near future, the organization must maintain a solid membership base during the transition through a high level of service that generates customer satisfaction and retention.

The YMCA of Palestine was built in 1892 (Piersol, 2007). The YMCA opened as the Railroad YMCA in 1903 and remained open until it burned in the 1950s (Portal to Texas History, 2007). During World War I, George E. Dilley, a business entrepreneur, served as chairperson of the Palestine YMCA and was responsible for establishing and raising money for a war fund as required by the YMCA national headquarters (Dilley, 1993). The current YMCA of Palestine was built in 1998 with an addition to the facility's main area in 2006 (Anderson Country Appraisal District, 2017).

## **Service Quality**

Customers are aware, more than ever, of organizations' continual desire to improve service and therefore, also have increased expectations of service providers (Frost & Kumar, 2000; Robinson, 1999), which may be difficult or impractical to achieve at some point (Rust & Oliver, 2000). The cost of improving service quality may not always align with a tangible financial benefit to the organization. Consequently, service quality is one of the most recurrent topics in management literature (Martinez & Martinez, 2010) and includes up to 10 dimensions that are proposed in the literature (Brady & Cronin, 2001).

Parasuraman, Zeithaml, and Berry (1988) were one of the first to address the need to focus on the measurement of service quality in the marketing industry rather than just the measurement of the quality of goods and later developed the Service Quality scale, SERVQUAL, a multi-item scale for measuring perceived service quality. Cronin and Taylor (1992) suggested that SERVQUAL was flawed which led to the development of a performance component of the Service Quality scale known as SERVPERF. Brady and Cronin (2001) set out to establish a structure that combined qualitative and empirical evidence and their research led to the development of a multidimensional, hierarchical service quality model. Jain and Gupta (2004) also noted a need to compare the methodological soundness and diagnostic power of SERVQUAL to SERVPERF and suggested that SERVQUAL provided greater diagnostic power for management to identify areas where service quality could be improved.

## **Service Quality Models in Health and Fitness Industry**

The SERVQUAL instrument has often been used to assess the theoretical framework of service quality in the fitness industry (MacKay & Crompton 1988, 1990; Wright, Duray, & Goodale, 1992). It was used as the basis for the tool used to determine perceived service quality in Australian sport centers (Howat, Murray, & Crilley, 1999). Terzoglou, Papadopoulos, Koronas, and Matsaridis (2012) also evaluated the service quality of private fitness centers in Greece using a modified model of SERVQUAL (Alexandris et al, 2004).

However, others have questioned the use of the generalized scale for the health and fitness industry. Chelladurai, Scott, and Haywood-Farmer (1987) identified the need for a model for fitness service dimensions and therefore, developed the Scale of Attributes for Fitness Services (SAFS). The SAFS includes 30 items to measure five dimensions of fitness attributes: (1) professional services, (2) consumer services, (3) peripheral services, (4) facilities and equipment, and (5) secondary services. Additionally, a modification of the SAFS was recommended in the event new fitness trends emerged. Focusing specifically on the sport sector, Chelladurai (1992) classified sport and physical activity services into two distinct categories: consumer and human services.

McDonald, Sutton, and Milne (1995) modified the SERVQUAL to develop the TEAMQUAL, a 39-item scale used to measure five dimensions of service quality in professional team sports. Kim and Kim (1995) then developed the Quality Excellence of

Sport Centers (QUESC) instrument. The QUESC expands on the list of service items examined by SERVQUAL and includes service dimensions related to the sport industry. The 12 dimensions of service specific to the sport industry include ambiance, employee attitude, reliability, information giving, programming, personal consideration, price, exclusivity, ease of mind, convenience, stimulation, and social opportunity. Kim and Kim (1998) further used the QUESC model to segment sport center members in Korea into five groups by attitudes: (a) facility-conscious, (b) goal-oriented, (c) convenience-seeking, (d) personal gratification-oriented, and (e) employee behavior-conscious.

Howat, Absher, Crilley, and Milne (1996) developed the Centre for Environmental and Recreation Management Customer Service Quality (CERM-CSQ) scale to measure four dimensions of service: core services, staff quality, general facility, and secondary services. Therefore, Howat, Murray, and Crilley, performed focus groups to establish the 19-item attributes used in their research instrument. Cavnar et al. (2004) agreed that recreational facilities had additional items to consider and evaluated the reliability of a survey tool to assess the quality of recreation facilities. Their research suggested that the tool did not obtain the level of perceived service quality from the end user. Ko and Pastore (2005) then developed the Scale of Service Quality in Recreational Sport (SSQRS) to evaluate perceived service quality in recreational sport programs. The scale items are based on the four dimensions of service quality identified by Ko and Pastore (2004): program quality, interaction quality, outcome quality, and environment quality.

Chang (1998) proposed a framework for the analysis of quality in fitness clubs through three dimensions in the input stage, five dimensions in the throughput stage, and one dimension in the output stage: perceived service quality. Continuing earlier research, Chelladurai and Chang (2000) developed a framework for managers to use to benchmark quality and eliminate service failures by establishing targets of service quality to include: targets of quality, standards of quality, and evaluators of quality. The targets of quality include the core science, physical context, and interpersonal interactions. The standards of quality include excellence, value, product specifications, and meeting or exceeding consumer expectations. The evaluators of quality include the client, the professional, and the management.

Murray and Howat (2002) used an 18-item attribute scale to measure perceived service quality as recommended by Howat et al (1999). Ko and Pastore (2004) then proposed a service quality model for sport organizations that was based on the concept that service quality is a multidimensional and hierarchical construct which was defined by Brady and Cronin (2001). This model contained four primary dimensions of service quality: program quality, interaction quality, outcome quality, and environment quality.

Consistent with a previously proposed multidimensional service quality model (Brady & Cronin, 2001), Lam, Zhang, and Jensen (2005) discussed the need to address the gap of earlier service quality models in sport (Howat et al, 1999; Kim & Kim, 1995; Wright et al., 1992). Their research led to the development of the Service Quality Assessment Scale to measure service quality in health-fitness clubs which identified six factors important to health-fitness club management: staff, program, locker room,

physical facility, workout facility, and childcare. Macintosh & Doherty (2007) considered both an organization's culture values and service quality elements to be of equal importance to customer retention. Their research reaffirmed the importance of assessing service elements in fitness centers in relation to the overall satisfaction of the consumer. The service elements that were identified to be of great importance included locker rooms, programs, equipment, and workout facility as shown in the Service Quality Assessment Scale (SQAS; Lam et al., 2005). Cheng (2010) agreed with others on the competitive market of the health and fitness industry and pushed organizations to seek those factors that cause service failures. Perez, Chincilla-Minguet, and Freire (2010) suggested that systems of quality management should be further explored to identify quality of service in sport. Their review of the literature suggested that while copious literature identified models to determine levels of service quality, the lack of agreement on service quality dimensions and the dependence on the customer's perception is inefficient to improve the quality of service in the sport industry.

Yildiz (2011) supported the theory that neither SERVQUAL nor SERVPERF are appropriate to effectively measure service quality in fitness centers. Her research suggested that the use of the Service Quality Scale of Fitness Centers, a modification of the SQAS (Lam et al, 2005), combined with importance-performance analysis (IPA) will show the greatest indicators for improving customer service levels.

### **Customer Satisfaction**

The primary goal of most organizations is to maintain their competitive advantage in the marketplace. Focusing on factors that influence service quality and customer

satisfaction will allow organizations in the health and fitness industry to outlive their competitors while helping to create opportunities for increased physical activity. “Firms that make customers feel good are formidable competitors because customers like to feel good and few companies make them feel that way” (Haeckel et al., 2003).

Kotler (1994) identified customer satisfaction as the key to customer retention. For a fitness facility to outlive its competitors, it must maintain a strong reputation for member satisfaction. Bodet’s (2006) findings agreed with prior research “when customers are satisfied, organizations are profitable”. Customer satisfaction is also an applicable measure of the effectiveness of a sport organization (Tsigilis, Masmanidis, & Koustelios, 2009). Pedragosa and Correia (2009) concluded from prior research that measuring consumer satisfaction of a facility would require utilization of a short-term approach in which “the consumer’s level of satisfaction with each of the specific attributes is identified and evaluated” (p. 454). McDougall and Levesque (2000) concurred with prior research that service quality and customer satisfaction are two distinct constructs; however, perceptions of service quality create levels of satisfaction that impact future intention to repurchase.

