

# **FITNESS TRAINERS' PHYSICAL ATTRACTIVENESS AND GYM GOERS' EXERCISE INTENTION**

**Soekmawati**

*Faculty of Business, Multimedia University, Malaysia*

**Robert Jeyakumar Nathan\***

*Faculty of Business, Multimedia University, Malaysia*

**Pei-Kian Tan**

*Faculty of Business, Multimedia University, Malaysia*

**Vijay Victor**

*Department of Economics, CHRIST (Deemed to be University), India  
College of Business and Economics, University of Johannesburg, South Africa*

## **ABSTRACT**

In line with the law of attraction, physical attractiveness has been widely used in marketing as well as advertising due to its potency in persuading consumers to take action. However, would physical attractiveness of a fitness trainer influence gym goers' intention to exercise? This question motivated this research. Based on recent literature reviews, several research constructs were identified to form a research framework to investigate the physical attractiveness phenomena in the fitness industry. Hypothetically, the impact of the physical attractiveness of a fitness trainer on gym goers' exercise intention is postulated to be mediated by trainer's perceived expertise, trustworthiness, likeability and perceived health. Questionnaires were administered among gym-goers from 10 randomly selected fitness centres across three districts of Melaka State in Malaysia, and 192 final sample data were obtained. Data analysis reveals fitness trainer's perceived expertise and likeability significantly mediates the relationship between the physical attractiveness of fitness trainers and gym goers' exercise intention. Physical attractiveness of fitness trainers does impact the exercise intention of gym goers indirectly. Implications of the findings to theory and practice are also discussed in this paper, as well as suggestions for future studies.

**Keywords:** physical attractiveness, fitness, perceived traits, exercise intention, sports marketing.

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## **1. INTRODUCTION**

Physical inactivity and sedentary lifestyle are major public health concerns due to their detrimental consequences. Issues related to sedentary lifestyle seemed to have intensified during

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\* Corresponding author: Faculty of Business, Multimedia University, Melaka 75450 Malaysia; Email: robert.jeyakumar@mmu.edu.my

the pandemic period, as a result of mandatory quarantine and restricted public activities and gatherings. Staying at home would increase screening time and sitting activity, resulting in decreased physical activity (Dominski & Brandt, 2020). Moreover, studies have shown that sedentary lifestyle and inactivity have been associated with mental disorders, including anxiety and depression (Hallgren et al., 2020; Stubbs et al., 2017). Depression symptoms were found to be reversely correlated to physical activity and positively associated to sedentary behaviour (Wu et al., 2019). Reports have shown that sedentary lifestyle and inactivity are critical health issues for the Malaysians. According to the National Health and Morbidity Survey carried out in 2019, one in four adults in Malaysia was physically inactive, amounting to 25.4% of its adult population. This led to many health problems in Malaysia, where 18.3% of its adults had diabetes, 30% of them had hypertension, and 38.1 % were diagnosed with hypercholesterolemia (Institute for Public Health, 2019). In addition, obesity has been a major health concern in Malaysia (Pell et al., 2016). In the 2019 statistical data of the World Health Organisation, Malaysia had the highest overweight and obesity cases in Asia in which 65% of its female and 64% of its male population were either obese or overweight (World Health Organisation, 2019). Understanding the urgency in promoting active lifestyle, this study aims to investigate the direct and indirect impacts of the physical attractiveness of a fitness trainer in persuading gym goers to exercise.

For decades, social scientists have been trying to answer the question why people are drawn to physically attractive persons. Studies show that physically attractive individuals have favourable traits and influence people's good perception towards them (Dion & Bersheid, 1972; Eagly et al., 1991). This good perception would result in favourable treatment of great looking people, leading to attractiveness-based stereotypes. Due to this stereotype, physically attractive people tend to progress further and quicker and earn more than less attractive persons (Hamermesh & Biddle, 1994; Patzer, 2013). The same stereotype would also cause a physically attractive individual to have an influential impact in convincing messages to other and persuading certain behavioural intention.

Extended to the business context, prior studies have explored the persuasive impact of physically attractive people in advertisements as well as sales and marketing. For instance, Baker and Churchill (1977) found attractive models in printed advertisements led to consumers' favourable evaluation. Correspondingly, an attractive spokesperson in a television insurance commercial was associated with greater purchase intention (Deshields et al., 1996). Beyond advertisement, Ebster and Reisinger (2006) extended the significant impact of physical attractiveness in face-to-face sales encounters, where it served as an important determinant of greater product evaluation and purchase intention. Furthermore, in a field study conducted by Ahearne et al. (1999), it was found that physical attractiveness stereotype was applied to knowledgeable audiences of pharmaceutical sales representatives and physicians, and found to be influential in cases of high-risk products, such as medicines and drugs.

