Market segmentation via attitudinal functions: a multi-method approach

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Abstract

Purpose – This study aims to develop a method of segmenting markets by using the functional approach to attitudes. The adopted approach identifies and groups individuals based on what functions their held attitudes serve for them. Specific marketing mixes can, thus, be designed for each functional profile.

Design/methodology/approach – The multi-method approach adopted consists of a qualitative assessment of consumers' attitudinal functions in the physical fitness context and the development of an instrument to identify the distribution of attitudinal function segments in the same context.

Findings – A valid and reliable instrument that can be used to segment a market based on functional profiles is developed.

Practical implications – The outlined method provides a method for practitioners to identify existing functional segments, thus creating marketing mixes based on these functional segments and, ultimately, maximizing the value created for each segment.

Originality/value – The value in this research lies in the integration of old concepts (functional approach and scale development) to solving a new problem. The functional approach reaches deep to determine "why attitudes are held" vs simply "what attitudes are held". Operationalization difficulties led to the abandonment of the approach. This research, thus, contributes theoretically by actually operationalizing the functional approach via a scale development, and using the operationalized form as a new means for segmenting markets.

Keywords Qualitative research, Scale development, Market segmentation, Multi-method research, Benefits-sought, Functional approach

Paper type Research paper

Introduction

As consumers attempt to satisfy their various recognized needs, they evaluate several alternatives to determine from which they can derive the most value. By operating under consumer-centric philosophies, firms understand the value of identifying these heterogeneous consumers' needs and creating valuable offerings for these consumers. To this effect, it is necessary to identify meaningful segments with similar needs in the marketplace, to create the most valuable marketing mixes for each segment.

This market segmentation, defined as the identification of meaningful and relatively similar consumer groups that are likely to engage in similar purchase behaviors (Smith, 1956; Lamb *et al.*, 2015), has been heralded as one of the cornerstones of marketing, essential to both theory and practice (Evans, 1994). Previous research has, thus, sought to study the

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concept of segmentation from various perspectives, particularly focusing on relevant and meaningful bases by which to identify similar markets. Some studies have looked at sociodemographic factors such as age, income and gender as the segmentation tool (Hammond *et al.*, 1996; Lin, 2002; Uncles and Lee, 2006); others have focused on psychographic factors such as attitudes, lifestyles, behaviors and benefits sought by consumers (Fennell *et al.*, 2003; Orth *et al.*, 2004; Hassan and Craft, 2005; Sarigöllü and Huang, 2005; Wells *et al.*, 2010).

Despite the academic research being conducted in the realm of market segmentation, Dibb and Simkin (2001, 2009) note that effective segmentation schemes have still not been developed, and this has resulted in a failure to generate substantive homogenous market segments in practice.

This research attempts to bridge the divide between market segmentation theory and practice by introducing the functional approach to attitudes (Katz, 1960) as a segmentation tool. Unlike standard attitudinal approaches, which generally measure positivity or negativity toward an attitude object, the functional approach delves deeper, to understand what functions individuals' held attitudes serve for them, i.e. whether individuals hold a positive attitude because it helps them express some internally held values or because their attitude object allows them to achieve some positive utility. The goal of this research is to identify these varying attitudinal functions and, thus, segment markets based on the similarity in held attitudinal functions. The attempt here responds to the call by Pires *et al.* (2011) to reengineer traditional segmentation principles, by bypassing *a priori* approaches (used to segment a market prior to researching it) such as demographics, and adopting post hoc approaches that use the results of research findings to segment markets after the fact.

Physical fitness is the chosen context for this research; as of 2014, the physical fitness industry in the USA was worth about $60.5bn (Marketdata Enterprises Inc, 2014). This figure consists of an even split between tangible products (such as diet drugs, foods and videos) and services (such as personal training and health club memberships). The high market value indicates participation by a large pool of individuals in the fitness industry; consequently, it is a substantial market in which segmentation can be examined. Further, individuals' motives for engaging in physical fitness are numerous (Prichard and Tiggemann, 2008; O'Hara *et al.*, 2014; Skov-Ettrup *et al.*, 2014); as such, we expect that the functions their attitudes toward physical fitness serve for them will also be various. To this effect, we expect that the physical fitness market represents a relevant context in which to identify various attitudinal function segments.

This research highlights a process that may prove valuable in identifying attitudinal function segments in the future by using a qualitative method to identify what functions individuals' attitudes serve for them in a physical fitness context, and then using the qualitative results to develop a segment identification tool.

Literature review

Market segmentation and the functional approach

Operating with a consumer-centric (market-oriented) focus is a prudent orientation for most firms, as it is strongly linked with high performance (Jaworski and Kohli, 1993). A major indicator of a firm's market-orientation is its firm-wide generation of market intelligence related to the current and future customer needs (Kohli and Jaworski, 1990). Market segmentation is one such indicator that a firm is market-oriented; its goal is to meaningfully aggregate similar groups of consumers and then to leverage the firm's core competencies in allocating resources to create valuable offerings for some or all the identified segments. Segmentation strategies allow firms to create valuable marketing mixes that better match

the unique desires of each consumer segment (Beane and Ennis, 1987; Sharp *et al.*, 1998), while maximizing value for the consumers and the firm (Wedel and Kamakura, 2002).