### **Customer Loyalty**

Customer satisfaction has had a direct effect on reuse while dissatisfaction has had a direct effect on switching behavior (Ferrand, Robinson, & Valette-Florence, 2010). For a customer to stay loyal, they must have a high level of satisfaction toward either the organization or the product. Additionally, customer satisfaction has been linked to

customer loyalty (Theodorakis, et al., 2004) in which Yi and La (2004) concluded that the relationship between customer satisfaction and repurchase intention was dependent on the level of loyalty of the consumer. Higher service quality leads to higher customer satisfaction which leads to higher customer loyalty. Beier, Woratschek, and Zieschang (2004) established the need for an Identification of Service Lacks (ISL) through their exploration of achieving high service quality, satisfaction, and loyalty to achieve greater repurchase intentions in German tourism.

The value of consumer satisfaction and loyalty on future purchase intentions has been shown in several models in sport research (Trail, Anderson, & Fink, 2005). Garbarino and Johnson (1999) also supported that varying levels of consumer loyalty alter the mediators to repurchase intention. Their study concluded that a low loyalty consumer preferred overall satisfaction as to the high loyalty consumer who preferred trust and commitment for future intentions to repurchase. Trust and commitment can be enhanced by correcting service failures through complaint resolution management (Tax, Brown, & Chandrashekar, 1998). Researchers have concluded that increased motivation leads to increased participation in the recreational sport industry (Tsorbatzoudis, Alexandris, Zahariadis, & Grouios, 2006). This information is valuable to the health and fitness industry since continued participation leads to customer loyalty and ultimately a retained member. The level of a consumer's commitment to exercise is determined by a number of factors including enjoyment, personal investment, social constraints, and involvement opportunities (Alexandris, Zahariadis, Tsorbatzoudis, & Grouios, 2002). In order for the health and fitness industry to sustain current members,

the factors that increase a consumer's loyalty and usage of a service should be considered.

Iwaski and Havitz (2004) reported that "customer loyalty is a person's attitude and behavior in relation to a brand causing the repeat use of that brand" (p. 46). As with any other business, facilities in the fitness industry want to provide a service that ensures continued customer satisfaction and loyalty in addition to generating increased revenue. Additional research is needed to determine which service quality is most important for customer retention in the fitness industry. Customer retention will also include addressing the needs of multiple cultures (James, 2009) and is considered "fundamental" to the survival of an organization (Ferrand, Robinson, & Valette-Florence, 2010, p. 83). Iwaski and Havitz (2004) reported that retaining customer loyalty increased competitive advantage and that it was more feasible to retain members than to recruit new ones. Others have shown the expense to acquire a new member is six times (Kye-Sok & Yong-Man, 2008) up to 10 times (Cheng, 2010) more expensive than retaining the current member.

MacIntosh and Doherty (2007) confirmed the value of service quality on membership satisfaction and retention. Therefore, fitness industry research has examined customer satisfaction and loyalty in addition to consumer perception of service quality in order to develop sound principles for customer retention. Hennig-Thurau and Klee (1997) suggested that the model necessary to determine customer retention by way of customer satisfaction and relational quality must be a nonlinear, three-dimensional

variable with the following constructs: (1) perceived service quality of consumer, (2) trust of consumer, and (3) loyalty of consumer.

### **Behavioral Intentions**

When customers perceive service quality as good, behavioral intentions are also good (Zeithaml & Bitner, 2003). Yi and La (2004) conducted a study on the link between customer satisfaction and repurchase intention among consumers. Customer satisfaction was measured using “the degree of satisfaction” and “the degree of happiness” while repurchase intention was measured using repeat purchase intention and repurchase probability. Shonk and Chelladurai (2008) supported the relationship between service quality and customer satisfaction on repurchase intention in their research on sport tourism which was later supported by research that suggested that service quality, value, and satisfaction were indicators of repurchase behavior (Hutchinson, Lai, & Wang, 2009).

Hennig-Thurau and Klee (1997) also noted that two primary limitations existed when trying to establish a connection between customer satisfaction and retention to future behavioral intentions. The first was that satisfaction and intention measures are generally on the same questionnaire, inherently correlated, and lead to an overestimation of the strength of the relationship. This is a potential limitation for the current research as the satisfaction and intention measure were located on the same survey. The second was that predictive validity of intention measures vary greatly by product, time, environment, and respondents. Terzoglou, Papadopoulos, Koronas, and Matsaridis (2012) presented findings that a significant correlation existed between expected outcomes of fitness center

services and the intention to participate in those services in the future. Additionally, they did note that the frequency that someone participated was directly related to service quality. Therefore, organizations should strive to deliver service quality that will produce feelings of customer satisfaction as they ultimately lead to frequent visits and intent to repurchase. This research also attempted to determine behavioral intentions of YMCA members.

### **Discussion and Summary**

This research examined the relationship between service quality, customer satisfaction, and intent to repurchase.

The research sought to (1) identify the primary service factors influencing consumer satisfaction, (2) identify differences between participant expected and actual experiences of fitness center service, (3) determine participants future intention to revisit the facility, (4) determine participants future intention to share their experience, and (5) identify differences between perceptions of service quality and customer satisfaction across demographic groups based on BMI (i.e., normal and overweight participant groups).

## CHAPTER III

### METHOD

The purpose of this chapter is to explain the procedures that were used to test the research hypotheses. It explains the research design used to examine service quality, customer satisfaction, and behavioral intention at the YMCAs in Greenville and Palestine, Texas. The first section of this chapter provides a description of the selection of subjects while the second section provides a description of the instrument. The third section of this chapter provides a description of the procedures used to distribute the survey and collect data and the final section provides a description of the research design and how the data were analyzed.

#### **Selection of Subjects**

The researcher selected the YMCAs of Greenville and Palestine, Texas, to perform the study. The YMCA of Greenville and Palestine are both recreational facilities in rural settings that offer health and fitness activities, adult and youth sports, senior activities, and aquatics. The target population for this study included 1190 individuals, who were primary members of the YMCA of Greenville and Palestine. Primary members are those who are considered the paying member by the facility. Questionnaires were distributed by the YMCA CEO via a PsychData weblink to the primary members' email address or were available in paper format. An initial email was sent on Day 1 with a follow-up reminder sent on Day 4. The survey deadline indicated a 7-day data collection period. On Day 7, a final reminder email was sent to participants.

Nulty (2008) shared findings of university online surveys that varied in response rates from 20-47%; however, the use of reminder emails and incentives increased response rates. To increase survey participation, a \$5 gift card was offered to a random selection of 20 participants who provided an email address at the completion of the survey. At the close of the survey, 57 of the 79 participants had provided an email address. Excel was used to identify a random sample of 20 participants in which these 20 participants were then sent an electronic \$5 gift card via Amazon.com.

### **Instrument**

Two instruments will be used in this study to collect member information. The Service Quality Assessment Scale (SQAS) and the Behavioral Intentions model as well as a demographic survey were completed by the subjects. A review of the literature indicated that the most frequently used instrument for customer satisfaction is a survey using Likert-type scales (Martinez & Ko, 2010). The survey instrument used in this study included 53 items, including 11 demographic, 1 customer service, and 38 service quality and repurchase intention questions. Service quality and repurchase intention items were examined by use of a Likert scale in which participants were asked to rate their satisfaction with service items on a scale of 1 (poor) to 5 (excellent). This method was chosen for this study because of its ability to measure the subjectivity of consumer perceptions within the health and fitness industry and the ability to connect service quality with future intentions within the scope of this study.

## **Demographic Survey**

A demographic survey developed by the researcher was used in this study. This survey collected personal data on each participant which included: gender, age, education, frequency of visits, membership length, and primary purpose for using the facility.

## **Service Quality Assessment Scale**

Service quality survey questions were from those used by Lam, Zhang, and Jensen (2005) during their development of the instrument. The SQAS model included a total of 40 items across six dimensions including: staff (9), program (7), locker room (5), physical facility (7), workout facility (6), and Child Care (6). The respondent's choices were assessed using a five-point Likert scale with answer choices ranging from poor (1) to excellent (5).