Being the largest growing sector in current economy, service industries could employ attractive service providers to add value to the entire exchange process, thereby increasing the overall utility of the purchase. An attractive service provider could offset a bad impression caused by a poor service condition and vice versa, he/she would enhance a good impression, resulting in higher perceived service quality by the clients (Lee et al., 2012). Furthermore, based on the experimental study conducted by Norouzi et al. (2015) on customers' in-store experience, it was revealed that the physical attractiveness of a store assistant increased customer satisfaction. They

found that favourable characteristics perceived in an attractive store assistant served as non-verbal communication and significant tangible assets in enhancing service quality, overall service assessment, and eventually, customer satisfaction. Similar supporting findings were also indicated in one of the experimental studies conducted by Bashi et al. (2016) which inferred the positive effect of physically attractive sales attendants on customer satisfaction and purchase intention.

As one of the thriving industries within the service-sector, the fitness industry benefits tremendously from its various exercise programmes. The fitness industry earned approximately US\$102 billion in year 2020 (Wellness Creative Co., 2020). In Malaysia alone, fitness industry was predicted to receive approximately US\$ 48 million in year 2020 and US\$53 million by year 2024 (Statista, 2020). The fitness industry has grown expandingly, resulting in the emergence of a wide variety of fitness trends, including Strength Training, High Intensity Interval Training (HIIT), Body Weight Training, Yoga, Circuit Training, Core Training, Group Training and many more. Personal Training has been a leading trend among the top ten trends since the year 2006, and it was number five in the year 2020 (Thompson, 2020). The dominating trend of Personal Training in the fitness industry was also observed in the nascence of other prominent trends established in supporting it, such as the Educated, Certified, and Experienced Fitness Professionals and the Group Personal Training.

Fitness-related occupation might be a highly relevant occupation where good appearance is linked to its productivity. Hamermesh and Biddle (1994) utilised the fifth digit of the DOT (Dictionary of Occupational Titles) code in determining jobs whose most important aspect was interpersonal interaction and therefore, required highly attractive personnel. All measures stated in the DOT code are most observable in the job characteristics of a fitness trainer. Trainer's physique is treated as a commodity and serves as a bodily capital (Fernandez-Balboa & Gonzalez-Calvo, 2017). Moreover, Melton et al. (2011) found that trainer's physical appearance was an important asset in the first impression encounter. In the first encounter, potential clients were postulated to rely on peripheral (outer) cues, such as a trainer's attractive appearance, to decide whether to sign up for an exercise programme offered. Nevertheless, would the physical attractiveness of a fitness trainer be truly effective when it is used in a larger population of gym-goers? Based on this backdrop, this study aims to measure the impact of fitness trainer's physical attractiveness on gym goer's exercise intention; considering the mediating effects of trainer's perceived expertise, trustworthiness, likeability, and health.

## **2. LITERATURE REVIEW**

Physical attractiveness phenomenon is not a strange topic in the fields of advertising and celebrity endorsement. The role of a sales person or agent is crucial in leading to persuasion in business and marketing (Low et al., 2021). However, there is a paucity of studies that empirically test its role in sports marketing and fitness industry. Besides, studies on physical attractiveness in marketing were experimental research involving control groups and conducted in laboratory settings, causing isolation of certain characteristics present in a field study. Table 1 provides the summary of prior researches relevant to this study.

Based on the analysis of previous studies from Table 1, there is a lacuna in research examining the effects of physical attractiveness of fitness trainers on client’s exercise intention. Although perception of clients was explored, they were mostly limited to what clients and fitness trainers thought of an attractive appearance, without looking further into its impact on behavioural intention. Some prior researches have studied clients’ perception about trainers’ physical attractiveness, including their physical fitness, and how it could attract potential clients. However, most were exploratory in nature.

**Table 1: Relevant Previous Literatures on Fitness Marketing**

<b>Author(s)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
Dion et al., 1972; Eagly et al., 1991; Hamermesh & Biddle, 1994	✓								
Ahearne et al., 1999; Apaolaza-Ibanez et al., 2011; Ebster & Reisinger, 2006; DeShields et al., 1996		✓							
Ohanian, 1990			✓						
Broers, 2020				✓					
Baniya, 2017; Nguyen, 2021; Silvera & Austad, 2003; Wu & Li, 2013									
Bashi et al., 2016; Garber et al., 2015; Lee et al., 2012; McColl & Truong, 2013; Norouzi et al., 2015; Yeh et al., 2020					✓				
Boerner, 2013; Maguire, 2001; Melton et al., 2011								✓	
Hutson, 2013; Fernandez-Balboa & Gonzalez-Calvo, 2017								✓	✓
Arai et al., 2014; Mutz & Meier, 2014							✓		
Morgenstern, 2016; Phillips & Drummond, 2001; Rotwein, 2003									✓

**Notes:**

Sub-topics in fitness marketing studies in the past.

