

EXPLORING EGOCENTRISM, NEED FOR UNIQUENESS AND MOTIVATED CONSUMER INNOVATIVENESS TO INFLUENCE THE CONSUMERS' BEHAVIORAL INTENTION OF INNOVATIVE FITNESS PRODUCTS

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ABSTRACT

National fitness is crucial to the national strategy as people's income and health awareness improve. This has led to a rise in health-related spending, expanding and diversifying the fitness market. The use of intelligent technology provides new opportunities for health management. However, most research on smart product adoption has focused on the technical aspects, with little consideration given to the impact of consumer characteristics. This study explored the impact of individual consumer characteristics on the behavioral intention of smart fitness products. This study adopted a mixed research methodology, combining an explanatory sequential design, questionnaires, and semi-structured interviews as research tools. The findings show that individuals with solid egocentrism and a need for uniqueness are more likely to accept smart fitness products. Motivated consumer innovativeness plays a key mediating role in the influence of egocentrism and the need for uniqueness on smart fitness products' behavioral intention. This study not only enriches the theoretical research in the field of smart product behavioral intention, but also provides valuable references and insights for the fitness market and practical applications in the field of smart technology.

Keywords: Self-completion; Egocentrism; Need for uniqueness; Motivated consumer innovativeness; Behavioral intention

1. INTRODUCTION

In recent years, the awareness of national fitness has become increasingly strong, and there are more and more fitness venues and equipment. The enthusiasm of the masses to participate in sports activities is also increasing. People who do not exercise for a long time are more prone to negative emotions, which can negatively affect their willingness to exercise and lead to a vicious cycle (Burtscher, Burtscher, & Millet, 2020). Therefore, exercise is one of the most important ways to relieve emotions and stress. With the upgrading of people's consumption level, the demand for fitness scenes and fitness equipment types is gradually becoming diversified and intelligent. The combination of intelligent technology and gyms has brought new opportunities to the traditional fitness industry. At present, many smart gyms in China use technologies such as artificial intelligence algorithms, sensors, big data analysis, and naked eye 3D to help customers exercise (Eskiler&Safak, 2022).

However, people with different personality traits have different intentions to use smart products, especially egocentrism. Self centeredness refers to the cognitive ability to overly focus on oneself or view problems from the perspective of others. Self centeredness can drive individual consumer behavior as a way to validate overly positive self views (Sedikides, Gregg, Cisek,&Hart, 2007). Based on the psychological motivation of egocentrism, the self centered mentality of consumers who show off, are fragile, and are good at expressing themselves can affect people's preferences for innovative products in the context of gym consumption.

Therefore, based on the theory of self completion, this article explores the impact of consumer egocentrism and uniqueness needs on consumer preference for innovative products,

by examining their impact on the development of the intelligent fitness industry.

The research questions of this study are:

RQ1: What are the personality traits and needs of consumers who are more likely to use innovative fitness products?

RQ2: What is the relationship among egocentrism, need for uniqueness, motivated consumer innovativeness and consumers' behavioral intention of innovative fitness products?

RQ3: What are the managerial guidelines for gym administrator to understand consumer behavior?

The research objectives of this study are:

RO1: To access the personality traits and needs of consumers that can influence the behavioral intentions of innovative fitness products.

RO2: To construct a model based on the relationship between egocentrism, need for uniqueness, motivated consumer innovativeness and behavioral intention of innovative fitness products.

RO3: To explain a developed model for gym administrator to understand consumer behavior.

2. LITERATURE REVIEW

2.1 Self-completion Theory

Self completion theory is a coping strategy used by individuals to overcome self threats (Mandel, Rucker, Levav,&Galinsky, 2017). The self completion theory suggests that people can complete their self definition by using indicators that symbolize achievement in the self-concept field. For example, brand, title, promotion or income certificate are indicators that a person uses to recognize career success (Saenger, Thomas&Bock, 2020). How does the theory of self completion affect consumer behavior? The self completion theory suggests that social identity leads to a sense of progress or achievement in goals and actions, and feedback on goals and actions in turn affects an individual's future goals (Susewind, Walkowitz, 2020). Therefore, some consumers choose innovative products, services, and branded products to protect or build a complete and positive self-identity, which in turn encourages others to actively evaluate and recognize them (Ismail, 2017).

