

NEEDS ANALYSIS AND THE ROLE OF ENGAGEMENT OF COMMERCIAL FITNESS CENTERS IN MALAYSIA

Derek Ong Lai Teik, Sunway University Business School, Malaysia¹⁾

ABSTRACT

Commercial fitness industry is booming in Malaysia and is becoming more difficult to entice new members with the built up competition. This research investigates the needs of these commercial fitness members and the role of engagement in determining overall satisfaction with service. Scale of Service Quality for Recreational Sport (SSQRS) was used for data collection reveals that fitness members are more drawn to interaction, outcome, physical environment quality and the engagement they receive from a gym membership and not much from the programs that are offered. This study's finding will contribute to the development of marketing strategies for the sustainable growth of the fitness industry.

Keywords: Scale of Service Quality for Recreational Sport, Malaysia, Financial giant, Health risk, Satisfaction of fitness

INTRODUCTION

Malaysia is seen as hodgepodge center of multiculturalism and possesses the potential to be a financial giant within the region. But this potential is threatened by the rising health problems that are continually taking its toll on its citizens. Statistics on heart problems (National Heart Association of Malaysia, 2010; Yap and Liew, 2009), obesity index (Cheng, 2013; World Health Organization, 2011) and even modern day living stress (Blaug, Kenyon and Lekhi, 2007) are probably just the tip of the iceberg of indicators alarm of health warnings that can hinder the productivity and growth of the country. With the fast growing pace of life, Malaysians find it difficult to balance daily activities and to stay healthy. In fact Malaysians would very much like to incorporate a healthy regiment into their daily activities and one source of motivation to do so is to join a health and fitness club (Alam and Hossain, 2012). This way, Malaysians can find a way to incorporate fun and encouraging exercise into daily routine to reduce their health risk.

However it is not easy for health and fitness clubs to cater to a myriad of fitness needs and goals of all its members (Robinson, 2006). The result is confused marketing program that does not specifically target needs of members with the matching products or services offered much more with the lack standardization of information and service quality to its' customers. With an industry that is gaining momentum in growth worldwide and with strong competition (Foo, 2012; Alam and Hossain, 2012; Fitness Australia, 2009) health

¹⁾dereko@sunway.edu.my

and fitness clubs need to continually evolve their strategy to connect with members with a more concrete and strategized marketing effort that involves meeting specific needs (Soita, 2012a; 2012b). When needs are not met, members will walk out and churn rates will go up, which ultimately will also affect the growth of potential new members coming in to the club (Lin, Tung, Jan and Chiang, 2011).

Based on the work done by Ko and Pastore (2004; 2005; 2007), this study seeks to investigate the relationship of needs and overall satisfaction of fitness members while evaluating the importance of engagement with between them and the health and fitness club. The outcome of this study would make a significant contribution to the health and fitness industry of Malaysia when understanding the dimensions of members' needs and wants and how best to deliver services that will effectively meet these needs.

THEORETICAL BACKGROUND

Consumer needs are the basis of all modern marketing because they are the essence of any marketing concept (Shiffman and Kanuk, 2010). The key to a company's survival, profitability, and growth in a highly competitive marketplace is its ability to identify and satisfy unfulfilled consumer needs better and sooner than the competition activity (Ryan, Frederick, Lepes, Rubio and Sheldon, 1997; Wilson, Rodgers and Fraser, 2002). Marketers do not create needs, although in many instances they strive to make consumers more keenly aware of unfelt or dormant needs (Crossley, 2005). This is where the understanding of underlying needs within the human context is so vital to many companies because consumers' basic needs do not change but the products and services that satisfy them do.