1. Physical Attractiveness in General
2. Physical Attractiveness in Marketing and Selling of Products (Non-Fitness)
3. Physical Attractiveness in Celebrity’s Endorsement
4. Physical Attractiveness in Selling of Fitness Products
5. Physical Attractiveness in Service Industry and/or Service Employees
6. Bodily Capital in Athletes
7. Perceptions of Fit Physique (by Clients and/or Trainers)
8. Bodily Capital in The Fitness Industry
9. Physical Attractiveness of a Fitness Trainer in Attracting Potential Clients (Qualitative Study)

Based on the literature reviews, four trainer’s perceived traits are selected in this study to examine the impact of physical attractiveness of a fitness trainer on clients’ exercise intention. These traits are chosen based on manifestation of attractiveness stereotype, source credibility and perception towards a fitness trainer. In the fitness industry, perceived expertise and trustworthiness of an influencer in a product review, were found to positively affect consumers' purchasing intention towards the product (Broers, 2020). In addition, perceived likeability and health are also included in the theoretical framework to fit the context of stereotype, commonly perceived in a physically attractive fitness trainer. Perceived likeability represents a fitness trainer’s social skill, a quality trait that might draw potential clients towards them. Besides, a trainer’s fit-physique is often referred to as his or her corporeal credibility and symbolically represents his or her health. Previous work found that “the construction of exercise as health

work relied not on trainer's accreditation and certification, but on their bodily capital and fit physique" (Hutson, 2013, p.69).

In addition to utilisation of physical attractiveness phenomenon and its stereotypes, this study refers to the Social Exchange Theory in understanding the effects of physical attractiveness of fitness trainers on their client's intention to exercise. Social Exchange Theory focuses on social interaction between two parties and justifies it via cost-benefit analysis to determine the risk and benefit. Social Exchange 'is a two-sided, mutually contingent, and mutually rewarding process involving transactions or simply exchange' (Emerson, 1976, p.336). Based on the theory, physically attractive persons would add value to the social exchange process as they increase the overall utility of the exchange or transaction. In a poor exchange condition, physically attractive persons would offset the deficiency by projecting good impression, resulting in higher utility of the exchange or transaction. Since there is no exact measurement for social benefits, it is not possible to precisely compute and quantitatively maximise the utility of social exchange transactions. Hence, past economist merely inferred that the utility was from the distribution of consumer expenditures or other economic decisions (Blau, 1964).

Although the Social Exchange Theory could possibly justify the effect of a physically attractive fitness trainer in convincing clients to exercise, the attractiveness phenomenon is a result of social interaction, which often involves social perceptions. This research recognises four perceived traits of physical attractiveness among fitness trainers. The direct impact of these traits towards exercise intention of gym goers are investigated. Six variables and five hypotheses are constructed in order to facilitate the construct measurement and data analysis. Each variable is discussed separately in the following sections.

### ***2.1. Physical Attractiveness of Fitness Trainer***

Physical attractiveness is operationally defined as a pleasing look of someone (Patzner, 2013). Talking in the context of the fitness industry, the physical attractiveness of a fitness trainer is comprised of not only facial appearance but also at least, a lean, aesthetic physique. Though physique plays a crucial role in the fitness world, it is still conceived as a segment of the physical attractiveness as it has added value in increasing overall perceived attractiveness (Gadberry, 2009). "*People view fitness professionals in critical light and demand higher standards in regard to physical appearance in comparison to many other professions. Personal trainers are expected to look the part: fit physique...*" (Morgenstern, 2016, p.26). Trainer's physique and appearance are important assets in the first impression encounter (Melton et al., 2011). In the first impression, potential clients often rely on peripheral (outer) cues, such as trainer's attractive appearance and physique, in making their decision to sign up for an exercise programme. Appearance of trainer would remain as a high priority of clients' selection-criteria (Rotwein, 2003), prior to their decision to sign-up for the exercise programme offered. In a study of celebrity endorsement in Malaysia, celebrity's attractiveness was verified to have a direct, significant impact on consumers' behavioural intention (Wu & Li, 2013). "The more attractive the endorser is, the greater the chance consumers could be aware of the product and brand, and thus, stimulate their purchasing motives" (Nguyen, 2021, p. 958). Therefore, in this study, it is hypothesised that, a fitness trainer's physical attractiveness could directly influence the client's exercise intention (H5). Besides, the physical attractiveness of fitness trainers predictably causes clients to perceive them to possess certain favourable traits because of the effect of attractiveness stereotype. Those

favourable, perceived traits of a physically attractive fitness trainer could have their mediating effects leading to client's exercise intention (H1 to H4). They are further explicated in the following sections.