The theory of self completion focuses on the internal needs and realization of individuals. In this study, an individual's intrinsic needs may include pursuing social recognition, personal superiority, and unique experiences. Individuals with self-centered and unique needs can satisfy these internal needs by using smart fitness devices, thereby influencing their behavioral intentions to use these devices. Therefore, choosing the theory of self completion as the main theoretical basis is because it can provide a profound explanation of the relationship between egocentrism, unique needs, and consumer behavior. Through this theory, we can reveal how egocentrism and uniqueness demands indirectly influence consumer behavioral intentions to use smart fitness devices by influencing innovation. This helps to explain the research results in a broader theoretical context and provides a deeper theoretical basis for the intelligent fitness equipment market and marketing strategies.

2.2 Egocentrism

Egocentrism was initially proposed by Jean Piaget in developmental psychology, defined as a cognitive bias or tendency in which an individual primarily views the world from their own perspective and strives to understand or consider the views of others (Kesselring & Muller, 2011). In recent related studies, Edershile & Wright (2022) conceptualized egocentrism as a complex functional dynamic system whose sustainability depends on a set of interrelated

processes. Some scholars also define egocentrism as describing a personality trait that is overly focused on oneself, exaggerates self importance, and requires recognition and admiration from others (Tajmiriyahi & Ickes, 2020).

In summary, egocentrism is often seen as a multidimensional concept, with different dimensions reflecting the different manifestations of an individual's interpersonal relationships, emotional responses, and behavioral states. Numerous scholars have conducted extensive research on egocentrism and its different dimensions in different academic contexts. Through literature review, it can be found that most studies use the dimensions of leadership/authority, grand exhibitionism, and power/availability to measure egocentrism, because this division more comprehensively captures the different aspects of egocentrism. Therefore, in this study, the dimension division of the egocentrism scale developed by Tajmiriyahi & Ickes (2020) was used to divide egocentrism into three dimensions: rights, grand exhibitionism, and authority. By subdividing egocentrism into these three dimensions, we can more finely analyze the impact of different characteristics of egocentrism on innovative behavior, thereby gaining a deeper understanding of the relationship between egocentrism and innovation.

2.3 Need for Uniqueness

The need for uniqueness (NFU) is a psychological concept, and its definition varies among different scholars. Lang & Armstrong (2018) defined need for uniqueness as the personal preferences, desires, or demands unique to a person's personality or characteristics. It includes the need for self-expression, differentiation, and standing out. Tian and McKenzie (2001) academically defined need for uniqueness as the trait of developing and enhancing one's self-image and social image through the purchase, use, and disposal of consumer goods, in order to pursue differentiation from others. Abosag et al. (2020) investigated the satisfaction of NFU in social networks on Internet platforms, and found that customers' NFU has a negative impact on the satisfaction of some social networking sites. This is because when sharing brand similarity with others, it avoids similarity with others, thereby reducing engagement and satisfaction. In this study, based on the background of this study, we defined NFU as the use of innovative fitness products to differentiate one's own and others' desires, with the aim of improving and enhancing one's self-awareness and social status.

Scholars unanimously agree that need for uniqueness is seen as a multidimensional variable, representing a profound and multidimensional psychological phenomenon. Currently, Tian, Bearden, and Hunter (2001) categorize consumer uniqueness needs into three main dimensions: creative choice, unpopular choice, and avoidance of similarity. This dimension has been widely used and validated in various fields. Therefore, based on the above three dimensions to explain the core connotation of need for uniqueness, we divide it into three dimensions: Creative Choice; Unpopular Choice; And Avoidance of Similarity.