The relationship between needs and satisfaction can occur at different levels within an individual (Maslow, 1970; Rust and Zahorik, 1993). The model of Motivation Process (Durgee, O'Connor and Veryzer, 1996) outlines this relationship between needs and wants of a person with the establishment of fulfillment which can be translated to satisfaction of these needs. It is also noted that behavior adds another dimension to this relationship as it would add to the effect of how much a person seeks to fulfill his/her needs until they are fully satisfied. This research will focus on forming a theoretical framework from 3 aspects of the Model of Motivation Process which is Needs (Needs Expectation), Behavior (Engagement) and Need Fulfillment (Overall Satisfaction)

Using Ko and Pastore's (2007) proposed instrument, the Scale of Service Quality in Recreational Sports (SSQRS) which looks into 4 dimension (Oliver, 1997) of needs. **(H1)** Program Quality (Crossley, 2005), **(H2)** Interaction Quality (Guenzi and Pelloni, 2004), **(H3)** Outcome Quality (McDougall and Levesque, 1994; Rust and Oliver, 1994) and **(H4)** Physical Environment Quality Needs (Bitner, 1992; Wakefield, Blodgett, and Sloan, 1996) are the dimensions that were evaluated in terms of their relation towards overall satisfaction. This study proposes the inclusion of **(H5)** Engagement which looks into two aspects of fitness member's engagement with the health and fitness clubs (overall enthusiasm level and attendance frequency) (Hennig-Thurau and Klee, 1997). The proposed framework for this study is therefore outlined in **Figure 1**.

METHODOLOGY

Data was collected from three major fitness franchise clubs in Malaysia, namely; Fitness First (14 centers), True Fitness (5 centers) and Celebrity Fitness (13 centers). The reason for these fitness centers chosen was based on their size of operations, capacity and number of members and outlets (Gopinath, 2012). The reason for the choice of centers is due to the concentration of the commercial fitness industry within these big players and also centered within the vicinities of the Klang Valley. Generalization of the results at this point in time will fit the current geographical and operational business concentration of the commercial fitness industry within Malaysia. Purposive sampling was employed based on work done by Soita (2012), Alam and Hossain (2012), Afthinos, Theodorakis, and Nassis (2005) and Largosen and Largosen (2007).

Structural Equation Modeling method of analysis was employed on a sample of 1036 usable data through questionnaire using SMART PLS. The arguments for choosing partial least squares as the statistical means for testing structural equation models and can be an adequate alternative to covariance based SEM, which is quite popular with AMOS are highlighted for the following reasons:

- The phenomenon to be investigated is relatively new and measurement models need to be newly developed (Bagozzi and Yi, 1988)
- Relationships between the indicator variables and the latent variables have been modelled in different modes (i.e, formative and reflective measurement models - Bollen, 2011)
- The conditions relating to sample size, independence or normality is less demanding and when the goal of the research is prediction more than parameter estimation (Urbach and Ahlemann, 2010; Chin, 1988; Chin and Newstead, 1999).

RESULT AND ANALYSIS

Table 1 shows the demographic breakdown of the respondents (fitness members) Most of the demographics comprises of more females (68.8%), of Chinese origin (72.3%), single (87.6%), and most studied in universities (86.8%) A majority of them are below 25 years old (76.6%) and reported an average household monthly income of less than (RM 10,000). There was a good representation of people from the different main commercial fitness center members with more from Celebrity Fitness (41.8%) followed by Fitness First (29.7%) , True Fitness (17.9%) and the rest from other gyms. Data collection was controlled as best as possible to ensure good representation of the population of the gym goers. The reason why the other gyms were also sampled in is because most of them have 2 or more gym memberships and have a temporary gym membership to either one of the main commercial fitness centers as well. Their views are also counted in as it can also represent the needs and views of members from other centers as well.

Table 2 shows the results of the list of hypothesis and the underlying relationships to be tested along with their unstandardized betas, standard errors t-values and hypothesis decision after bootstrapping. The hypothesis test results dictate that there seems to be an insignificant relationship between Program Quality Needs and Overall Satisfaction. There is however a significant positive relationship between Interaction Quality Needs, Outcome Quality Needs and Engagement with Overall Satisfaction. The strongest relationship is between Physical Environment Quality Needs.

Table 3 shows the overall measurement and structural analysis of the proposed model along with the reliability and validity testing of the model constructs.

DISCUSSION AND CONCLUSION

This research seeks to determine the relationship between the needs of members and how these needs that are met would lead to overall satisfaction. Satisfaction, especially in the service industry is important for customer retention therefore, from these four main needs it is important to assess fitness members' importance of these individual needs to gauge the level of satisfaction.