## **2.2. Trainers' Perceived Traits: Expertise, Trustworthiness, Likeability, and Health**

Prior studies found that physically attractive persons could persuade behavioural intention because of mediation of certain traits or qualities perceived in them (Ahearne et al., 1999; Ebster & Reisinger, 2006; Ohanian, 1990). In a study on celebrity endorsement by Silvera and Austad (2003), the effect of an endorser's physical attractiveness on consumers' positive attitude towards the advertisement and the endorsed brand was mediated by consumers' positive attitude and favourable inference towards the endorser. Inference is naturally subjective because it involves one's perceptions towards another person. Hence, four mediating variables are selected in this research to bridge the impact of physical attractiveness of fitness trainer on client's exercise intention. They are trainer's perceived expertise, trustworthiness, likeability and health. Ohanian (1990) reported that perceived expertise and trustworthiness met all criteria as satisfactory dimensions in measuring source credibility with acceptable convergent and discrimination validity. Source credibility has been largely used in the study of physical attractiveness in the marketing context as it positively influenced product attitudes (Ebster & Reisinger, 2006). In the past study on review of fitness supplement, both perceived expertise and trustworthiness of a fitness influencer were found to positively affect consumers' purchasing intention towards the supplement (Broers, 2020). Furthermore, Yeh et al. (2020) found trust and intellectual competence or expertise mediated the impact of real estate agent's physical attractiveness on customer satisfaction and loyalty.

The likeability construct has been included in many physical attractiveness studies that investigated social skills of physically attractive persons who were often socially preferred (Ahearne et al., 1999; Eagly et al., 1991; Gadberry, 2009). Besides those perceived personalities, physically attractive fitness trainers were often associated with certain appearance-based qualities, including coupling their fit physiques with their state of health (Hutson, 2013). Thus, in this study, an additional mediating variable of 'Perceived Health' is added in the theoretical framework to better fit the context of stereotype perceived in a physically attractive fitness trainer. To sum up, in Hypothesis 1 to 4, attractive trainers would cause their clients to perceive that they are in their best health (Donaghue & Allen, 2015), they are likeable, they know their 'stuff' well and they are believable (Melton et al., 2011; Rotwein, 2003). The mediating variables and their corresponding hypotheses are explained in the following sections.

## **2.3. Trainer's Perceived Expertise**

According to prior findings, a trainer's expertise and level of knowledge were often assessed based on his or her physical appearance (Gadberry, 2009; Hutson, 2013). In an interview conducted by Rotwein (2003), most clients agreed that a trainer's experience and knowledge were measured based on his or her body shape as well as body tone. Correspondingly, Morgenstern (2016) found a direct correlation between a trainer's physique and participants' perception of that trainer's fitness ability. Similarly, a muscular trainer was also perceived to be significantly more knowledgeable and competent (Boerner, 2013). Based on these findings, it is predicted that the physical attractiveness of a fitness trainer would influence trainer's perceived

expertise (H1a) and eventually, this perceived expertise would persuade client's intention to sign-up for an exercise programme offered, leading to client's exercise intention (H1b).

#### **2.4. *Trainer's Perceived Trustworthiness***

In previous studies on attractiveness stereotype, physically attractive persons were often perceived to be more trustworthy (Ahearne et al., 1999; Eagly et al., 1991; Ebster & Reisinger, 2006; Garber Jr. et al., 2015; Ohanian, 1990). The trust paradigm in communication is all about the listeners' degree of confidence in a spokesperson and their level of acceptance of the message. When a spokesperson is perceived to be highly trustworthy, his or her opinionated message is more effective in causing attitude change. When this trait: trustworthiness, is brought into the fitness context, its characteristics and definition are not that different. Fitness trainer is said to be perceived as trustworthy when their clients are confident and trust him or her as a professional who is not seeking opportunistic gains. Hutson (2013), in his qualitative study, mentioned the importance of a trainer's physical appearance in establishing a trustful relationship with clients. Clients' trust would increase if their trainers possessed a physical proof, such as having a fit, muscular and lean body (Morgenstern, 2016). It is, therefore, predicted in this study that clients would perceive a physically attractive fitness trainer to be more trustworthy (H2a) and eventually be persuaded to sign-up for an exercise programme offered, leading to exercise intention (H2b).