Previous research has adopted various bases to segment markets. Demographics have been the most prevalent of these bases, mostly because of the ease of identifiability and measurability of consumer characteristics such as age and gender, which are obvious to both consumers and firms (Beane and Ennis, 1987). Further, some research has also found that demographic groups (age cohorts, ethnic groups, genders, etc.) have been influenced in the same general way by the evolution of their macro-environments (political, social, demographic, technological, etc.); as such, there is sufficient evidence to expect similar responses to marketing mixes from each of these groups (Meredith and Schewe, 1994; Holbrook and Schindler, 1989, 1994; Noble and Schewe, 2003). Most research has, however, found demographic segmentation to be weak, as the identified segments rarely exhibit unique responsiveness patterns (Fennell *et al.*, 2003; Simcock *et al.*, 2006; Wells *et al.*, 2010).

For a segmentation base to be deemed effective, it must meet the evaluative criteria of substantiality, identifiability, accessibility/actionability and responsiveness (Thomas, 1980; Hassan *et al.*, 2003; Sun 2009). Demographic segmentation generally satisfies the first three criteria; as aforementioned, however, research has shown that it fails to meet the responsiveness criterion, which suggests that the identified segment must respond distinctively to a marketing mix designed for it (Thomas, 1980; Hassan *et al.*, 2003).

Another stream of research on segmentation has, thus, examined consumers' attitudes, lifestyles, benefits-sought and behaviors as segmentation bases. Unlike demographic segmentation where the aggregation of similar consumers is based on factors determined *a priori*, i.e. age, gender, etc., behavioral/benefits-sought segmentation is based on a consumer-revealed strategy, wherein consumers are clustered on similarity in responses to relevant information such as benefits sought, attitudes and behaviors (Wind, 1978; Allred *et al.*, 2006). The contention is that these consumer-revealed strategies should result in more uniquely responsive segments. This contention has been supported by research across several contexts (Ko *et al.*, 2007, 2012; Kimiloglu *et al.*, 2010; Wells *et al.*, 2010).

From a consumer behavior analysis viewpoint, the behaviorally based/benefits-sought, consumer-revealed segmentation approach is the most logical (Wells *et al.*, 2010) as there has been more agreement across different contexts on it use. As such, this research adopts the functional approach to attitudes as another segmentation base under the behaviorally based approaches. One might see "attitudes" and conclude that this research takes a retrograde step to behavioral approaches to segmentation; however, the focal phenomena of the functional approach are the functions consumers' attitudes serve for them. Adopting the functional approach contributes to research in the behavioral/benefits sought approach to segmentation by focusing on the *psychological benefits* consumers seek/derive from their held attitudes rather than on product/service attribute benefits.

The functional approach to the study of attitudes

The early proponents of the functional approach suggested that a new paradigm for exploring attitudes was required, one that examined attitudes based on what psychological needs they serve (Smith, Bruner and White 1956; Katz 1960). Katz (1960) suggests that attitudes play different functions for different individuals; consequently, while people may hold the same general attitude toward an object, the attitudes may serve fundamentally different functions for the different individuals. Katz identified four different functions which these attitudes may serve:

(1) Utilitarian/adjustive function: Attitudes that serve this function are positive toward means of reaching a desired goal, and are likewise negative toward

unpleasant outcomes. For example, an employee who experiences a lot of positive success in completing an easy task will most likely develop a positive attitude toward that task.

(2) Value expressive function: This function suggests that people are satisfied by holding on to and expressing attitudes that express their deeply held values. Katz notes that the reward for the individual here comes from the individual "establishing his self-identity and confirming his notion of the sort of person he sees himself to be". For example, an environmentalist would have a positive attitude toward driving hybrid or electric cars as he sees himself as protecting the environment by doing so.

(3) Ego-defensive function: These attitudes are solely based on defending one's own self-image. As a self-defense mechanism, the object of the attitude is selected by the person holding the ego-defensive attitude as a matter of convenient outlet for attitude expression.

(4) Knowledge function: One interpretation of the knowledge function is that it is a special case of the utilitarian function. Increasing one's knowledge about the attitude object helps in achieving the primary goal (Locander and Spivey, 1978).

To illustrate the functional approach in the real world, imagine two individuals, Colin and Catherine, who both hold a generally positive attitude toward Heineken beer: Colin's positive attitude primarily serves a utilitarian function as it is driven by his appreciation for crisp and slightly hoppy beer; Catherine's positive attitude primarily serves a value expressive function, as it is driven by her deeply held beliefs of consuming products that connect her to her home country, The Netherlands.

Several empirical studies attempt to test the relevance of the functional approach across various contexts (Locander and Spivey, 1978; Spivey *et al.*, 1983; Alwitt and Prabhaker, 1992). The primary focus across these studies is to delineate the implications of the existence of different functional profiles in a market base, i.e. whether consumers can be better served with offerings if we understand what functions their held attitudes serve for them. This clearly indicates a focus on using the functional approach as a segmentation tool. In fact, the majority of research carried out on the functional approach conclude that different functional segments respond to different promotional messages differently, i.e. matching message appeals to the functions consumers' held attitudes serve will elicit more positive responses (Spivey *et al.*, 1983; Snyder and DeBono, 1985, 1987; Shavitt, 1990; Shavitt and Nelson, 2002).