2.4 Motivated Consumer Innovativeness

Consumer Innovation Motivation (MCI) refers to the positive willingness or motivation of consumers to innovate, describing their tendency to explore and adopt novel or innovative products and ideas. Kuswati (2018) believes that consumer innovation refers to the degree to which innovative products are independently accepted, where innovation is defined as the degree to which individuals accept new ideas faster than other members. Hwang et al. (2019) coined the term "motivated consumer innovation" by combining motivation with consumer innovation. This concept belongs to the internal driving factors that influence consumer innovation tendencies. Lee, Kwak&Cha (2021) argue that consumer innovation motivation is an internal and external factor that influences consumer innovative consumption behavior through motivation. This includes various consumer goals, whether they are business goals,

personal goals, or social goals. Therefore, based on the research background of this study, consumer innovation motivation is defined as internal factors driven by social, functional, hedonic, and cognitive needs, which can lead to consumer intention to innovate. The tendency of consumers to choose and adopt new fitness products, services, and fields in gyms can be referred to as consumer innovation.

Currently, scholars tend to categorize MCI into multiple dimensions and commonly use the four-dimensional scale (MCI) developed by Vandecasteele & Geuens (2010) to measure consumer innovation motivation. This scale considers several different motivations, including functional (purchasing new products provides practical and functional benefits), pleasurable (purchasing new products provides happiness and enjoyment), social (selecting new products provides social recognition and meets social needs), and cognitive (purchasing new products satisfies personal curiosity and knowledge acquisition needs). Based on this, this study divides consumer innovation into four dimensions: Functional Motivated Consumer Innovativeness (Functional MCI); Hedonic Motivated Consumer Innovativeness (Hedonic MCI); Social Motivated Consumer Innovativeness (Social MCI); And Cognitive Motivated Consumer Innovativeness (Cognitive MCI).

2.5 Behavioral Intention

Behavioral intention is the tendency of a consumer to adopt a certain behavior and is a prelude to the occurrence of the actual behavior. In the field of consumer behavior, behavioral intentions are particularly important as they reveal the likelihood of consumers purchasing products, using services, or adopting new behaviors. When certain conditions are present, consumer behavioral intentions are transformed into actual consumption behavior (Xu & Li, 2018). Jeong & Shin (2020) conducted an online survey of tourists from the top five smart cities in the United States, examining their overall experience with smart tourism technology and their behavioral intentions in using smart technology products. The research results indicate that the experience of tourists using smart tourism technology has a positive impact on their overall travel experience and increases their behavioral intention to use smart products.

Based on the definitions and related research of different scholars on behavioral intention, in the context of this study, we define behavioral intention as the intensity of consumer willingness to participate in electronic word-of-mouth, willingness to use innovative products, and willingness to pay more on social media, and divide behavioral intention into three dimensions: electronic word-of-mouth; The intention to use innovative products; And the willingness to give more.

3. THEORETICAL FRAMEWORK

3.1 The relationship between egocentrism and motivated consumer innovativeness

Egocentric may be considered innovative (Smith & Webster, 2018), as ecocentric consumers are more likely to experience satisfaction, excitement, and happiness by consuming innovative services or products (Ford & Nichols, 2019). Kashmiri, Nico, and Arora (2017) found through their research that companies led by ecocentric CEOs may have higher new product release rates and a higher proportion of aggressive innovation in their new product portfolio. In the context of gym consumption, self-centered consumers who are arrogant, fragile, and good at expressing themselves will influence their preference for innovative products. That is to say, when consumers have expressive egocentric personalities, they prefer innovative products that can attract more attention.

Based on this, this study proposes the following hypotheses:

H1: Egocentrism has a positive impact on motivated consumer innovativeness

3.2 The relationship between egocentrism and behavioral intention

Consumers with higher levels of self-efficacy have a higher willingness to purchase services supported by innovative technologies (artificial intelligence) (van Esch, Cui,&Jain, 2021).

Egocentrism will show greater interest in exclusive, customizable, and personalized products (Lee, Gregg,&Park, 2013). For example, due to a strong desire for attention, egocentric CEOs may take strategic actions to help them gain attention and social recognition (Resick et al. 2009), and gain social recognition by doing better than their peers (Robins, Tracy,&Shaver, 2001). When egocentric individuals successfully seek attention and appreciation (Sedikides, Rudich, Gregg, Kumashiro,&Rusbult, 2004), they have a strong preference for scarce products with unique value (Lee and Seidle, 2012), and are more likely to use different innovative or novel products to further enhance consumer behavioral preferences for such products.