#### **2.5. *Trainer's Perceived Likeability***

Adapting to a definition given by Ahearne et al. (1999), likeability means a quality in which a fitness trainer is pleasant and enjoyable to be around. 'Likeable sources convey that they have the receivers' best interest at heart, which communicates goodwill; a quality that can help sources achieve practical goals' (Gadberry, 2009, p.17). In the meta-analytic review on physical attractiveness stereotype conducted by Eagly et al. (1991), it was found in agreement that the strongest impact of physical attractiveness stereotype was on perceived social competence with its core on sociability, popularity and similar social attributes, including likeability. Interestingly, An et al. (2020) found a significant relationship between high level of physical activity and one's life satisfaction and happiness. Correspondingly, trainers who are physically active may have better life satisfaction and feel happier. When physically attractive fitness trainers look happy, they may appear to be more likeable and thus, approachable by their clients. Hence, this study postulates that a physically attractive fitness trainer would be perceived to be more likeable (H3a) and a likeable trainer would, ultimately, persuade potential clients to sign-up for an exercise programme offered (H3b).

#### **2.6. *Trainer's Perceived Health***

A fit and lean trainer with low body fat was found to be labelled as a healthy trainer (Philips & Drummond, 2001; Polman, 2004). Furthermore, in the qualitative study conducted by Hutson (2013), a trainer's fit-appearing physique was referred to as his or her corporeal credibility and symbolically representing his or her health. 'The construction of exercise as health work relied not on trainers' accreditation and certification, but on their bodily capital and fit physique' (Hutson, 2013, p.69). As a result, health has been used as an alibi and endorsement for appearance-based fitness goals by both clients and trainers (Donaghue & Allen, 2015; Maguire, 2001). 'A notion of health/fitness...was about maintaining a balance of food and exercise to

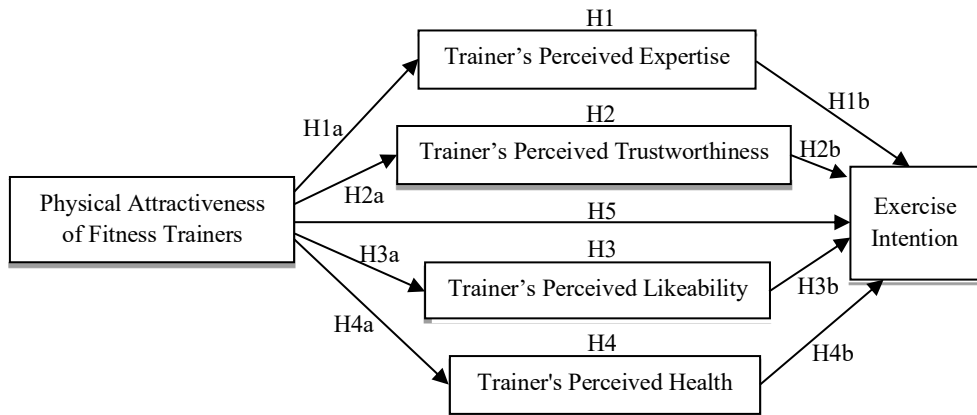
achieve a slim body shape' (Wright et al., 2006, p.711). Moreover, preference of slim body as an aesthetic criterion in human's physique appears to be more prominent among Malaysians who prefer females with medium Leg-to-Body Ratio (LBR) and males with low LBR (Swami et al., 2007). Therefore, in this study, it is predicted that clients would perceive a physically attractive fitness trainer to be healthy (H4a) and be persuaded to sign-up for an exercise programme offered, leading to their exercise intention (H4b).

## **2.7. Gym Goers' Exercise Intention**

According to Kilpatrick et al. (2005), exercise is defined as a type of physical activity that required the exertion of adequate intensity, duration, and frequency in order to achieve various physical and fitness or other athletic goals. The definition of exercise is different from that of sport activity. Sport activity is governed by formal and/or informal rules and mostly involved competition against opponent or oneself (Kilpatrick et al., 2005), while exercise is performed with proper techniques, with or without guidance from a trainer. In this study, exercise intention is measured as a gym goers' intention to sign-up for an exercise programme offered by a physically attractive fitness trainer. Gym goers are interchangeably referred to as 'clients', as they chose to work under the guidance of a fitness trainer.