The problem with previous research on the functional approach as a segmentation tool is the use of surrogate concepts to represent attitudinal functions. Owing to the difficulty in operationalizing attitudinal functions, previous research adopted operationalizable personality characteristics such as self-monitoring to represent functional profiles (Snyder and DeBono, 1985, 1987). The logic being that high self-monitors are more apt to prefer marketing mixes that emphasize themes representing Katz's value expressive function, while low self-monitors are more apt to prefer mixes that represent the utilitarian function (Snyder and DeBono, 1985, 1987). Some researchers attempted to circumvent the operationalization problem by analyzing subjects' open-ended responses to an attitude object, to determine if any functional patterns emerged (Herek, 1987; Shavitt, 1990). Other researchers followed a more direct route, and created survey instruments (based on Katz's typology) to assess if respondents exhibited Katz's distinct functional profiles (Locander and Spivey, 1978; Lutz, 1981; Spivey *et al.*, 1983; Herek, 1987; Alwitt and Prabhaker, 1992). The

summary remains that an effective segmentation scheme based on the functional approach has not been developed.

This research, thus, proposes a method to mitigate the operationalization difficulty of the functional approach. The researchers adopt a two-step multi-method process to first qualitatively explore what functions consumers' held attitudes toward some object/phenomenon serve for them, and then develop an instrument to readily identify the distribution of these attitudinal functions in the population. The instrument developed at the end of the two-step process can be used to segment different groups in a population (based on their attitudinal functions). Then, in combination with traditional research methods (surveys, experiments, etc.), researchers can determine if these different groups exhibit different interactions or response patterns to different marketing mix offerings. Although seemingly tedious, this multi-method approach increases researchers' abilities to optimize precision, realism and generalizability (Davis *et al.*, 2013), which also serves the purposes of practitioners. The current study introduces this multi-method process within the context of individuals' attitudes toward physical fitness activities.

Methods

Study one

Qualitative assessment of functions of attitudes toward physical fitness. This first study in the two-part process uses a qualitative approach based on the principles of grounded theory (Glaser and Strauss 1967) to determine what functions underlie individuals' attitudes toward engaging in physical fitness. Further, this research adheres to the guidelines put forth by Glaser and Strauss (1967), which suggest focusing on the substantive domain of a specific area of inquiry, to develop an idea from which formal conceptions can emerge. As such, comparative analysis, within the substantive domain of physical fitness, is used to explore what functions emerge.

In this study, 77 individuals who reported that they regularly participate in physical fitness activities (e.g. running, lifting weights, going the gym, yoga, etc.), wrote short essays describing the reasoning behind their attitudes toward participating in said activities. The selected respondents were members of a fitness/health center in the southern USA, who claimed to be regular participants in physical fitness (at least once a week). They were recruited by random selection at the front desk of the fitness center. The respondents were given a link to an online platform where they could respond to questions relating to their participation in physical fitness. The sample was balanced, consisting of 38 females and 39 males between the ages of 18 and 32 years. The respondents reported workout rates ranging from twice a week to everyday, and they participated in all kinds of workouts including running, lifting weights, CrossFit, yoga, etc.

The grounded theoretic approach (Glaser and Strauss, 1967) implies three levels of assessing qualitative responses:

- the code level, on which each word/line/paragraph of respondents' statements are assessed, to infer what the respondents are referencing;
- concept level, which consists of groupings of similarly *coded* data from the respondents' statements; and finally
- topmost level, which consists of a more abstract grouping of similar concepts called categories, and from which theory can be developed.

The respondents' essays are coded using the CDC EZ-Text 4.0 qualitative analysis software developed by the US Center for Disease Control and Prevention.

Results. In total, 21 codes emerged from the analysis of the respondents' essays. A few of the resulting codes are discussed in detail below, and summarized in Table I.

Achievement: This code encompasses all statements that suggest that the respondent feels a sense of accomplishment. Respondents that displayed this code derived a sense of achievement of some goal (not necessarily physical) from working out. Of the 77 analyzed respondents, three (3.9 per cent) displayed this code in their essays. Examples of statements that displayed this code include the following:

> [. . .] most importantly, exercise makes me feel as if I have done something worth my time. (Respondent 48)

Disease prevention: This code includes all statements that suggest that the respondent maintains a positive attitude toward physical fitness because it enables him to keep diseases such as diabetes and arthritis at bay. Of the 77 analyzed respondents, four (5.2 per cent)

Table I.
Qualitative analysis summary

Code	Summary statement	Percentage of sample	Concept	Category/function
Achieve	*It makes me feel as if I've accomplished something*	3.9	Actualization	Ego
Active	*I see myself as an active person and I work out to maintain that*	5.2		
Esteem	*I feel better about myself as a person when I work out*	26.0		
Figure	*I work out to get or maintain a great figure*	16.9	Physical attractiveness	
Muscle	*I want to look more muscular, so I workout*	1.3		
Fun	*I work out because it's fun*	9.1	Interactive	Process
Social	*I work out because it gives me a chance spend time with my friends, having a good time*	10.4		
Mood	*Working out puts me in a better mood*	6.5	Feeling good	
Relax	*Working out relaxes me*	5.2		
Stress	*I work out because it helps me decompress after a stressful day*	10.4		
Disease	*I work out to prevent from succumbing to diseases*	5.2	Physiological	Utilitarian
Fitness	*I work out because I love to stay physically fit*	16.9		
Flex	*I work out because I want to be more flexible*	3.9		
Health	*I work out to get healthy, if nothing else*	48.1		
Life	*I work out so I can live longer*	2.6		
Shape	*I work out to get or stay in shape*	26.0		
Strong	*I work out to get stronger*	7.8		
Weight	*I work out because I want to lose weight*	23.4		
Food	*I work out so I can eat whatever I want*	2.6	Succeeding at external measure	
Insure	*I work out to receive lower insurance premiums*	1.3		
Sports	*I work out because I play a team sport competitively*	10.4		

displayed this code in their essays. Examples of statements that displayed this code include the following:

> [. . .] I want to be stronger so that I will not get sick. (Respondent 50)

> [. . .] also, to reduce the risk of cardiovascular disease. (Respondent 57)

Esteem: This code constitutes all statements that suggest that a respondent maintains a positive attitude toward physical fitness because it lets him feel good about himself. The respondents displaying this code typically feel good about themselves when they workout, or when they are in excellent physical shape. Of all, 20 respondents (26 per cent) displayed this code in their essays. Examples of statements that displayed this code include the following:

> [. . .] I'm happier, think more clearly, and have confidence [. . .] (Respondent 8)

> When I do participate in physical exercise, it makes me feel good about myself that I do something for the benefit of my body. (Respondent 11)

> When I'm in good shape, I feel better, not only physically, but better about myself in general. (Respondent 64)

Figure concerns: This code includes all statements that suggest that the respondent maintains a positive attitude toward physical fitness because it makes him look good. Respondents that displayed this code worked out to attain what they considered a "good body", not necessarily a healthy body, but a figure they considered to be desirable. Of the 77 analyzed respondents, 13 (16.9 per cent) displayed this code in their essays. Examples of statements that displayed this code include the following:

> To be honest, I participate in physical exercise to keep or improve my visual appearance [. . .] (Respondent 48)

> Well it started off when I saw a picture of myself someone else took, I was shocked at how unhealthy I looked and wanted to do sumthing [sic] about it because I felt I was ugly and not attractive [. . .] (Respondent 35)

Health: The health code includes all statements that suggest that a respondent maintains a positive attitude toward physical fitness because it helps to get or stay healthy. This code was the most prevalent in the data set. Thirty-seven respondents (48.1 per cent of the sample) displayed this code in their essays. Examples of statements that displayed this code include:

> I participate in physical exercise because I need to in order to lead a healthy life. It can also be fun (Respondent 65)

> By participating in physical exercise, my physical and mental health is improving. For example, I participate in slow pitch games because it is what I enjoy doing and also because I get in a small workout. Also, by staying active I will defeat my chances of repeating any of my family health issues. My reason to do physical activities is to stay in shape, improve mentally, and defeat the odds. (Respondent 13)

> [. . .] I was shocked at how unhealthy I looked and wanted to do sumthing [sic] about it because I felt I was ugly and not attractive. I wanna [sic] live a full life "whatever that means" and be there

> for my future children and wife, I can't do that being unhealthy and besides I want to set a good example for my family the elders at least. (Respondent 35)

Social: This code constitutes all statements that suggest that a respondent maintains a positive attitude toward physical fitness because of the social benefits it provides in terms of interaction with others. Respondents displaying this code all made suggestions regarding their participation in physical activity as a means to be socially involved with friends. Of the 77 analyzed respondents, eight (10.4 per cent) displayed this code in their essays. Examples of statements that displayed this code include the following:

> I work out because I like to spend time with friends and have fun after class (Respondent 62)

Similar codes described above were grouped together into higher level concepts. The goal here is to use our classification reasoning and our tacit and intuitive senses to group data which look or feel alike together (Lincoln and Guba, 1985). Six such groupings were established:

(1) *Physiological*: This concept grouping consists of codes that generally suggest that individuals engage in physical fitness as a means to maintain or improve the functionality of their physiological systems. Codes such as fitness, strong and weight were included in this grouping.

(2) *Physical attractiveness*: This concept grouping consists of codes that generally suggest that individuals engage in physical fitness to achieve their mental conception of a desirable physical body. Their positive attitudes toward physical fitness are not primarily driven by the desire to feel healthy, but the desire to look good.

(3) *Succeeding at external measure*: This concept grouping consists of codes that generally suggest that individuals engage in physical fitness to succeed at some external measure of success – whether it be to receive lower premiums because of good health (insurance code), or to perform better in one's sport (sport code).

(4) *Interactive*: This concept grouping consists of codes that generally suggest that individuals engage in and maintain a positive attitude toward physical fitness because they enjoy the social engagement with others, which it provides for them.

(5) *Feeling good*: This concept grouping consists of codes that suggest individuals engage in physical fitness activities because the process drives the individuals toward a more positive frame of mind by improving their moods, helping them relax or helping them relieve stress.

(6) *Actualization*: This concept grouping consists of codes that suggest that individuals engage in physical fitness because it helps them attain or actualize their conceptualized ideal images. People feel more like accomplished versions of themselves when they engage in fitness activities and, hence, their positive disposition toward fitness.