Based on this, this study proposes the following hypotheses:

H2: Egocentrism has a positive impact on behavioral intention

3.3 The relationship between need for uniqueness and motivated consumer innovativeness

Consumer demand for uniqueness is defined as individuals seeking to differentiate themselves from others through the purchase and use of innovative consumer goods, in order to develop and enhance their personal and social identity (Tian, Bearden,&Hunter, 2001). Consumers may seek "creative products" by choosing original, novel, and unique products that are "acceptable" to a small number of people (Tian,&McKenzie, 2001), and businesses with such scarce products may also increase the price of their products (Irmak, Vallen,&Sen, 2010), and consumers are willing to pay more for them. It also increased the prices of their products (Irmak, Vallen,&Sen, 2010), and consumers are willing to pay higher prices for them. The pursuit of uniqueness also motivates consumers to innovate and encourages them to pay higher prices for innovative products to showcase their uniqueness and differentiation.

Based on this, this study proposes the following hypotheses:

H3: Need for uniqueness has a positive impact on motivated consumer innovativeness

3.4 The relationship between need for uniqueness and behavioral intention

Unlike others, the desire for uniqueness has long been considered to have a significant impact on consumer behavior (Chan, Berger,&Boven, 2012). The intensity of a person's behavior change depends on how much demand there is for uniqueness; The stronger the need for uniqueness, the more he or she wants to be different from others (Snyder, 1992). Therefore, consumers' desire for uniqueness can motivate them to choose innovative products or services to showcase their uniqueness and influence their behavioral intentions in choosing which products or services.

Based on this, this study proposes the following hypotheses:

H4: Need for uniqueness has a positive impact on behavioral intention

3.5 The Relationship Between Motivated Consumer Innovativeness and Behavioral Intention

In evaluating new products, consumers with innovative motivation will have a greater impact on the degree of evaluation of the new product (Klink,&Athaide, 2010), while

innovative employees may provide new methods, methods, or technologies to perform critical tasks (Smith,&Webster, 2018). Therefore, innovation motivation has a positive impact on consumer purchase intention and their behavior of using new products and services (Seyed, Esfahani,&Reynolds, 2021). Under the influence of different consumer innovation motivations, consumers will choose different products, and the new products adopted by innovative consumers play a crucial role for many companies, enabling them to better predict consumer psychology, update and iterate products.

Based on this, this study proposes the following hypotheses:

H5: Motivated consumer innovativeness has a positive impact on behavioral intention

3.6 The Mediation Effect of Motivated Consumer Innovativeness

Chao et al. (2012) found that innovative products mediate the relationship between consumer innovativeness and willingness to purchase new products. Consumer confidence in new products mediates consumer innovativeness and its relationship with innovative products (Klink,&Athaide, 2010). Perceived value and learning processes mediate the impact of consumer innovation on purchase intention (al Jundi, Shuhaiber,&August, 2019). Boakye (2015) found that consumer experience positively influences the willingness to use products or services, and to some extent moderates the impact of service quality on the willingness to continue using. Consumer motivation for innovation also significantly influences the willingness to re-examine through the perceived value of the product (Terason, Tiwari, Pattanayanon,&Kulwanich, 2022).

Narcissists seek the admiration of others and attempt to gain attention by purchasing innovative products or using related services (Buss,&Chiodo, 1991). Therefore, narcissists are motivated to engage in innovative behavior because they want to showcase their differences and uniqueness to showcase their social status and identity.

Based on this, this study proposes the following hypotheses:

H6: Motivated consumer innovativeness has a mediation effect in the influence of egocentrism on behavioral intention

H7: Motivated consumer innovativeness has a mediation effect in the influence of need for uniqueness on behavioral intention

3.7 Conceptual Framework Proposed

This study is based on the theory of self completion, exploring the impact of self-centered personality and seeking uniqueness on consumer innovation motivation and behavioral intention. In addition, we also propose that consumer innovation motivation has a mediating effect on behavioral intention. In this study, self-centered individuals may be more inclined to use smart fitness devices because these devices help them highlight their physical image and gain recognition from others, which in turn satisfies their pursuit of social status. This behavior may be to satisfy their need for self-identity, making them feel more complete and satisfied. By using these innovative products, uniqueness demanders can achieve complete self-identity, as they can showcase their unique taste and choices.