Figure 1 illustrates the posited relationships discussed above that connect the research variables. As the main focus of this research is to examine the mediation effects of trainer's perceived expertise, trustworthiness, likeability and health; there are four hypotheses forwarded to test for the mediating relationships. Each of them is further divided into two sub-hypotheses, depicted as paths pointing towards and away from the mediations. Perceived expertise, trustworthiness and likeability are frequently identified as the favourable traits of physically attractive persons, in published studies, particularly in those related to physical attractiveness stereotype and endorser's credibility. As for perceived health, it is a new attribute added to this framework, owing to a frequent association between one's health-state and his or her fit-appearance. It is part of the unique relationship identified under the physical attractiveness in the fitness industry. The physical attractiveness of fitness trainer is anticipated to have a direct effect on gym goer's exercise intention. The direct relationship is represented by a path labelled as H5 in the theoretical framework.



**Figure 1: Theoretical Framework**

H1: Trainer's perceived expertise mediates the relationship between physical attractiveness of fitness trainer and gym goers' exercise intention.

H1a: Physical attractiveness of fitness trainer influences his perceived expertise.

H1b: Perceived expertise of physically attractive fitness trainer affects gym goer's exercise intention.

H2: Trainer's perceived trustworthiness mediates the relationship between physical attractiveness of fitness trainer and gym goers' exercise intention.

H2a: Physical attractiveness of fitness trainer influences his perceived trustworthiness.

H2b: Perceived trustworthiness of physically attractive fitness trainer affects gym goer's exercise intention.

H3: Trainer's perceived likeability mediates the relationship between physical attractiveness of fitness trainer and gym goers' exercise intention.

H3a: Physical attractiveness of fitness trainer influences his perceived likeability.

H3b: Perceived likeability of physically attractive fitness trainer affects gym goer's exercise intention.

H4: Trainer's perceived health mediates the relationship between physical attractiveness of fitness trainer and gym goers' exercise intention.

H4a: Physical attractiveness of fitness trainer influences his perceived health.

H4b: Perceived health of physically attractive fitness trainer affects gym goer's exercise intention.

H5: Physical attractiveness of fitness trainer influences gym goer's exercise intention.

### 3. METHODOLOGY

This research aims to investigate the effects of fitness trainer's physical attractiveness on gym goers' exercise intention, directly and mediated by their perceived expertise, trustworthiness,

likeability, and health. This cross-sectional study adopted a deductive research-technique using a self-administered questionnaire.

### 3.1. Research Instrument: Questionnaire Design and Scales

The questionnaire contained six variables with 5 to 6 measurement items in each, namely (1) physical attractiveness of fitness trainer, (2) trainer's perceived expertise, (3) trainer's perceived trustworthiness, (4) trainer's perceived likeability, (5) trainer's perceived health and (6) gym goer's exercise intention. The scales of measurement for all items under the six variables were based on a five-point Likert Format with the anchors of 1 as 'Strongly Disagree' and 5 as 'Strongly Agree'. The scale items, included in the questionnaire, were adapted from items used in prior papers which studied physical attractiveness phenomenon and its stereotype in marketing, celebrity's endorsement. These items were cross-checked with similar items utilised in past studies about the physical attractiveness and bodily capital in the fitness industry, especially studies within the last six years. For studies that were qualitative and inductive in their approaches, frequently mentioned key words and terms were identified and synthesised to construct additional scale items in the questionnaire for measuring their relevant variables. Table 2 shows the measurement items and their sources.

**Table 2:** Scale Items and Their Sources

Variable	Scale Items (in keywords)	Sources
PAFT	Attractive, Handsome, Fit, Muscular, Lean and Aesthetic	<i>Adapted from</i> Ahearne et al., 1999; DeShields et al., 1996; Gadberry 2009; Ohanian, 1990. <i>Synthesised from</i> Morgenstern, 2016; Phillips & Drummond, 2001; Polman, 2004; Rotwein, 2003.
TPE	Expert, Competent, Knowledgeable, Skilled and Experience	<i>Adapted from</i> Ahearne et al., 1999; Ebster & Reisinger, 2006; Gadberry; 2009; Ohanian, 1990. <i>Synthesised from</i> Boener, 2013; Hutson, 2013; Melton et al., 2011; Morgenstern, 2016; Phillips & Drummond, 2001; Rotwein, 2003.
TPT	Dependable, Honest, Not Seeking Opportunistic Gain, Reliable, Sincere, Trust	<i>Adapted from</i> Ahearne et al., 1999; Ebster & Reisinger, 2006; Ohanian, 1990. <i>Synthesised from</i> Hutson, 2013; Morgenstern, 2016.
TPL	Fun, Enjoyable, Nice, Friendly, Likeable, Like	<i>Adapted from</i> Ahearne et al., 1999; Gadberry, 2009. <i>Synthesised from</i> Hutson, 2013; Morgenstern, 2016.
TPH	Fit=Good Health, Lean=Healthy, Muscular=Vigorously Healthy, Low Body Fat=Healthy, Low Body Weight=Healthy	<i>Synthesised from</i> Donaghue & Allen, 2015; Fernandez-Balboa & Gonzalez-Calvo, 2017; Hutson, 2013; Morgenstern, 2016; Phillips & Drummond, 2001; Polman, 2004; Wright et al., 2006.
GEI	Inquire, Get Trainer's Contact Number (Self-Developed), Get a Trial Session (Self-Developed), Consider to Sign-up, Would Sign-up	<i>Adapted from</i> Caballero et al., 1989; DeShields et al., 1996; Ebster & Reisinger, 2006; Ohanian, 1999.