Lam, Zhang, and Jensen (2005) discussed the need to address the gap of earlier service quality models in sport (Howat et al, 1999; Kim & Kim, 1995; Wright, et al., 1992). Their research led to the development of the Service Quality Assessment Scale to measure service quality in health-fitness clubs. This research study, therefore, will use the SQAS to determine member perceptions of service quality in the YMCA.

The development of the Service Quality Assessment Scale (SQAS) was to determine the service quality of recreation and fitness facilities as researchers concluded that the generic service quality models did not sufficiently address the needs of these facilities (Lam, et al., 2005). Six factors were established: staff, program, child care, locker room, physical facility, and workout facility. Two studies were conducted to (1)

develop scale items and (2) perform a pilot study on the scale (Lam, et al., 2005). Content validity was evaluated by a panel of fitness industry experts and face validity was evaluated by pilot study participants. Variance extracted (VE), alpha reliability and composite reliability (CR) were completed. VE was considered acceptable for all six factors and alpha reliability coefficients indicated the items within each factor were unidimensional. Composite reliability coefficients were above the .70 standard. SQAS contains 40 items within six factors: staff (9), program (7), locker room (5), physical facility (7), workout facility (6), and Child Care (6).

### **Behavioral Intentions Model**

The Behavior Intentions questions were derived from those used by Zeithmal, Barry, and Parasuraman (1996) during their development of the model. The model includes five behavioral-intention dimensions with 13 items specific to: loyalty (5), switch (2), pay more (2), external response (3), and internal response (1). Content validity was completed by evaluation of managers from the respective Companies who were participating in the study. Additionally, reliability coefficients were measured and the internal consistency for the loyalty dimension was excellent while all others were poor to acceptable. For that reason, only questions derived from the loyalty dimension were used for this study. Three items were selected as statements to address behavioral intention including: I will return to the YMCA, I will recommend the YMCA to my friends, and I will have positive things to say about the YMCA. McDougall and Levesque (2000) used a single item of recommendation scale to measure behavioral intention in their study on repurchase behaviors in the sport industry in which Tian-Cole,

Crompton, and Willson, (2002) derived questions from this model to measure visitors' behavioral intentions to visit or say positive things about the wildlife refuge. The respondent's choices for this study were associated with a 5-point Likert scale and anchors that included strongly unlikely (1) to strongly likely (5).

### **Procedures**

In order to target the members of the YMCA, the researcher identified the most relevant instruments for service quality, behavioral intention, and customer satisfaction. Then, a questionnaire (see Appendix B) was developed that best represented the type of data being sought for this study. Therefore, two research surveys (Service Quality Assessment Scale and Behavior Intention model) were combined for use considering their appropriateness to the variables being examined and their previous validity and reliability testing.

The YMCAs of Greenville and Palestine, Texas, were selected based on the willingness of the facility to participate in this study and given their demographic similarities. The researcher conducted a phone call with each of the Chief Executive Officers (CEO) from the YMCAs to confirm access of their membership for this study. Then, the CEOs were asked to sign an agreement to distribute questionnaires to YMCA primary members (see Appendix A). The subjects were solicited to complete a survey regarding demographics, consumer satisfaction, service quality and behavioral intention. All subjects who were primary members of the YMCAs and over 18 years of age were invited to participate. Participants were recruited through the YMCA's primary member database by the CEOs as the researcher was not allowed direct access to email accounts.

An email was sent to the primary member listserv via CEO with the introduction letter (see Appendix C) and the link to the survey. Participants clicked the link to the survey and by responding to the survey gave informed consent. Additionally, the reminder email (see Appendix D) was sent in the same method via the CEO. The researcher explained the objective of the study and the specific instructions to the participants in the introduction section of the survey once the participant clicked on the PsychData weblink. A flyer with the survey link was distributed at each facility (APPENDIX F). On two days the researcher provided electronic devices at each facility. Alternately, paper copies of the survey were available to participants at the front entrance of the facilities and a box was provided for participants to securely deposit their responses.

### **Statistical Design and Analysis**

This research was conducted for the purpose of studying the relations of service quality and behavioral future intentions to further the understanding of these constructs, specifically in the fitness and recreational center setting. Procedures from SPSS version 24.0 for Windows were used to analyze the demographic data in which descriptive statistics included means, standard deviations, frequencies, and percentages. Statistical significance for all analysis were evaluated with a  $p < .05$  significance level. Regression analysis was used to test if service quality factors were a significant predictor of customer satisfaction. One-way ANOVA analyses were used to examine mean differences between the seven dimensions of the SQAS and the demographic variables in which Tukey HSD was used for post hoc multiple comparisons considering that sample sizes were not equal. This analysis determined the difference between the actual and expected

service for gender, age bands, education levels, and body mass index. Likewise, one-way ANOVA analyses were used to determine the behavior intentions to revisit and share among the previous listed demographic categories.

## CHAPTER IV

### PRESENTATION OF FINDINGS

The purpose of this study was to examine the relationship between service quality, customer satisfaction and intent to repurchase. The research sought to (1) identify the primary service factors that influence customer satisfaction, (2) identify the difference between the expected and the actual service experience among participants, (3) determine the intentions of participants to revisit the facility, (4) determine the intentions of participants to share their experience, and (5) identify differences in service quality and customer satisfaction between normal and overweight individuals. This chapter describes the results of participant demographics, primary service factors that influence customer satisfaction, the difference between expected and actual service experience among the following demographic groups: (1) gender, (2) age, and (3) highest education level, the participants intent to revisit and to recommend the YMCA, and the differences in customer satisfaction and service quality between normal and overweight individuals.

The Service Quality Assessment Scale (SQAS) was used to identify the primary service factors that influenced customer satisfaction by measurement of one sample t tests to the median score of each factor. The SQAS was also used to establish any differences in the expected and actual service experience among participants by measurement of Mann Whitney U for gender, and one-way ANOVA for age, higher education level, and body mass index. The Behavioral Intentions model was used to determine the intentions

of participants to revisit the facility and to share their experience by measurement of one-way ANOVA for both items.

### **Description of the Demographic Information**

#### **Participants**

The researcher used an online survey through PsychData and print surveys with a sample of YMCA members at least 18 years of age. The survey was available to 1189 individuals with a response rate of 6.7%. Demographic data for all responses are shown in Table 1. There were 60 (76%) female subjects and 19 (24%) male subjects. The mode for the age band of respondents was 26 to 35 years (28%), with a total range of 18 to over 65 years. The majority of customers had a degree: bachelor's (32%), master's (18%), and doctoral (3%); while the remainder had some college hours (34%), a high school diploma (10.0%), or other education (3%). The most frequently selected membership type (49%) was a family membership with the second largest membership type (32%) being an adult membership. The last membership types were comprised of senior adult (11%) and senior family (8%). The respondents were grouped by their occupation which included: professional (27%), construction (3%), retail (3%), clerical (9%), education (15.0%), homemaker, (6%), retired (17%), and other (20%). Respondents were also grouped by the time of day they visited the facility in which they reported: 6-10a.m. (35%), 10a.m.-2p.m. (14%), 2-6p.m. (34%), and 6-10p.m. (17%). Finally, respondents were grouped by how many times per week they visited the facility: 1-2 times per week, (27%), 3-4 times per week (34%), 5-6 times per week (23%), 7 or more (5.0%), or other (11%).