This study has shown that Program Quality Needs is not significantly related to the overall satisfaction of a member within the commercial fitness industry as compared to meeting other needs. This is truly an interesting finding as it would seem that with the large amount of investment spent on the fitness industry increasing year on year, one would assume that good programs would draw in more crowds. More specialized programs need to be relooked into by many of the commercial fitness operators in the coming years. Fitness Trends 2012 reports that more programs are being developed for even the older generation with less cardio intensity and more body balancing type exercises that appeal to members of that demographic. The same report also identifies a shift in members need to want to be more interactive when being involved in these programs.

Quality interactions between members contribute to the socialization mood within the fitness centers and build communities. These interactions can quickly transform into shared values and ideas about a subject (eg a person, or a class and sometimes about things outside of the fitness center). Community based relationships such as these is vital to building a healthy image for the company as member's word of mouth stemming from their satisfaction will ultimately lead to not only retention and customer loyalty reciprocated through new prospect introductions to the fitness centre by the members themselves.

Outcomes like functional reasons of weight-loss and appearance has been a major focus that has been pushed by the fitness center operators to entice many to sign up as members. However, this focus have begun to change over time as more members would like to achieve a more balanced outlook on body image and many have begun to be more health conscious in their lifestyle choices. Through the promotion of healthier projections of outcomes with regards to exercise and not just with the pre-occupation of body image,

more and more members would be able to begin to appreciate their achievements of their labour which can be fuelled by the extrinsic motivation given by the staff and management of the establishment, either through public commendations which is practiced currently by some of the fitness centers.

Fitness centers need to adhere to a strict code of professional standards when it comes to creating a quality physical environment for the members. The focus should be on internal physical environment created through use of fitness facilities. More specifically, the concentration on maintenance of fitness equipment should be of prime importance to fitness operators, as these are the bare minimum when it comes to offering the main service delivery within the fitness industry. For chain fitness centers like Fitness First, Celebrity Fitness and True Fitness, standardization of physical design and atmosphere must serve as form of organizational communication and presence to the members that quality is maintained and practiced within the whole organization.

The fitness industry is an industry that has to deal with high client-member turnover and needs to create an engendering environment that caters to client-members demands in order to capture significant and quality engagement from the members which is rooted in the cultural dimensions of key values present in the daily operations of the gym; namely: atmosphere, connectedness, service equipment and service programs. Therefore it falls to the responsibility of the fitness center to capture the potential members' intention to engage by convincingly presenting the benefits of continued and prolonged quality engagement through value added strategies (eg. loyalty programs).

This research posed several limitations. The sample of this research covers only the commercial fitness industry and only investigated three major commercial fitness center chains. There are also other smaller community gyms which were not present included in this study. If there is a need to look at the entire population of the fitness industry in Malaysia, then it is suggested that there should be a wider coverage of sampling that extends to the entire industry covering all these smaller gym which may be scattered across the entire country.

This study only focused on the needs analysis as defined by Ko and Pastore (2007). A dimension which may prove useful to be researched at which is lacking in this study could be the organizational response to members need (Sekiguichi, 2005). Future research could include this and other dimensions of intrinsic and extrinsic motivation needs which are translated into behavior and how the members would be engaged with the fitness center.

REFERENCES

- Afthinos, Y., Theodorakis, N. D., & Nassis, P. (2005). Customers' Expectations of Service in Greek Fitness Centers, *Managing Service Quality*, 15, pp. 245-258.
- Alam, M. J., & Hossain, M. A. (2012). Motivations Behind Attending Fitness Clubs in Bangladesh: A Survey Study on Clubs' Members in Sylhet, *European Journal of Business and Management*, 4(2), pp. 120-136.