**Abbreviations:**

PAFT: Physical Attractiveness of Fitness Trainer

TPE: Trainer's Perceived Expertise

TPT: Trainer's Perceived Trustworthiness

TPL: Trainer's Perceived Likeability

TPH: Trainer's Perceived Health

GEI: Gym Goer's Exercise Intention

The questionnaire also contained several photographs of a male model, named as “Dave”, to allow respondents to visualise a physically attractive fitness trainer. It included a short prologue and two scenarios which were meant to give sufficient verbal apparatuses to the respondents in envisioning the real-time settings. The textual scenarios introduced the setting of the gym and its facilities as well as the exercise programme offered by a hypothetical gym. Utilising images instead of a video enabled the researcher to isolate the impact that the portrayed trainer had in persuading gym goer’s exercise intention, solely based on his physical attractiveness. By doing so, the study could measure the impact of the physical attractiveness of a fitness with better precision without inference.

The male model (model 3) used in the questionnaire was the highest rated model among three initial models tested in the Preliminary Attractiveness Survey (PAS); fifty students participated in the PAS and fifty-six percent of them rated model three as the most attractive model in terms of his physique and facial attractiveness. The three models were all males taking into consideration of the results from previous empirical studies which found the advantages of physical attractiveness in male salesperson over female salesperson who should not have been too attractive (Ebster & Reisinger, 2006). Moreover, using attractive female models might have caused social comparison jealousy among female respondents and led them to derogate the models and asperse their expertise and knowledge (Bower, 2001). All models presented in the study were actual fitness influencers cum fitness trainers. Another motivation to include real trainers were to exclude the Hollywood celebrities. By not including world-wide celebrities as models, the researchers could avoid a significant amount of variation in respondents’ knowledge and favouritism towards particular celebrities. Even though those variations are randomly distributed, “high within-group variation reduces the power of the study” (Till & Busler, 2013, p.5).

### ***3.2. Sampling Technique***

This study used a multi-stage sampling technique. The research population was residents of Melaka in Malaysia, considering the increasing issues of physical inactivity and underlying health issues in the state. According to Malaysian Health and Morbidity Survey, 2019, Melaka State was ranked as the third most inactive state, positioning after Perak and Putrajaya (Institute for Public Health, 2019). Approximately 33.2 percent of Melaka residents was physically inactive, making them vulnerable to many health issues. Consequently, 37.6% of Melaka residents were obese. Moreover, Melaka State was also ranked as the second highest state in term of its diabetic adults (13.7% of its total adult population had diabetics), the fourth highest state in term of its hypertension cases (18.8% of its adult population was diagnosed with hypertension) and the fifth highest state in prevalence of depression (at least 3.8% of Melaka’s adults was depressed). Despite these issues, there is a paucity of studies examining the prospects of sports and fitness marketing in Melaka, although as a touristic state, most previous studies conducted in the state were focusing on tourism; as Melaka is a popular tourist destination for its history and heritage (Goh et al., 2012; Nathan et al., 2020). Thus, selecting samples from those residing in Melaka was appropriate, considering the growing number of its obese population, diabetes, hypertension and depression cases which are the health problems associated to sedentary lifestyle and physical inactivity. Besides, since two of the independent variables were exercise motives, the sampling frame for this study was fitness centre-goers within Melaka as they already had their existing exercise motives.

The full list of all privately-owned fitness centres in Melaka was obtained from the Companies Commission of Malaysia (Suruhjaya Syarikat Malaysia). Subsequently, 10 fitness centres were randomly selected via INDEX function in the Microsoft Excel. Those ten fitness centres were ensured to represent all districts of Melaka unless the district did not have any fitness centre. The number of fitness centers required for each district was based on ratio-basis of the actual numbers. From each of those fitness centres, twenty-two gym-goers were randomly picked out, of their respective members-lists, totalling up to 220 potential respondents, and then, requested to fill-in the questionnaire. The completed questionnaires were sorted to obtain a minimum sample size of 172 which was obtained via the G\*Power Calculator with 5 percent probability of error ( $\alpha = 0.05$ ), 95 percent statistical power and medium effect size of 15 percent.