According to the principles of grounded theory, these concepts eventually lead to higher level and more abstract constructs called categories. These categories are what we deem to be the underlying functions served by the respondents' attitudes toward engaging in physical fitness activities in this research. It is at this categorical level that the systematic interrelationships between constructs can be studied toward theory development (Corbin and Strauss, 2008). Three of these categories/function emerged in this research:

(1) *Utilitarian function*: This function is constituted of the physiological concept and the concept of succeeding at external measures. In general, the concepts categorized within this function suggest that individuals maintain positive attitudes toward physical fitness because it serves some objective utility for them. That is to say, individuals have objective goals they are trying to achieve in their physiological state or performance goals they are trying to meet on some other measure; physical fitness helps them achieve said objective goals and, hence, their positive attitudes toward it.

(2) *Ego function*: This function includes the lower-level concepts of attractiveness and actualization. In general, the concepts categorized within this function suggest that individuals maintain positive attitudes toward physical fitness because it helps them confirm their perceptions of their self-concept, or to receive adulation from relevant others. Like the utilitarian function, this function is outcome driven, but the goals desired are less measurable and more subjective as they relate to *states of mind* rather than *states of being*.

(3) *Process function*: This function includes the lower-level concepts, interactive and feeling good. Unlike the previous two functions that are outcome based, attitudes toward physical fitness serving this function are held because the individuals inherently enjoy the *process* of working out. Outcome goals are not necessarily sought, but the benefits attained while engaging in the fitness activities drives this attitudinal function.

Study two

Scale development. The second part of the two-step process being introduced in this research involves developing an instrument to identify the distribution of the attitudinal functions (that emerged in the first step) in the population. This study uses the scale development procedures put forth by Churchill (1979) and Gerbing and Anderson (1988).

An initial pool of items was generated by assessing previous works exploring scale development within the functional literature, examining the results of the qualitative study described above and by consulting with experts in the functional literature. The initial pool focused on the two outcome based functions (ego and utilitarian), as described in the last section, because they were much more prevalent and discriminating between respondents. Among the respondents, 52 per cent displayed a primarily utilitarian function; 23.4 per cent displayed a primarily ego function; 9 per cent displayed a primarily process function; and 15.6 per cent of respondents equally displayed elements of two or all the functions in their responses. With statements such as *I work out because it improves my athletic performance* and *I work out because it makes me look good*, the generated items were designed to represent the function at the base code level.

In all, 32 items were generated in the initial pool – 17 representing the ego function and 15 representing the utilitarian function.

Face validity assessment. The SUMSCORE approach was used to assess face validity. Experts knowledgeable with the functional literature were asked to rate how well each item reflected the domain of each of the functions presented. Three experts were selected: two with terminal qualifications in the area of psychometric scale development and one other expert in the functional literature. The expert assessors were given specific directions for the rating exercise, the definition of each of the functional constructs and the initial pool of items. The judges had to rate the items as being not representative, somewhat representative or very representative of the functional constructs. When an item was

deemed as very representative, it received a score of three, two when deemed somewhat representative and one when deemed not representative. To successfully transition to the next phase of the scale development, an item must be rated as (at least) somewhat representative by two of the judges. After the judges' assessments, items not meeting the rating requirement were eliminated. Thus, the initial pool of 32 generated items was reduced to 26 after the judges completed their face validity assessments.

Scale purification. The next step involved purifying the scale by means of factor analysis and reliability assessments. The factor analysis was exploratory in nature, and carried out to determine the true underlying structure of the data. Pre-factorial analysis, the generated items were classified as being either under the ego or utilitarian functions, and the analysis was used to initially observe if this general structure would emerge.

The sample used in this initial data collection stage consists of individuals who primarily engaged in their physical fitness activities at a gymnasium. These individuals were contacted online and asked to respond to a survey containing the items (using a seven-point Likert-type scale) that made it past the validity assessment in stage one. A total sample of 87 respondents participated in the survey over a two-week period. The data were then subjected to an unconstrained exploratory factor analysis, using varimax rotation, to discern the underlying factor structure of the items. The analysis resulted in a seven-factor solution.

The next step involved further purifying the results of the factor analysis by eliminating any items that loaded at less than 0.6 on any factors; a five-factor solution emerged. Considering that the generated items were written at the code level, the emergent five factors are purported to represent "concepts", as described in the qualitative study. As such, we note that Concepts 1 and 5 make up the ego function, while Concepts 2, 3 and 4 make up the utilitarian function. The underlying concept/factor structure can be observed in Table II.

Table II.
Purified rotated component matrix

Item	Concept 1	2	3	4	5
EGO1	0.508				
EGO3	0.649				
EGO4	0.709				
EGO6	0.716				
EGO5	0.695				
EGO15	0.725				
UTIL2		0.810			
UTIL4		0.752			
UTIL5		0.796			
UTIL3			0.873		
UTIL6			0.711		
UTIL7				0.887	
UTIL10				0.839	
UTIL12				0.749	
EGO8					0.757
EGO9					0.764
UTIL14					0.762
EGO13					0.853
EGO14					0.829
EGO17					0.851
Cronbach's alpha	*0.836*	*0.813*	*0.807*	*0.891*	*0.903*

The first concept contained items such as *I work out because it is part of what defines me as an individual* and *I work out because it is a part of my identity*; these suggest that this concept can be labeled as *actualization*. The fifth concept contained items such as *I work out because I feel more sexy when I do* and *I work out because I feel more attractive when I do*, which suggest that this factor can be labeled as *physical attractiveness*. Together these concepts represent the ego function.