- Anderson, J. C., & Gerbing D W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach, *Psychological Bulletin*, 103(3), pp. 411-423.
- Bagozzi, R. P., & Yi, Y. (1988). On the Evaluation of Structural Equation Models, *Journal of the Academy of Marketing Science*, 16(1), pp. 74-94.
- Bitner, M J. (1992). Servicescapes: The Impact of Physical Surroundings on Customers and Employees, *Journal of Marketing*, 56, pp. 57-71.
- Blaug, R, Kenyon A., & Lekhi, R. (2007). Stress at Work, *The Work Foundation*, London
- Bollen, K. A. (2011). Evaluating Effect Size, Composite and Casual Indicators in Structural Equation Models, *MIS Quarterly*, 35 (2), pp. 359-372.
- Cheng, N. (2013). Malaysia is now the fattest country in SE Asia, says Liow, *The Star Online*, 2013, The Star.
- Chin, W. W. (1988). Issues and Opinions on Structural Equation Modeling, *MIS Quarterly*, 22 (1), pp.7-16.
- Chin, W. W., & Newsted, P. R. (1999). Structural Equation Modeling Analysis with Small Samples Using Partial Least Squares, *Statistical Strategies for Small Sample Research*, Rick Hoyle (ed.), Thousand Oaks, CA: Sage Publications, pp. 307-341.
- Crossley, N. (2005). In the Gym: Motives, Meanings and Moral Careers, *Center for Research on Socio-Cultural Change*, Working Paper Series 6, University of Manchester, UK.
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences, Laurence Earlbaum Associates Publishing, 2nd Ed, Hillsdale, New Jersey.
- Durgee, J. F., O'Connor, G. C., & Veryzer, R. W. (1996). Observations: Translating Values into Product Wants, *Journal of Advertising Research*, 36(6), pp. 90-100.
- Fitness Australia (2009). Let's Get Physical: The Economic Contribution of Fitness Centers in Australia.
- Foo, K. (2012). Fit Talent for the Health and Fitness Sector, The Malaysian Reserve
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error, *Journal of Marketing Research*, 18(1), pp. 39-50.
- Gefen, D., Straub, D. W., & Boudreau, M. C. (2000). Structural Equation Modeling and Regression: Guidelines for Research Practice, *Communications of Association for Information Systems*, 4, pp. 1-79.
- Gopinath, A. (2012). The Art of Fitness, The Edge Malaysia
- Guenzi, P., & Pelloni, O. (2004). The Impact of Interpersonal Relationships on Customer Satisfaction and Loyalty to the Service Provider, *Journal of Service Industry Management*, 15(4), pp. 365-384.
- Hennig-Thurau, T., & Klee, A. (1997). The Impact of Customer Satisfaction and Relationship Quality on Customer Retention: A Critical Reassessment and Model Development, *Psychology and Marketing*, 14(8), pp. 737-764.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The Use of Partial Least Squares Path Modeling in International Marketing, *Advances in International Marketing (AIM)*, 20, pp. 277-320.
- Hulland, J. (1999). Use of Partial Least Squares (PLS) in Strategic Management Research: A Review of Four Recent Studies, *Strategic Management Journal*, 20, pp. 195-204.