Table 1

*Descriptive Statistics for Demographics*

Demographic Groups	Categories	N	Percent
Gender	Male	19	24
	Female	60	76
Age	18-25	5	6
	26-35	22	28
	36-50	21	26
	51-65	14	18
	Over 65	17	22
Education Level	High School	8	10
	Some college	27	34
	Bachelor's	26	32
	Master's	14	18
	Doctoral	2	3
	Other	2	3
Occupation	Professional	21	27
	Construction	2	3
	Retail	2	3
	Clerical	7	9
	Education	12	15
	Homemaker	5	6
	Retired	14	17
	Other	16	20
Membership	Family	39	49
	Adult	25	32
	Senior Adult	9	11
	Senior Family	6	8
Member Years	<1 year	23	29
	1 year	14	18

	2 years	7	9
	3 years	7	9
	4 or more years	28	35
Visits per week	1-2 times	21	27
	3-4 times	27	34
	5-6 times	18	23
	7 or more	4	5
	Other	9	11
Time of day	6-10a.m.	28	35
	10a.m.-2p.m.	11	14
	2-6p.m.	27	34
	6-10p.m.	13	17

*Note. n = 79*

### **Primary Service Factors That Influence Customer Satisfaction**

Regression analysis was used to determine if service quality factors significantly predicted customer satisfaction among YMCA members as shown in Table 2. Service quality items were combined by each dimension (staff, program, locker room, fitness, aquatics, and childcare) prior to performing the analysis. A simple linear regression was calculated to predict customer satisfaction based on staff,  $\beta = -0.50$ ,  $t = -5.04$ ,  $p < .001$ , with an  $R^2$  of .25. A simple linear regression was calculated to predict customer satisfaction based on program,  $\beta = -0.30$ ,  $t = -5.04$ ,  $p < .001$ , with an  $R^2$  of .09. A simple linear regression was calculated to predict customer satisfaction based on locker room,  $\beta = -0.48$ ,  $t = -4.79$ ,  $p < .001$ , with an  $R^2$  of .25. A simple linear regression was calculated to predict customer satisfaction based on fitness,  $\beta = -0.40$ ,  $t = -3.79$ ,  $p < .001$ , with an  $R^2$  of .16. A simple linear regression was calculated to predict customer satisfaction based

on aquatics,  $\beta = -0.30$ ,  $t = -2.79$ ,  $p < .01$ , with an  $R^2$  of .09. There was not a significant regression equation identified for the childcare dimension factors suggesting that feedback on childcare services is not a predictor of customer satisfaction levels.

Table 2

*Regression Analysis of Service Quality Factors that Influence Customer Satisfaction*

Customer Satisfaction						
<b>Variables</b>	<b>B</b>	<b>SE B</b>	<b><math>\beta</math></b>	<b><math>R^2</math></b>	<b>F</b>	<b>Sig.</b>
Staff	-.08	.016	-.50	.25	25.36	.001
Program	-.06	.02	-.30	.09	7.63	.01
Locker	-.07	.02	-.48	.23	22.93	.001
Fitness	-.08	.02	-.40	.16	14.33	.001
Aquatics	-.06	.02	-.30	.09	7.79	.01

**Influence of Demographic Variables**

**Gender**

The researcher performed a Mann Whitney U on the Gender Groups for both male and female populations who responded to the survey. This analysis indicated there were no significant differences between responses of the male and female participants.

**Age**

A one-way ANOVA was conducted to compare the effect of the following age bands: 18-25, 26-35, 36-50, 51-65, and over 65 years of age on service quality factors. An analysis of variance showed that the effect of age bands on possession of required knowledge/skills for staff was significant ( $F(4,74) = 3.05$ ,  $p = .022$ ), communication

with members was significant ( $F(4,74) = 2.88, p = .028$ ), the availability of workout equipment was significant ( $F(4,74) = 3.01, p = .023$ ), and the hours of operation for childcare was significant ( $F(4,73) = 2.82, p = .031$ ). Considering their significance, a post hoc evaluation was conducted using Tukey HSD for the age bands. A significant difference in the perceived level of service was noted between the 26-35 year age group and the 36-50 year age group for the following survey items: possession of required knowledge/skills,  $p = .020$  and communication with members,  $p = .047$ . The 26-35 year age group rated the YMCA higher in both items than the 36-50 year age group. Additionally, there was a significant difference between the 51-65 year age group and the over 65 year age group for their expectations for communication with members,  $p = .011$ . The 65 year age group rated the YMCA higher than the 51-65 year age group. Lastly, a significant difference was identified between the 18-25 year age group and the over 65 year age group for the expected hours of operation for childcare,  $p = .036$ . The 65 year age group rated the YMCA higher than the 18-25 year age group. There were no significant differences established in any other service quality factor among age groups.

Table 3

*Factors Influenced By Age Bands*

		Sum of Squares	df	Mean Square	F	Sig.	
Possession of required knowledge/skills	Between Groups	10.333	4	2.583	3.051	0.022	
	Within Groups	62.655	74	0.847			
	Total	72.987	78				
Communication with members	Between Groups	12.182	4	3.046	2.882	0.028	
	Within Groups	78.197	74	1.057			
	Total	90.380	78				
		Within Groups	84.401	74	1.141		
		Total	95.797	78			
		Within Groups	117.498	74	1.588		
		Total	119.418	78			
		Within Groups	168.619	74	2.279		
		Total	180.304	78			
		Within Groups	124.549	74	1.683		
		Total	129.342	78			
	Availability of workout facility/equipment	Between Groups	18.555	4	4.639	3.006	0.023
Within Groups		114.179	74	1.543			
Total		132.734	78				
Hours of operation	Between Groups	13.611	4	3.403	2.815	0.031	
	Within Groups	88.235	73	1.209			
	Total	101.846	77				

Table 4

*Post-hoc (Tukey HSD) Evaluation of Factors Influenced by Age Bands*

<b>Dependent Variable</b>				<b>Mean Difference (I-J)</b>	<b>Std. Error</b>	<b>Sig.</b>
Possession of required knowledge/skills	18-25 years	26-35 years		-0.055	0.456	1.000
		36-50 years		0.829	0.458	0.376
		51-65 years		0.686	0.479	0.610
		Over 65 years		0.400	0.468	0.912
	26-35 years	18-25 years		0.055	0.456	1.000
		36-50 years		.883*	0.281	0.020
		51-65 years		0.740	0.315	0.140
		Over 65 years		0.455	0.297	0.547
	36-50 years	18-25 years		-0.829	0.458	0.376
		26-35 years		-.883*	0.281	0.020
		51-65 years		-0.143	0.317	0.991
		Over 65 years		-0.429	0.300	0.612
	51-65 years	18-25 years		-0.686	0.479	0.610
		26-35 years		-0.740	0.315	0.140
		36-50 years		0.143	0.317	0.991
		Over 65 years		-0.286	0.332	0.910
	Over 65 years	18-25 years		-0.400	0.468	0.912
		26-35 years		-0.455	0.297	0.547
		36-50 years		0.429	0.300	0.612
		51-65 years		0.286	0.332	0.910

Communication with members	18-25 years	26-35 years	-0.009	0.509	1.000
		36-50 years	0.876	0.512	0.433
		51-65 years	0.900	0.536	0.452
		Over 65 years	0.459	0.523	0.904
	26-35 years	18-25 years	0.009	0.509	1.000
		36-50 years	.885*	0.314	0.047
		51-65 years	0.909	0.351	0.083
		Over 65 years	0.468	0.332	0.624
	36-50 years	18-25 years	-0.876	0.512	0.433
		26-35 years	-.885*	0.314	0.047
		51-65 years	0.024	0.355	1.000
		Over 65 years	-0.417	0.335	0.725
	51-65 years	18-25 years	-0.857	0.647	0.677
		26-35 years	-0.539	0.425	0.711
		36-50 years	-0.762	0.429	0.394
		Over 65 years	-1.504*	0.448	0.011
Over 65 years	18-25 years	0.647	0.632	0.844	
	26-35 years	0.965	0.401	0.125	
	36-50 years	0.742	0.405	0.364	
	51-65 years	1.504*	0.448	0.011	
Hours of operation	18-25 years	26-35 years	-0.876	0.547	0.501
		36-50 years	-1.162	0.547	0.221
		51-65 years	-1.471	0.573	0.087
		Over 65 years	-1.635*	0.559	0.036

### Highest Education Level

A one-way ANOVA was conducted to compare the effect of education levels on service quality factors. This analysis revealed that the effect of education level on the availability of workout equipment was significant ( $F(5,73) = 2.66, p = .029$ ). Considering this significant result, a post hoc Tukey was performed to identify which specific groups had the greatest differences with education level (See Table 5). Participants with a doctoral degree greatly differed from their counterparts with some college,  $p = .016$ , followed by bachelor's degree,  $p = .037$  and master's degree,  $p = .012$ .