The second concept included items such as *I work out because it increases my endurance* and *I work out because it makes me stronger*; this suggests that this concept deals with *physical functionality*. The third concept includes the items *I work out because it improves my overall health* and *I work out because it enables me to get or stay healthy*; these suggest that this concept can be labeled as *health concerns*. The fourth concept contained items such as *I work out because it improves my athletic performance* and *I work out because it enables me to perform better at sports*, which suggest that this factor can be labeled as *succeeding at external measure*. Together these concepts clearly represent a utilitarian function. Having achieved satisfactory scale reliability scores, the next step in the scale development process was to confirm the factor structure via confirmatory factor analysis.

Confirmatory factor analysis. A new data set was subjected to the factor structure suggested by the exploratory factor analysis. The new data sample of respondents were contacted via a US national panel, generated by Qualtrics, and asked to respond to a survey containing the retained items from the exploratory factor analysis. This new survey contained screening questions used to determine the respondents' level of involvement with physical fitness activities. In all, 243 respondents participated in the survey over a week, and the gathered data were subjected to a confirmatory factor analysis constrained to the expected factor structure.

The initial model produced a χ^2 value of 755.06 (significant at the 0.01 level) and 142 degrees of freedom. Examining the fit indices for the model, we note a comparative fit index (CFI) of 0.775, a normed fit index (NFI) of 0.740 and a root mean square error of approximation (RMSEA) of 0.143. These values were nowhere close to the baseline fit statistics suggested by Hair *et al.* (2007). The researchers reanalyzed and further purified the scale. First, the researchers assessed nomological validity, to determine if the items purported to load together by the EFA were theoretically supported. A few items that did not meet this face assessment were eliminated from the analysis. Further, some items generated very high standardized residual covariances, and they were eliminated without compromising the theoretical integrity of the scale (Hair *et al.*, 2007).

Two of the five concepts (health and physical functionalities) exhibited very high similarity ($\phi = 0.93$), suggesting that the two constructs were not discriminating from each other. The researchers, thus, condensed all the items into one construct, and reassessed the combined construct for item loadings and unusual residual values. This assessment led to the discarding of two items, and resulted in a final construct/concept deemed the "Physiological" concept. The final four concept measurement model is shown in Figure 1.

The purified congeneric model produced a χ^2 value of 132.3 (significant at the 0.01 level) and 48 degrees of freedom. The standardized maximum likelihood loadings and fit statistics are shown in Table III. Examining the fit indices for the model, we note a CFI of 0.95, an NFI of 0.92 and a RMSEA of 0.091; together, these indices suggest good fit per the guidelines provided by Hair *et al.* (2007). The scale was then assessed for reliability and convergent/discriminant validity.

Discriminant validity was assessed by comparing the squared correlation estimate between the latent constructs shown in Table IV, with the variance extracted for each construct (Table III). To pass the discriminant validity requirement, the variance extracted

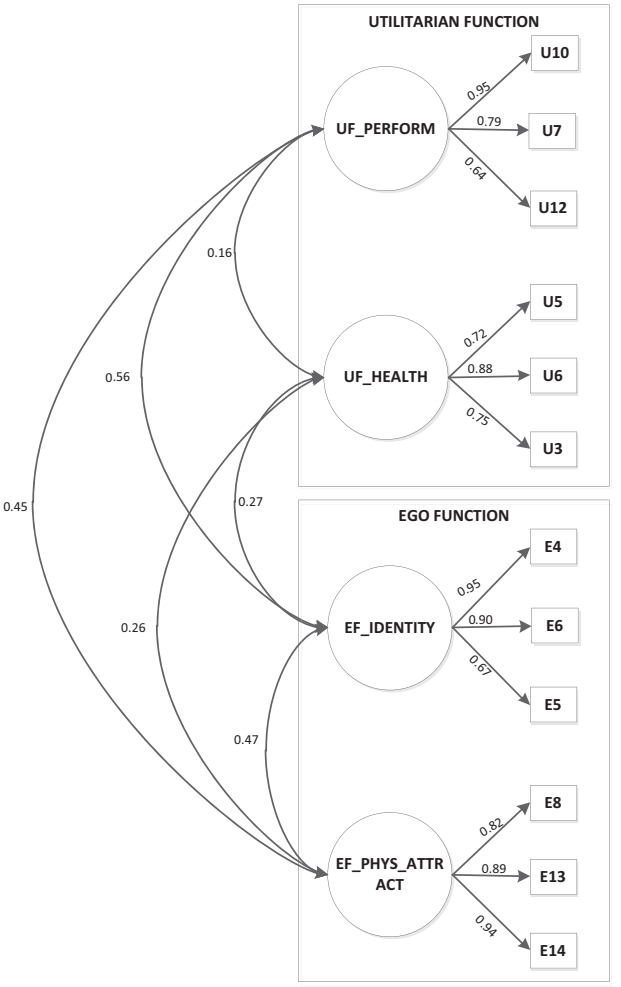

Figure 1.
Final functional scale with factor loadings and inter-construct correlations

for a construct must exceed the squared interconstruct correlation between that construct and all other constructs within the model (Fornell and Larcker, 1981). Examining the aforementioned construct values, all constructs within the model pass the discriminant validity requirement.