- Ko, Y. J., & Pastore, D. L. (2004). Current Issues and Conceptualizations of Service Quality in the Recreation Sport Industry, *Sport Marketing Quarterly*, 13, pp. 158-166.
- Ko, Y. J., & Pastore, D. L. (2005). A Hierarchical Model of Service Quality for the Recreational Sport Industry, *Sport Marketing Quarterly*, 14, pp. 84-97.
- Ko, Y. J., & Pastore, D. L. (2007). An Instrument to Assess Customer Perceptions of Service Quality and Satisfaction in Campus Recreation Programs, *Recreational Sports Journal*, 31, pp. 34-42.
- Lagrosen, S., & Lagrosen, Y. (2007). Exploring Service Quality in Health and Fitness industry, *Journal of Managing Service Industry*, 17, pp. 41-53.
- Lin, S. C., Tung, C. H., Jan, N. Y., & Chiang, D. A. (2011). Evaluating Churn Model in CRM: A Case Study in Telecom, *Journal of Convergence Information Technology*, 6(11), pp. 192-200.
- Maslow, A. (1970). *Motivation and Personality*, 2nd ed., New York: Harper.
- McDougall, G. H. G., & Levesque, T. J. (1994). Revised Review of Service Quality Dimensions: An Empirical Investigation, *Journal of Professional Service Marketing*, 11, pp. 189-209.
- National Heart Association of Malaysia (2010). In The Press: Knowing Your Heart Risks
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*, New York: McGraw-Hill.
- Oliver, R. L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*, New York: McGraw-Hill.
- Peng, D. X., & Lai, F. (2012). Using Partial Least Squares in Operations Management Research: A Practical Guideline and Summary of Past Research, *Journal of Operations Management*, 30, pp. 467-480.
- Robinson, L. (2006). Customer Expectations of Sport Organizations, *European Sport Management Quarterly*, 6, pp. 67-84.
- Rust, R. T., & Oliver, R. (1994). Service Quality: Insights and Managerial Implications from the Frontier, *Service Quality: New Directions in Theory and Practice*, Sage Publications, Inc., pp.1-17 .
- Rust, R. T., & Zahorik, A. J. (1993). Customer Satisfaction, Customer Retention, and Market Share, *Journal of Retailing*, 69(2), pp. 105-111.
- Ryan, R. M., Frederick, C. M., Lepes, D., Rubio, N., & Shedlon, K. M. (1997). Intrinsic Motivation and Exercise Adherence, *International Journal of Sport Psychology*, 28, pp. 335-354.
- Sekiguichi, T. (2005). The Strategic Choice Model and Industrial Relations in Japan, *Osaka Keidai Ronshu*, 56(4), pp. 91-102.
- Shiffman, L. G., & Kanuk, L. L. (2010). *Consumer Behaviour*, 10th Edition, Pearson, pp. 116-117.
- Soita, P. W. (2012a). Customer's Perception about Service Quality in Commercial Health and Fitness Clubs in Uganda, *Journal of Education and Practice*, 2(4), pp. 53- 63.
- Soita, P. W. (2012b). Measuring Perceived Quality Using SERVQUAL: A Case Study of the Ugandan Health and Fitness Sector, *Journal of Education and Practice*, 2(4), pp. 53- 63.
- Urbach, N., & Ahlemann, F. (2010). Structural Equation Modeling in Information Systems Research Using Partial Least Squares, *Journal of Information Technology Theory and Application*, 11(2), pp. 5-40.

- Wakefield, K. L., Blodgett, J. G., & Sloan, H. J. (1996). Measurement and Management of the Sportscape, *Journal of Sport Management*, 10, pp. 15-31.
- Wilson, P. M, Rodgers, W. M., & Fraser, S. N. (2002). Cross Validation of the Revised Motivation for Physical Activity Measure in Active Women, *Research Quarterly for Exercise and Sport*, 73(4), pp. 471-477.
- World Health Organization (2011). Non-Communicable Diseases Country Profiles 2011.
- Yap, S. F., & Liew, K. H. (2009). Exercise as a Healthy Lifestyle Choice: A Review and Avenues for Future Research, *International Business Research*, 2(1), pp. 147-158.

TABLES AND FIGURES

Table 1. Respondents General Demographic Profile

	Freq	%		Freq	%
Gender			Race		
Male	323	31.2	Malay	102	9.8
Female	713	68.8	Chinese	749	72.3
Highest Education level			Indian	116	11.2
No Schooling	15	1.4	Others	69	6.7
Primary Level	1	.1	Age in years		
Secondary Level	79	7.6	<= 25	474	45.8
University/College	899	86.8	21 - 25	319	30.8
Masters/PhD	42	4.1	26- 30	111	10.7
Current Fitness Centre			31- 35	51	4.9
Fitness First	308	29.7	36- 40	25	2.4
Celebrity Fitness	433	41.8	41+	56	5.4
True Fitness	185	17.9			
Others	100	10.7			
Average Household Monthly Income (RM)					
<= 10000.00	877	84.7	30001.0 - 40000.00	7	0.7
10001.00 - 20000.00	87	8.4	40001.00+	44	4.2
20001.00 - 30000.00	21	2.0			

Table 2. Hypothesis Testing Direct Effects on Overall Satisfaction

	Relationship	Beta	t- Value	Conclusion
H1	Program Quality Needs -> Overall Satisfaction	0.02	0.65	Not supported
H2	Interaction Quality Needs -> Overall Satisfaction	0.20	7.08**	Supported
H3	Outcome Quality Needs -> Overall Satisfaction	0.22	7.34**	Supported
H4	Physical Environment Needs -> Overall Satisfaction	0.46	14.02**	Supported
H5	Engagement -> Overall Satisfaction	0.08	3.89**	Supported