Overall, individuals who are self-centered and have unique needs choose and use smart fitness equipment to strengthen self-identity and meet their inner needs, thereby influencing their attitudes and behavioral intentions towards smart fitness equipment.

Therefore, this study proposes the following conceptual framework, as shown in the figure 1.

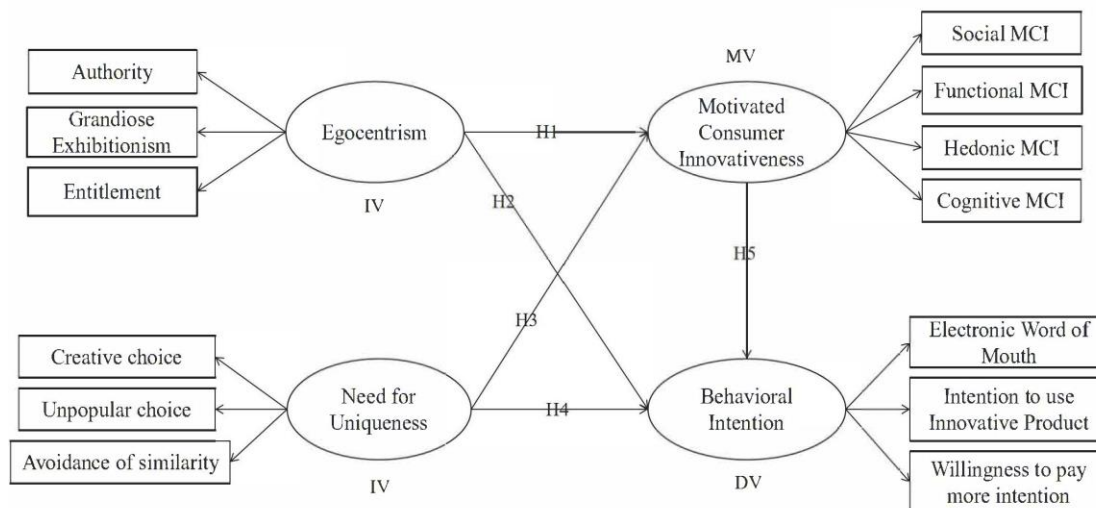


figure1. Conceptual Framework

4. METHODOLOGY

This study employed a qualitative research approach, which involved searching for literature reviews related to egocentrism, need for uniqueness, motivated consumer innovation, and behavioral intention from databases. The references are based on Web of Science, Scopus, Science Direct, and other databases. The references are only taken from journal articles, book chapters, and full-text documents to organize the selected relevant articles.

5. CONCLUSIONS

This study is based on the theory of self completion and explores the relationship between egocentric, need for uniqueness, motivated consumer innovation, and consumers' behavioral intention of innovative fitness products through literature review, and proposes research hypotheses. Successfully developed a theoretical framework that helps to gain a deeper understanding of the driving factors behind the intention to use innovative fitness products, which will be useful for future research in this field.

In practical terms, this study can provide assistance for the intelligent fitness industry. Firstly, understanding the main factors that influence customers to use innovative fitness products can help with precision marketing and develop more comprehensive marketing strategies. It can also continuously improve one's own innovative fitness products for making strategic decisions on future development directions.

In theory, the analysis of these variable factors has important reference value for further research in related fields, but data is needed to prove these connections. As this is a conceptual document without any data collected, it cannot be promoted to other countries. In addition, the framework of this study was constructed based on reference to previous literature. Therefore, generalization is not suitable for application. Therefore, future research can collect data from different backgrounds to validate the conceptual framework proposed in this study. In addition, we encourage other countries to conduct similar studies to explore the factors that may affect the consumer's behavioral intention of innovative fitness products from different perspectives.

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