Table 5

*One Way ANOVA for Higher Education Levels*

		Sum of Squares	df	Mean Square	F	Sig.
Availability of workout facility/equipment	Between Groups	20.424	5	4.085	2.655	0.029
	Within Groups	112.310	73	1.538		
	Total	132.734	78			

Table 6

*Post Hoc Tukey HSD Factors for Higher Education Levels*

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.
Availability of workout facility/equip ment	High School Diploma/GED	Some College	-0.412	0.499	0.962
		Bachelor's Degree	-0.144	0.501	1.000
		Master's Degree	-0.589	0.550	0.891
		Doctoral Degree	2.625	0.981	0.092
		Other (please specify)	-0.875	0.981	0.947
	Some College	High School Diploma/ GED	0.412	0.499	0.962
		Bachelor's Degree	0.268	0.341	0.969
		Master's Degree	-0.177	0.409	0.998
		Doctoral Degree	3.037*	0.909	0.016
		Other (please specify)	-0.463	0.909	0.996
	Bachelor's Degree	High School Diploma/ GED	0.144	0.501	1.000
		Some College	-0.268	0.341	0.969
		Master's Degree	-0.445	0.411	0.887
		Doctoral Degree	2.769*	0.910	0.037

	Other (please specify)	-0.731	0.910	0.966
Master's Degree	High School Diploma/ GED	0.589	0.550	0.891
	Some College	0.177	0.409	0.998
	Bachelor's Degree	0.445	0.411	0.887
	Doctoral Degree	3.214*	0.938	0.012
Doctoral Degree	Other (please specify)	-0.286	0.938	1.000
	High School Diploma/ GED	-2.625	0.981	0.092
	Some College	-3.037*	0.909	0.016
	Bachelor's Degree	-2.769*	0.910	0.037
	Master's Degree	-3.214*	0.938	0.012
Other (please specify)	Other (please specify)	-3.500	1.240	0.065
	High School Diploma/ GED	0.875	0.981	0.947
	Some College	0.463	0.909	0.996
	Bachelor's Degree	0.731	0.910	0.966
	Master's Degree	0.286	0.938	1.000
	Doctoral Degree	3.500	1.240	0.065

### **Intent to Revisit and Recommend**

Participants indicated their return rate (likelihood to return to the facility) was high in which 71.8% of respondents answered they were strongly likely to return followed by 21.8% who were likely to return. Additionally, a strong majority of respondents indicated they were strongly likely (56.4%) or likely (21.8%) to recommend the YMCA to a friend. Tests were performed on demographic categories to assess differences in likelihood to revisit and recommend the YMCA. A Mann Whitney U test was performed for gender in which no significant differences were established. Additionally, a one-way ANOVA was performed for the factors of age, highest education level, and normal and overweight individuals on the likelihood to revisit or recommend the facility in which no significant differences emerged between groups for behavioral intentions.

### **Overall Satisfaction with YMCA**

The majority of respondents were either very satisfied (40.5%) or satisfied (38.0%) with the overall customer service of their YMCA (See Table 7). When performing a one-way ANOVA, there were no statistically significant differences established between age, gender, education level, or body mass index and the overall satisfaction level with the YMCA.

Table 7

*Participant overall satisfaction with the YMCA*

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Satisfied	32	40.5	40.5	40.5
Satisfied	30	38.0	38.0	78.5
Dissatisfied	9	11.4	11.4	89.9
Very Dissatisfied	3	3.8	3.8	93.7
No opinion	1	1.3	1.3	94.9
Other (please specify)	4	5.1	5.1	100.0
Total	79	100.0	100.0	

**Perceptions of Normal, Overweight, and Obese Individuals**

To determine the service quality perceptions of normal and overweight individuals and customer satisfaction responses, participants were divided into three Body Mass Index (BMI) groups for evaluation. The researcher was able to compute the body mass index of participants who provided their height and weight in the survey response by using the formula:  $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$ . Participants were then assigned to BMI groups which included Group 1 for a BMI of less than 25.0 (normal weight), Group 2 for a BMI of 25.0-29.9 (overweight), and Group 3 for a BMI of 30.0 or more (obese). A one-way ANOVA was conducted to compare the effect of BMI on perceptions of service quality (see Table 7). This analysis of variance reported that the effect of BMI on modern looking equipment was significant ( $F(2,70) = 3.190, p = 0.047$ ). To follow this significant result, a post hoc Tukey HSD was utilized to determine which

specific BMI groups were significantly different. The modern looking equipment differed between the overweight (Group 2) and obese participant (Group 3),  $p = 0.045$ . (see Table 9). The overweight group rated the YMCA equipment higher than the obese group. There was no statistically significant difference in overall customer satisfaction between the groups.

Table 8

*Factors Influenced by Body Mass Index*

		Sum of Squares	Df	Mean Square	F	Sig.
Modern-looking equipment	Between Groups	13.879	2	6.939	3.190	0.047
	Within Groups	152.286	70	2.176		
	Total	166.164	72			

Table 9

*Post Hoc Tukey HSD for BMI Groups*

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.
Modern-looking equipment	Tukey HSD	1.00	2.00	0.286	0.441	0.794
			3.00	-0.714	0.426	0.221
		2.00	1.00	-0.286	0.441	0.794
			3.00	-1.000*	0.410	0.045
		3.00	1.00	0.714	0.426	0.221
			2.00	1.000*	0.410	0.045

## CHAPTER V

### DISCUSSION

The purpose of this study was to examine customer satisfaction, perception of service quality and behavioral intentions to repurchase membership at YMCA fitness centers in Greenville, Texas and Palestine, Texas using the Service Quality Assessment Scale (SQAS) instrument (Lam, et al., 2005) and the Behavioral Intentions model (Zeithmal, Barry, & Parasuraman 1996). This study sought to continue the focus on service quality research for YMCAs as their commitment to improving community well-being has a different role than their commercialized fitness competitors. The purpose of this chapter is to discuss this study's results relative to the relationship between service quality, customer satisfaction, and intent to repurchase. The research sought to (1) identify the primary service factors influencing consumer satisfaction, (2) identify differences between participant expected and actual experiences of fitness center service, (3) determine participants future intention to revisit the facility, (4) determine participants future intention to share their experience, and (5) identify differences between perceptions of service quality and customer satisfaction across demographic groups based on BMI (i.e., normal and overweight participant groups).

#### **Customer Satisfaction**

To address research question one, the primary service factors that influenced customer satisfaction for the YMCA were evident in five of the six dimensions of the

SQAS: staff, program, locker room, fitness and aquatics. There was not a significant result for the childcare dimension. Since the results suggest that the relationship of service quality and customer satisfaction did not occur by chance for five of the dimensions, it is important for those service areas that generated negative satisfaction levels to be further explored. The value that participants place on service level factors should be reviewed by the YMCA facilities as making improvements in these areas have the potential to improve customer satisfaction. The service quality dimensions that were identified in the current research are supported by earlier research with similar findings. Since 1987, customer satisfaction of a fitness center has been connected to perceived service quality of facilities, equipment and professional services (Chelladurai, Scott, & Haywood-Farmer, 1987). Kim and Kim (1995) also noted employee attitude and programming as one of the 12 dimensions identified of sport center service quality for the QUESC. Additionally, Ko and Pastore (2007), confirmed in multiple studies that program quality, interaction quality, outcome quality, and physical environment were all important factors to the individual in recreational sports.

### **Service Quality**

To address research question two, the difference between the expected service and the actual service experience among participants were measured according to gender, age, and education level. These demographic variables provide an opportunity for the YMCA facilities to focus on improvement efforts while also providing the framework for targeted communications to each group based on their desired preferences. No significant differences existed among the expected and actual service between gender.

This was a surprising discovery as attendance in fitness classes, usage of equipment types and members who utilize support services are generally dominated by one gender or another. Since the SQAS had already identified a weakness in gender invariance in the childcare dimension for the items: hours of operation, adequacy of space, and safety of environment (Lam, et al., 2005) further exploration of gender comparisons for these items could be considered by the YMCA. Other studies have also shown a service quality distinction in the fitness center setting among genders (Theodorakis, et al., 2004). However, gender did not prove to be a primary indicator for these rural YMCA populations.

Significant differences existed between age groups for four service factors (1) possession of required knowledge and skills of staff, (2) communication with members, (3) availability of workout equipment, and (4) hours of operation for childcare. Research has historically shown the value of customer satisfaction in the fitness center setting with staff that are responsive and have the appropriate knowledge, facilities that are well-maintained, and programs that suit the member's needs (Kim & Kim, 1995; Ko & Pastore, 2007; Theodorakis, et al., 2004).