Next, convergent validity was assessed by examining the extracted construct reliabilities and item loadings on to their respective factors/concepts (Hair *et al.*, 2007). All the factor loadings where highly significant ($p < 0.001$), and the construct reliability estimates (shown above) all exceed 0.7; taken together, these observations suggest convergent validity for scale. The final scale is, thus, reliable and valid, as it meets all the requirements for discriminant validity, convergent validity and construct reliability.

Finally, the scale was once again subjected to expert reviews to determine its face validity, and its adequacy in covering the domain of the utilitarian and ego functions. The

	Utilitarian function (health)	Utilitarian function (performance)	Ego function (identity)	Ego function (physical attraction)
U3	0.75	–	–	–
U5	0.73	–	–	–
U6	0.88	–	–	–
U7	–	0.79	–	–
U10	–	0.95	–	–
U12	–	0.64	–	–
E4	–	–	0.94	–
E5	–	–	0.67	–
E6	–	–	0.90	–
E8	–	–	–	0.82
E13	–	–	–	0.89
E14	–	–	–	0.94
	UF_HEALTH	*UF_PERF*	*EF_IDENT*	*EF_PHYS_ATT*
Variance extracted (%)	62.37	64.44	71.48	77.89
Construct reliability	0.83	0.84	0.88	0.91
χ^2	132.3			
df	48			
CFI	0.95			
RMSEA	0.091			

Table III.
CFA Results including standardized loading estimates

Φ squared matrix	UF_HEALTH	UF_PERF	EF_IDENT	EF_PHYS_ATT
UF_HEALTH	1.00			
UF_PERF	0.03	1.00		
EF_IDENT	0.07	0.31	1.00	
EF_PHYS_ATT	0.07	0.20	0.22	1.00

Table IV.
Interconstruct correlation estimates (standardized Φ)

scale was deemed as valid and adequate in covering the functional domains. The final 12 item scale can, thus, be used to classify individuals based on the utilitarian or ego function that their attitudes toward physical fitness serve. The final version of the scale is shown in Final Functional Scale:
Utilitatrian function.

(1) Performance concept
- I work out because it enables me to perform better at sports
- I work out because it improves my athletic performance
- I work out because it makes me faster

(2) Health concept
- I work out because it improves my cardiovascular functioning
- I work out because it improves my overall health
- I work out because it enables me to get healthy

Ego function.

(1) Identity concept
- I work out because it is a part of my identity
- I work out because it is part of what defines me as an individual
- I work out because it is an essential component of a complete life

(2) Physical attractiveness concept
- I work out because I feel sexier when I do
- I work out because it makes me look good
- I work out because I feel more attractive when I do

Discussion

The purpose of this study is to introduce a method of segmenting markets that is applicable across multiple contexts, and which also results in segments that satisfy the evaluative criteria for effective segmentation substantiality, identifiability, accessibility and responsiveness (Thomas, 1980; Hassan *et al.*, 2003; Sun, 2009). The functional approach to attitudes is introduced as a new method of segmenting markets. Unlike the name suggests, the functional approach is not a typical attitude study method, where consumers' attitudinal valence toward an object is simply measured. Rather, this approach seeks to comprehend the underlying psychological mechanisms driving the consumers' attitudes.

This study focuses on the physical fitness context, with a main goal of segmenting individuals based on what functions their attitudes toward physical fitness serve for them. The qualitative exploration in the first study resulted in the discovery of three different functions that attitudes toward physical fitness serve for consumers: an ego function, a utilitarian function or a process function. Focusing on the two most prevalent (utilitarian and ego) functions, an instrument was developed to identify the distribution of attitudinal function segments in the physical fitness industry. This instrument can thus be used to identify the distribution of attitudinal function segments within a physical fitness firm's customer base and, thus, determine if firm resources should be allocated in developing valuable offerings for each segment.

Further, we can evaluate the segments generated from the two-step process outlined in this research on the aforementioned criteria for effective segmentation. Considering that the process outlined in this research adopts a *consumer revealed* segmentation approach (Allred *et al.*, 2006), we expect that the identifiability and accessibility criteria are easily met using the functional approach. Likewise, the substantiality criterion, which assesses if the identified segment is large enough to warrant its firm resource allocation, would also be logically met; as we see, in this case, the entire representative sample resulted in just three major segments. Finally, the responsiveness criterion, which assesses if each segment responds uniquely to marketing mixes designed for it, is not as easily evaluated in this research. However, the study of the functional approach led to the exploration of the functional matching concept, wherein the basic concept is that matching message themes to the attitudinal functions of the consumer base will lead to greater persuasion (Spivey *et al.*, 1983; Snyder and DeBono, 1987; Shavitt and Nelson, 2002). This functional matching concept lends support to the postulation that if used as a segmentation tool, the functional approach would yield uniquely responsive segments; this is certainly an avenue for future research efforts.