**p<0.01 (2.33), *p<0.05 (1.645)

Table 3. Overall Measurement and Structural Model Analysis

Model Construct (Latent Variable)	Measurement Item	Loadings^a	T-Statistics^b	Cronbach's Alpha^c	Composite Reliability^d	Average Variance Extracted (AVE)^e	Effect Size (f²)^f	Predictive Relevance (q²)^g
Engagement (E) <i>(Exogenous)</i>	A3a_Average_D aysperweek	0.68472	14.057173	0.717442	0.786286	0.652478	0.0218	0.0200
	A5_Enthusiasm	0.914393	41.123000					
Program Quality Needs (PQN) <i>(Exogenous)</i>	C1_ROP1	0.75066	39.565408	0.836395	0.879115	0.549453	0.0136	0.0050
	C1_ROP2	0.751695	38.990397					
	C1_ROP3	0.825001	62.766652					
	C1_ROP4	0.656995	19.695662					
	C2_OT3	0.776551	45.376945					
	C2_OT4	0.672965	21.387222					
Interaction Quality Needs (IQN) <i>(Exogenous)</i>	C4_CEI1	0.71598	36.715504	0.878061	0.903474	0.513592	0.0572	0.0216
	C4_CEI2	0.760028	48.373747					
	C4_CEI3	0.756586	44.712193					
	C4_CEI4	0.753514	41.590643					
	C4_CEI5	0.770388	45.949665					
	C4_CEI6	0.792941	50.918255					
	C4_CEI7	0.749326	45.298429					
	C5_ICE1	0.56693	21.158459					
C5_ICE3	0.535442	17.408415						
Outcome Quality Needs (OQN) <i>(Exogenous)</i>	C6_FPC1	0.759647	47.925123	0.870762	0.898175	0.525111	0.0681	0.0233
	C6_FPC2	0.764425	48.686393					
	C6_FPC3	0.707494	32.119951					

	C6_FPC4	0.692415	28.813958					
	C7_V1	0.748106	44.550258					
	C7_V2	0.726261	44.025622					
	C7_V3	0.748106	48.046860					
	C7_V4	0.642428	23.601443					
Physical Environment Needs (PEQN) <i>(Exogenous)</i>	C9_AC1	0.701113	36.315343	0.92586	0.935984	0.52967	0.2616	0.1664
	C9_AC2	0.729394	43.362350					
	C9_AC3	0.762063	50.641320					
	C9_AC4	0.714269	38.379152					
	C9_AC5	0.655630	26.916970					
	C10_D1	0.738751	44.448765					
	C10_D2	0.748589	44.861477					
	C10_D3	0.712702	36.381425					
	C10_D4	0.729355	36.196474					
	C11_E1	0.73722	41.936909					
	C11_E2	0.729999	43.332682					
	C11_E3	0.743861	43.846373					
	C11_E4	0.752069	47.091972					
Overall Satisfaction (OS) <i>(Endogenous)</i>	C12_S1	0.823035	66.258472	0.861766	0.900473	0.644209	-NA-	-NA-
	C12_S2	0.778902	48.003737					
	C12_S3	0.826552	67.970454					
	C12_S4	0.802615	57.576454					
	C12_S5	0.780761	43.713607					

a. All loadings are above 0.4 – Indicator Reliability (Hulland, 1999)

b. T-statistics indicator, > 2.33 ($p < 0.01$), > 1.645 ($p < 0.05$) (Peng and Lai, 2012)

c. All Cronbach's Alpha are above 0.7 (Nunnally and Bernstein, 1994)

d. All Composite Reliability is above 0.7 - Internal Consistency (Gefen, Straub and Boudreau, 2000)

e. All Average Variance Extracted (AVE) is above 0.5– Convergent Reliability (Bagozzi and Yi, 1988; Fornell and Larcker, 1981)

f. Effect Size impact indicator f^2 values: 0.35 (large), 0.15 (medium), and 0.02 (small) (Cohen, 1988)

g. Predictive Relevance of Predictor Exogenous Latent Variables, q^2 values: - 0.35 (large), 0.15 (medium), and 0.02 (small) (Henseler, Ringle and Sinkovics, 2009)

Fig 1: Theoretical Framework for Needs and Engagement towards Overall Satisfaction of Fitness Members