First, specific to expected and actual service for required knowledge and skills of the staff, a significant difference existed for participants between the 26-35 and 36-50 age bands. Although this is an interesting finding, further examination into what skills and knowledge these members expect from their YMCA facility staff is warranted as it is outside the scope of this study and there is not a foundation for this in the extant literature. Therefore, it is encouraged that YMCA leaders poll their members to

determine the knowledge and skills they currently perceive and the expected knowledge and skills that they would like to see. This data then could be utilized for staff professional development and serve as the basis for their skills and knowledge training.

Second, with regard to communication of the facility staff with their members, there were significant differences between the service quality item for the 26-35 and 36-50 age bands. Communication with members was perceived as average by the 36-50 age band compared to near excellent by the 26-35 age band. Similarly, there was a significant difference between the service quality item, communication with members among the 51-65 and over 65 age bands. Communication with members was rated as average by the 51-65 age band while rated as good by the over 65 age band. These results then indicated inconsistencies among age groups for how facility staff were perceived to communicate with their members. In consideration of this, facilities could then further research what satisfactory levels of communication would look or sound like to their members for all age groups and more specifically within the 36-50 and 51-65 age bands. More specifically, communication with members could be clarified in future research to include the channel of communication, the content, and the timeliness of the message in which communication channels could include YMCA utilization of social media, email, print materials, and account notifications.

Third, the perception that the availability of workout equipment was limited by specific age groups as well as a specific education level may present the YMCA with particular focus on enhancing the availability of that type of equipment. The only difference identified between expected and actual service between those with a doctoral

degree and all other education levels was availability of workout equipment. However, the group was a small sample size and the expense of altering workout equipment or providing more equipment may not be a feasible option for either of the YMCAs.

Additional research would need to be explored to identify if discontentment lies in the fact that the desired equipment is not in the facility or if it is available but always in use.

Fourth, a significant difference existed between the 18-25 and over 65 age band on the item hours of operation for child care. The 18-25 participants viewed the hours as average while the over 65 participants viewed the hours as excellent. It is likely that the 18-25 aged participants have children and are direct users of the service as opposed to members over the age of 65 who may perceive the hours to be excellent simply because they do not utilize the service to the same level. Additionally, it is possible that the 18-25 aged members are in the workforce and do not work a standard work week schedule. In that case, these members would need alternate childcare hours to effectively utilize the facility. More research would need to be conducted to determine the specific hours that 18-25-year-old members need childcare.

Additional reasons for the above differences among groups could also be attributed to the age and experience of the YMCA fitness professional who, at times, may be younger or less experienced than expected by the YMCA member. Additionally, the method and frequency of communication by the YMCA may not currently meet the needs of the varying age groups of members and need further review. The YMCA could consider generational studies on communication channels and create communication materials that address those learnings.

### **Behavioral Intent to Revisit and Share**

To address research questions three and four, the intentions of participants to revisit the YMCA facility and to share their experience of the YMCA with others was measured. Although differences existed among certain demographic groups on perceived service quality, the overall intent to repurchase was strongly likely for all groups across demographics. Studies have shown a correlation between service quality, customer satisfaction, and intent to repurchase both in the general consumer segments and specifically in the fitness industry (Hutchinson, Lai, & Wang, 2009; Shonk & Chelladurai, 2008; Terzoglou, Papadopoulos, Koronas, & Matsaridis 2012; Zeithaml & Bitner, 2003). Specific to intent to revisit the facility, the majority of respondents answered they were strongly likely to return, while just over under a quarter of participants answered they were likely to return. Additionally, a strong majority of respondents indicated they would share their experience positively with others and recommend the YMCA to a friend.

In 2009, the New York Times reported that the YMCA had the “most valuable brand in the nonprofit field” as determined by two marketing firms, Cone LLC and Intangible Business (Strom, 2009). The impact of the YMCA brand along with its over 100 years of international history of impacting communities in a positive manner may have influenced respondents’ answers. Their overall satisfaction to the mission of the organization may not be connected to how they respond to specific service quality factors. Additionally, participants from the YMCAs in this study are members of the largest fitness facility in their market, have access to aquatics, childcare, and full-time

staff. Most of the alternate fitness facility options in the Greenville and Palestine, Texas communities do not offer a comprehensive service model to members.

### **Influence of Body Mass Index on Health Industry Trends**

To address research question five, participants were classified as normal weight, overweight, and obese as defined by the Centers for Disease Control and Prevention. Miller and Miller (2010) suggested that facilities consider the emotional impact of overweight and obese individuals when designing fitness facilities and providing services. Surprisingly, there were no significant differences between normal (Group 1) and overweight (Group 2) individuals in the study. However, with regard for attention from instructors, Dimmock, Hallett, and Grove (2009) identified an implicit bias of overweight individuals in an exercise context by fitness center professionals. This type of bias is of particular concern when the fitness center professional is one in which the member should receive meaningful instruction and praise for their efforts. In applying these findings to the studied YMCA facilities, it is recommended that these facilities explore ways to maintain a high level of perceived service from instructors

Additionally, a significant difference existed between overweight and obese individuals within the service quality factor for modern equipment. Research has shown that the type of exercise program available to the individual and their motivation determines their likelihood to engage and continue the program (Davey et al., 2009). While the equipment did not meet the expectations of all body mass index groups, the overall customer satisfaction among the groups was not impacted at a significant level.

## **Strengths and Limitations**

The strengths of this study included the number of delivery channels used for the survey and the identification of demographic categories where YMCA improvements can be made to improve customer experience. Expanding the delivery channels to include both print and electronic opportunities for members was important to address personal preference for survey completion. And, identifying actual areas of the YMCA where improvement can be made or further explored can potentially enhance the member's experience and help the YMCA meet their retention goals.

The first limitation was the identification of the number of primary members identified as respondents. The survey was available to 1189 individuals and achieved a response rate of 6.7%. However, the researcher only had access to the CEO's reported data of primary members who were active within the past 6 months. This may or may not have been the exact number of primary members that had an email associated with the YMCA listserv at the Greenville facility. Also, there was no way to determine how many of the emails on the listserv were active or how many emails were returned. Similarly, the Palestine facility does not collect email addresses from their members. Therefore, the electronic access point was distributed via a paper flyer. The primary member for either facility would have had to check their email or visit the facility during the survey period. It is difficult to determine if all of the 1189 members had awareness or access to the survey during that time. A second limitation was the respondents were limited to YMCA members in Northeast Texas. YMCA facilities in other geographic regions and non-YMCA facilities may have produced varying results. A third limitation

is that participants were offered an incentive to participate in the survey. Survey responses may be dependent on the type of incentive offered to respondents.

### **Practical Implications and Recommendations**

The use of the Service Quality Assessment Scale (SQAS) and Behavior Intentions model identified in this study may help other YMCAs improve their facilities, programs, equipment, staff development, and childcare availability to retain current members. Chief Executive Officers of YMCAs would have the opportunity to take action on customers' responses to members' surveys to increase customer satisfaction and intent to repurchase. Executives may use this information to seek approval from the local Board of Directors to support funding efforts for specific staff, facility, or communication improvements for members. Recommendations would be to consider staff training on fitness industry items provided by the YMCA National offices, and local training on customer service and department specific topics. Membership and marketing teams may use this information to design communication delivery channels to test among their membership. Channels that were not explored during the current research, but are used quite often for consumer and personal use today include text messaging and various forms of social media. All YMCA staff could benefit from understanding member needs to create an action plan for opportunities when there is direct member contact. Providing opportunities for all YMCA staff and Board of Directors to understand feedback from member surveys may allow the facility to place itself in a more competitive position in the local fitness center market.

Future research ideas could include expanding the opportunity to all YMCA members across all countries with facilities to determine if ethnic or cultural differences exist among expected and actual service. Additionally, fitness centers could include further research on identifying appropriate communication mediums for members of different age groups. Another research opportunity for fitness centers is to identify the instructor involvement and program content desired by individuals at varying body mass index levels.

### **Conclusions**

This research focused on the opportunity to identify members' experiences with YMCA services and discover the intent of those members to return or share their experiences with others. The exploration of several demographic groups was important to the research as the YMCA offers a variety of membership levels, programs, equipment, facility hours, communication methods, and staffing volumes that could be impacted by perceived needs of those of a certain gender, age, education level, or body mass index. The evaluation of a member's experience by body mass index category was important because of the tremendous growth the U.S. is facing in the number of overweight and obese individuals. Both of the YMCA facilities in this study have the resources to aid in weight management and physical activity programs for members. And, therefore, have the potential to contribute to the reduction of overweight and obese rates in the counties in which they serve.