Consequently, this research contributes to the theory on the functional approach, by attempting to overcome the operationalization difficulties that led to the use of surrogate constructs in place of attitudinal functions in previous research. Further, this research extends the study of the functional approach by exploring its use as a tool specifically for segmenting markets. Furthermore, this study contributes to the segmentation literature by introducing a new segmentation base (functional approach) within the consumer-revealed behavioral/benefits sought stream. Unlike previous segmentation studies in the benefits sought stream, however, this study does not segment consumers based on what product attribute benefits they seek, but rather on what psychological benefits they seek or derive from their attitudes toward an object.

Implications for practice

Although this study is limited to one context and it optimizes realism over generalizability (Levy, 2005), the focus here is on creating a segmentation process that can be applied in any context. The burning question however is "what is the usefulness of this process in practice?"

Although multiple criteria are presented as indicative of a good segmentation strategy, firms ultimately want to identify market segments that exhibit unique responsiveness. This uniqueness can aid firms to better understand how consumers in different segments will respond to the value-offering efforts. Thus, firms can leverage their core competencies and better allocate their resources in creating value for the segments they believe will be best served by their offerings.

By introducing a psychological, benefits-sought segmentation scheme, practitioners can now aggregate similar consumers in the market based on what underlying psychological benefits they seek, and then create valuable offerings for those consumers who seek the benefits the firm can actually provide. In practice, a firm could use the grounded theoretical approach from study one to identify what functions consumers' attitudes toward the firms' brands serve. These functions can then be used to develop a segmentation instrument as shown in study two. Management's key responsibility is to develop strategy and allocate resources to the strategic initiatives. The segmentation method developed here can certainly contribute to management's accomplishment of its key responsibility.

For instance, if an already established firm is looking to expand its operations to a new market, the developed instrument can be used to assess the attitudinal functional segment distribution in the new market. The distribution knowledge gained can then be used to allocate firm resources. Staying within the context of this research as an example, a fitness firm expanding to a new geographic locale might discover that the functional attitudinal distribution in the new location is heavily in favor of the utilitarian function. The firm might then decide to allocate resources to: developing promotional material that highlights the utilitarian benefits of their brand, purchasing and installing equipment that are focused on getting clients to their goal, rather than investing in wellness classes that focus on confirming individuals' positive attitudes about themselves. This hypothetical simply shows how using the functional approach as a segmentation tool can help firms make better strategic decisions and optimize their resource allocation.

The functional approach is also in concordance with the evolutionary view of segmentation as suggested by Clarke and Freytag (2008). Using the functional approach, firms can monitor and detect the evolutionary change in segments occurring at the benefits-sought level that may require firms to adjust resources, activities and/or

employees to continue to serve existing segments. In addition, the functional approach addresses the theory–practice gap discussed by Boejgaard and Ellegaard (2010) concerning the implementation of segmentation. Instead of complex theoretical abstractions and complex mathematical models, the functional approach provides a method for firms to use to not only identify deeply held attitudes but also discover why those attitudes are held.

Limitations and future research

As aforementioned, one limitation of this study is that it is constrained to the physical fitness industry; thus, generalizability claims must be made with caution. Another limitation is that the instrument developed in this study was not tested as a segmentation tool in an existing market base, and, as such, the responsiveness of any potential emerging segments could not be assessed.

For this reason, future research efforts should be focused on:

- following the guidelines outlined in this study, to create similar segmentation instruments in other contexts; and
- using this and other developed instruments to actually segment markets, and then testing (via experiments, survey and other research techniques) if the yielded segments do in fact exhibit unique response patterns that warrant unique marketing mixes.

References

Allred, C.R., Smith, S.M. and Swinyard, W.R. (2006), "E-shopping lovers and fearful conservatives: a market segmentation analysis", *International Journal of Retail & Distribution Management*, Vol. 34 Nos 4/5, pp. 308-333.

Alwitt, L.F. and Prabhaker, P.R. (1992), "Functional and belief dimensions of attitudes to television advertising: Implications for copytesting", *Journal of Advertising Research*, Vol. 32 No. 5, pp. 31-42.

Beane, T.P. and Ennis, D.M. (1987), "Market segmentation: a review", *European Journal of Marketing*, Vol. 21 No. 5, pp. 20-42.

Boejgaard, J. and Ellegaard, C. (2010), "Unfolding implementation in industrial market segmentation", *Industrial Marketing Management*, Vol. 39 No. 8, pp. 1291-1299.

Churchill, G.A. Jr (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16 No. 1, pp. 64-73.

Clarke, A.H. and Freytag, P.V. (2008), "An intra- and inter-organisational perspective on industrial segmentation: a segmentation classification framework", *European Journal of Marketing*, Vol. 42 No. 9, pp. 1023-1038.

Corbin, J. and Strauss, A. (2008), *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 3rd ed., Sage, Thousand Oaks, CA.

Davis, D.F., Golicic, S.L., Boerstler, C.N., Choi, S. and Oh, H. (2013), "Does marketing research suffer from methods myopia?", *Journal of Business Research*, Vol. 66 No. 9, pp. 1245-1250.

Dibb, S. and Simkin, L. (2001), "Market segmentation: diagnosing and treating the barriers", *Industrial Marketing Management*, Vol. 30 No. 8, pp. 609-625.

Dibb, S. and Simkin, L. (2009), "Implementation rules to bridge the theory/practice divide in market segmentation", *Journal of Marketing Management*, Vol. 25 Nos 3/4, pp. 375-396.