Results of this study showed that participants placed their strongest expectations on the YMCA staff, workout equipment, and child care hours. Surprisingly for these

YMCAs, support services and staff skills are the ones that need a thorough review as opposed to the core services that need less of an intense review such as fitness equipment or programs as the need for customer experience enhancements does not appear to be as big of a concern to members. This study leaves some open items for future consideration. Research that could be considered includes communication and marketing strategies for YMCA members. There is a need to address communication channels and preferences across all demographic groups. The YMCAs in the study could leverage learnings from the YMCA National office to obtain communication and marketing best practices. They could explore low budget communication tools through social media, text messaging, or applications. Understanding how members want to receive information and how they use technology is key for the YMCAs to promote their brand and to create awareness of upcoming events, new programs, and membership drives. Additionally, the workforce dynamics of the community may be different than they were when the hours of the childcare operations were set. Employees who work non-standard shift hours, work from home, or homeschool children may need alternate childcare hours to support their wellbeing efforts. The YMCA National office has shared through promotional campaigns their dedication to strengthening communities through healthy living. This can be used as a reminder to all YMCA organizations that each one can play a role in helping the community become stronger while reinforcing the value of the brand to its members.

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June 2, 2015

Dear YMCA Director,

I am a doctoral candidate in the Department of Kinesiology at Texas Woman's University. I am designing a research study to determine the factors that influence customer service and satisfaction in the fitness center environment. I am requesting the participation of the YMCA to allow its members to receive an email with the survey link attached.

A member's participation in the study is strictly voluntary. The results of this study may be published, but individual data is anonymous. The survey will use PsychData as the data warehouse and the email can be sent directly to the YMCA director who can send to the YMCA listserv without any additional party having access to any member's email address. All questions and procedures for the study will follow the University's Institutional Review Board requirements for research.

The YMCA would benefit by having access to the results of the study to further the improvement of their own facility and increase their own customer satisfaction levels.

Actual data requests would occur during late Summer 2015 through early Fall 2015.

I would very much appreciate your facility's participation in this study!

If you have any questions or concerns, please don't hesitate to contact me.

Kember L. Roberts, Doctoral Candidate  
Texas Woman's University  
Phone: |  
Email: |

	Interim CEO	6/15/15
Approver's Signature	Approver's Title	Date
YMCA of Greenville/Hunt Co	1915 Stanford St. Greenville, TX 75101	(903)455-9025
YMCA Branch	Physical Address	Phone Number



FOR YOUTH DEVELOPMENT®  
FOR HEALTHY LIVING  
FOR SOCIAL RESPONSIBILITY

May 16, 2016

Dear Kembre,

I have received your request to use our YMCA to do research for your doctoral study. Your method of collection for the study is acceptable for us. You are welcome to print copies of the survey, leave them in the lobby for members to fill out and place in a drop box. Your poster with information about the research will be vital to member participation. In addition, we would be happy to assist with member participation by using the names from the completed surveys to draw for a 3 month family membership, a 5 pack class pass, and one two- week Swim America swim lesson package for anyone 5 and older if you want to advertise this on your poster to encourage participation in the survey. In return, we would love to have the end result of the research for our internal use.

Please let us know how we can further assist you.

Sincerely,

Cindy Piersol  
President/CEO  
Palestine YMCA  
5500 N. Loop 256  
Palestine, Texas 75803  
903-729-3139  
[www.palestineymca.org](http://www.palestineymca.org)

APPENDIX B

Participant Survey

## Survey

### TEXAS WOMAN'S UNIVERSITY CONSENT TO PARTICIPATE

Title: Customers' Perception of Service Quality and Future Behavioral Intentions of a YMCA Facility

Investigator: Kembre Roberts      Kembre.Roberts@xxxx.com    xxx-xxx-xxxx

#### **Explanation and Purpose of the Research**

You are being asked to participate in a research study for Ms. Kembre Roberts at Texas Woman's University. The purpose of this research is to determine customer perception of the service quality and intention to repurchase a membership at the YMCA. You have been asked to participate in this study because you are a member of the YMCA.

#### **Description of Procedures**

As a participant in this study you will be asked to spend ten minutes of your time responding to a survey. The survey will ask you questions about your demographic information, customer satisfaction, and intent to repurchase a membership. The survey information will be stored in a University database accessible by the researcher and the advisor. In order to be a participant in this study, you must be at least 18 years of age or older and be a primary member of the YMCA.

#### **Potential Risks**

A possible risk in this study is discomfort with the questions you are asked. You may stop answering questions at any time and end the survey or skip any question that makes you feel uncomfortable.

The survey does not collect personal identifiable information. Confidentiality will be protected to the extent that is allowed by law. However, the results of the study will be reported in university research, scientific magazines or journals and to the YMCA but your name or any other identifying information will not be included. The researcher will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem.

#### **Participation and Benefits**

Your involvement in this study is completely voluntary and you may withdraw from the study at any time. If you would like to know the results of this study, please contact the researcher.

#### **Questions Regarding the Study**

If you have any questions about the research study you should ask the researcher by contacting xxx-xxx-xxxx. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at IRB@twu.edu.

**The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.**

**SECTION ONE: Demographics and other basic information**

**This section contains statements concerning general information about the participant. Please check the appropriate box that best describes your situation.**

1. Please indicate your membership type (check one only).

- Family
- Adult
- Teen
- Senior Adult
- Senior Family

2. How long have you been a member?

- < 1 year
- 1 year
- 2 years
- 3 years
- 4 or more years

3. On the average, about how frequently do you come to use our facilities?

- 1-2 times per week
- 3-4 times per week
- 5-6 times per week
- 7 or more per week
- Other (specify)\_\_\_\_\_

4. Rate in order your use of the following: [1, 2, 3]

- Aquatic
- Fitness
- Athletic

5. What is your gender?

- Male
- Female

6. How old are you?

- Under 18 years
- 18-25 years
- 26-35 years
- 36-50 years
- 51-65 years
- Over 65 years

7. What is your current height (inches)?

[   ]

8. What is your current weight (pounds)?

[   ]

9. What time of day do you usually visit/use the center?

- 6 - 10 a.m.
- 10 a.m. - 2 p.m.
- 2 - 6 p.m.
- 6 - 10 p.m.

10. Highest Education Level (check one):

- High School Diploma/GED
- Some College
- Bachelor's Degree
- Master's Degree
- Doctoral Degree
- Other (specify)\_\_\_\_\_

11. Profession (check one):

- Professional
- Construction
- Utilities
- Retail
- Clerical
- Education
- Homemaker
- Retired
- Other (specify)\_\_\_\_\_

12. How would you rate your overall satisfaction with the YMCA?

- Very Satisfied
- Satisfied
- Dissatisfied
- Very Dissatisfied
- No Opinion

## SECTION TWO: Service Quality Assessment Scale (SQAS)

The purpose of this section, totaling 38 questions, is to assess the general feelings of your perceptions regarding service quality of this fitness center. Please answer the questions according to your expectation of service quality with 1-poor, 2-below average, 3-average, 4-above average, and 5-excellent for each statement by selecting one of the five choices.

<b>Overall Staff Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Possession of required knowledge/skills	1	2	3	4	5
2. Neatness and dress	1	2	3	4	5
3. Willingness to help	1	2	3	4	5
4. Patience	1	2	3	4	5
5. Communication with members	1	2	3	4	5
6. Responsiveness to complaints	1	2	3	4	5
7. Courtesy	1	2	3	4	5
8. Individualized attention from instructors	1	2	3	4	5
9. Provision of consistency of service	1	2	3	4	5
<b>Overall Program Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Variety of programs	1	2	3	4	5
2. Availability of programs at appropriate level	1	2	3	4	5
3. Convenience of program time/schedule	1	2	3	4	5
4. Quality/Content of programs	1	2	3	4	5
5. Appropriateness of class size	1	2	3	4	5
6. Background music (if any)	1	2	3	4	5
7. Adequacy of space	1	2	3	4	5
<b>Locker Room Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Availability of lockers	1	2	3	4	5
2. Overall maintenance	1	2	3	4	5
3. Shower cleanliness	1	2	3	4	5
4. Accessibility	1	2	3	4	5
5. Safety	1	2	3	4	5
6. Temperature control	1	2	3	4	5
<b>Fitness Facility Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Modern-looking equipment	1	2	3	4	5
2. Adequacy of signs and directions	1	2	3	4	5
3. Variety of equipment	1	2	3	4	5
4. Availability of workout facility/equipment	1	2	3	4	5
5. Overall maintenance of equipment	1	2	3	4	5
<b>Aquatic Facility Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Pool area cleanliness	1	2	3	4	5
2. Water temperature control	1	2	3	4	5
3. Water quality	1	2	3	4	5
4. Availability of lanes	1	2	3	4	5
5. Pool area maintenance	1	2	3	4	5
<b>Child Care Service Quality</b>	<i>Poor</i>		<i>Average</i>		<i>Excellent</i>
1. Quality of staff	1	2	3	4	5
2. Cleanliness of equipment	1	2	3	4	5

3. Hours of operation	1	2	3	4	5
4. Adequacy of space	1	2	3	4	5
5. Safety of environment	1	2	3	4	5
6. Diversity of experience provided	1	2	3	4	5

**SECTION THREE: Behavioral Intentions Scale**

The purpose of this section, totaling 3 questions, is to assess the likelihood that you will revisit the YMCA and/or share your experience at the YMCA with others. Please answer the questions according to your intent to revisit or share your experience with others with 1-strongly unlikely, 2-unlikely, 3-neutral, 4-likely, and 5-strongly likely for each statement by circling one of the five choices besides each statement.

<b>Behavioral Intentions</b>	<i>Strong Unlikely</i>		<i>Neutral</i>		<i>Strongly likely</i>	
1. I will return to the YMCA.	1	2	3	4	5	
2. I will recommend the YMCA to my friends.	1	2	3	4	5	
3. I will have positive things to say about the YMCA.	1	2	3	4	5	

## APPENDIX C

### Recruitment Email

Dear YMCA Member,

I am a doctoral student in Sport Management in the Department of Kinesiology at Texas Woman's University.

You are being asked to participate in a research study to collect information about customer satisfaction at the YMCA. The survey asks questions about demographic information, customer satisfaction, and intent to repurchase a membership at the YMCA. The survey will take approximately 10 minutes to complete. Simply follow this link: [survey link].

Following the completion of the study you will have an opportunity to enter your email address for a chance to receive one of twenty \$5 Amazon.com gift cards. The results of the study will be shared in aggregate form with the Texas Women's University, Department of Kinesiology, and the Chief Executive Officer of the YMCA. The survey is anonymous. Your data will remain confidential, and your answers will not be traced back to you. The data will be stored on a password protected file. Participation is voluntary, refusal to take part in the study involves no penalty and you may withdraw from the study at any time.

If you have questions about this study, please contact Kembre Roberts at 903-xxx-xxxx or at.

If you are 18 years of age or older, understand the statements above, and freely consent to participate in the study, click on this link [survey link].

Thank you,

*Kembre L. Roberts*

Kembre Roberts  
Doctoral Candidate  
Texas Woman's University  
903-xxx-xxxx

APPENDIX D

Reminder Email

Dear YMCA Member,

Only 3 days left to complete the Survey!

I am a doctoral student in Sport Management in the Department of Kinesiology at Texas Woman's University.

You are being asked to participate in a research study to collect information about customer satisfaction at the YMCA. The survey asks questions about demographic information, customer satisfaction, and intent to repurchase a membership at the YMCA. The survey will take approximately 10 minutes to complete. Simply follow this link: [survey link].

Following the completion of the study you will have an opportunity to enter your email address for a chance to receive one of twenty \$5 Amazon.com gift cards. The results of the study will be shared in aggregate form with the Texas Women's University, Department of Kinesiology, and the Chief Executive Officer of the YMCA. The survey is anonymous. Your data will remain confidential, and your answers will not be traced back to you. The data will be stored on a password protected file. Participation is voluntary, refusal to take part in the study involves no penalty and you may withdraw from the study at any time.

If you have questions about this study, please contact Kembre Roberts at 903-xxx-xxxx or at

If you are 18 years of age or older, understand the statements above, and freely consent to participate in the study, click on this link [survey link].

Thank you,

*Kembre L. Roberts*

Kembre Roberts  
Doctoral Candidate  
Texas Woman's University  
903-xxx-xxxx

APPENDIX E

Institutional Review Board Approval



**Institutional Review Board**

Office of Research and Sponsored Programs

P.O. Box 425619, Denton, TX 76204-5619

940-898-3378

email: [IRB@twu.edu](mailto:IRB@twu.edu)

<http://www.twu.edu/irb.html>

DATE: March 28, 2016

TO: Ms. Kembre Roberts  
Kinesiology

FROM: Institutional Review Board - Denton

*Re: Notification of Approval for Modification for Customers' Perception of Service Quality and Future Behavioral Intentions of a YMCA Facility (Protocol #: 18624)*

The following modification(s) have been approved by the IRB:

1. Displaying Flyers with survey link at the front desk of the YMCA and throughout the building.
2. Providing laptops and tablets for members to complete surveys onsite.

cc. Dr. Leslie Graham, Kinesiology

APPENDIX F

Modification to Survey Distribution



## Complete this YMCA Survey for a Chance to Win!

Hello YMCA Members!

My name is Kembre Roberts; I'm a doctoral student at Texas Woman's University. I'm requesting your participation in my research study about the YMCA.

**Purpose:** The purpose of this study is to understand your perception of the service quality and your interest in continuing your membership at the YMCA.

**Who:** Only current members of the YMCA, at least 18 years of age or older, are being asked to participate in this survey.

**Time:** 10 minutes

**How:** If you would like to participate, you can respond to the survey in one of the following ways:

- Complete the survey at the YMCA on April 12-13, 2016
- Respond via the email link provided to all members from YMCA CEO.
- Enter this link into your web browser to complete:  
<https://www.psychdata.com/s.asp?SID=169275>

The survey does not collect personal identifiable information. You may enter your email address for an opportunity to win a \$5 gift card to Amazon.com. Your involvement in this study is completely voluntary and you may withdraw from the study at any time. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

You can contact me at | \_\_\_\_\_ or 903- \_\_\_\_\_, if you have any questions regarding the survey.

Thank you,  
Kembre Roberts



## Complete this YMCA Survey for a Chance to Win!

Hello YMCA Members!

My name is Kembre Roberts; I'm a doctoral student at Texas Woman's University. I'm requesting your participation in my research study about the YMCA.

**Purpose:** The purpose of this study is to understand your perception of the service quality and your interest in continuing your membership at the YMCA.

**Who:** Only current members of the YMCA, at least 18 years of age or older, are being asked to participate in this survey.

**Time:** 10 minutes

**How:** If you would like to participate, you can respond to the survey in one of the following ways:

- Complete the survey at the YMCA June 9-24, 2016
- Enter this link into your web browser to complete:  
<https://www.psychdata.com/s.asp?SID=169275>

**Opportunity to Win Prizes:** You may enter your email address for an opportunity to win a \$5 gift card to Amazon.com. In addition, for those who complete the survey and submit their name, the Palestine YMCA will draw for a 3 month family membership, a 5 pack class pass, and one two- week Swim America swim lesson package for anyone 5 and older.

The survey does not collect personal identifiable information. Your involvement in this study is completely voluntary and you may withdraw from the study at any time. There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

You can contact me at [redacted], or 903-[redacted], if you have any questions regarding the survey.

Thank you,  
Kembre Roberts

APPENDIX G

Institutional Review Board Modification Approvals



**Institutional Review Board**

Office of Research and Sponsored Programs  
P.O. Box 425619, Denton, TX 76204-5619  
940-898-3378  
email: IRB@twu.edu  
<http://www.twu.edu/irb.html>

DATE: June 3, 2016

TO: Ms. Kembre Roberts  
Kinesiology

FROM: Institutional Review Board - Denton

*Re: Notification of Approval for Modification for Customers' Perception of Service Quality and Future Behavioral Intentions of a YMCA Facility (Protocol #: 18624)*

The following modification(s) have been approved by the IRB:

Another YMCA location added as a new recruiting site and modification to provide survey in hard copy form and online survey (link) formats.

cc. Dr. Leslie Graham, Kinesiology