The data collected was coded and extracted to the SPSS to run the outliers-analysis. Twenty-two cases were removed and the remaining 192 cases were further evaluated for internal consistency reliability, convergent validity and discriminant validity. Besides, bootstrapping with 5000 iterations was applied for hypotheses testing and the t-values and p-values obtained were used to either accept or reject the hypotheses proposed.

### 3.3. Pilot Study

A pilot study was conducted among gym goers in the fitness centre of the Multimedia University-Melaka Campus and a few other fitness centres within Bukit Beruang area in Melaka, Malaysia. Sixty respondents were requested to fill-in the questionnaires. Data obtained were exclusively used for a purpose of the pilot study which tested the reliability of all scale items contained in the first set of questionnaires. The number of respondents selected for this pilot test was based on a minimum of ten percent sample, out of the total sample required (Connelly, 2008). Since this study required 172 number of samples, its ten percent is 17.2, rounding up to a minimum of 20 respondents. After the pilot study, all variables and their scale items were retained as their scores of Cronbach's Alphas, Composite Reliability and AVEs fulfilled the minimum criteria.

**Table 3:** Results of the Pilot Study

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Physical Attractiveness of Fitness Trainer	0.876	0.908	0.622
Trainer's Perceived Expertise	0.92	0.938	0.715
Trainer's Perceived Trustworthiness	0.921	0.938	0.717
Trainer's Perceived Likeability	0.937	0.95	0.761
Trainer's Perceived Health	0.917	0.938	0.752
Gym Goer's Exercise Intention	0.903	0.929	0.723

## 4. RESULTS AND DISCUSSION

From the 192 finalised sample, 79 respondents were from 18 to 40 years old age-group, representing the younger market segment. Table 3 presents the distribution of age groups of the respondents. As for gender, the sample had almost balanced representation from both male and

female gym goers. The gender-balanced responses show that both males and females actively participate in physical activities.

**Table 4:** Demographic Details of the respondents

Demographics	Categories	Frequency	Percentage
Ages-Groups	18-40 years old	152	79.2%
	41-64 years old	40	20.8%
Genders	Female	97	50.5%
	Male	95	49.5%

All variables had Cronbach Alpha scores above 0.70. Convergent Validity was tested using the Factor Loadings, Composite Reliability and the Average Variance Extracted (AVE) for all six variables: (1) Physical Attractiveness of Fitness Trainer, (2) Trainer's Perceived Expertise, (3) Trustworthiness, (4) Likeability, (5) Health and (6) Gym Goer's Exercise Intention. The outer loadings of some indicators of Physical Attractiveness of Fitness Trainer were below 0.70. However, since composite reliability and AVE values were satisfactory (as shown in Table 4 - Construct Reliability and Validity), convergent validity of the variable could be ensured (Chin, 2010; Fornell & Larcker, 1981).

**Table 5:** Construct Reliability and Validity

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Physical Attractiveness of Fitness Trainer	0.821	0.87	0.532
Trainer's Perceived Expertise	0.889	0.915	0.642
Trainer's Perceived Trustworthiness	0.902	0.924	0.67
Trainer's Perceived Likeability	0.925	0.941	0.727
Trainer's Perceived Health	0.884	0.916	0.686
Gym Goer's Exercise Intention	0.902	0.928	0.72

For analysing the discriminant validity, square root of the AVE for each variable was confirmed to be larger than the correlation of that respective variable to the remaining variables, as depicted in Table 5. According to Fornell and Larcker (1981), square root value of the AVE has to be greater than the highest correlation with any other construct because the construct should have shared more variance with its own indicators. Supplementing that, authors also looked into the HTMT values which were all less than the threshold of 0.85 (Henseler et al., 2015; Kline, 2011). Besides, the upper and lower boundaries of their confidence intervals did not include the result of 1. Thus, discriminant validity was established for all variables in this research model.

**Table 6:** Discriminant Validity Assessment Using Fornell Larcker Criterion

ID	Construct	1	2	3	4	5	6
1	Gym Goer's Exercise Intention	<b>0.849</b>					
2	Physical Attractiveness of Fitness Trainer	0.43	<b>0.729</b>				
3	Trainer's Perceived Expertise	0.577	0.542	<b>0.801</b>			
4	Trainer's Perceived Health	0.565	0.395	0.635	<b>0.828</b>		
5	Trainer's Perceived Likeability	0.598	0.372	0.554	0.677	<b>0.853</b>	
6	Trainer's Perceived Trustworthiness	0.596	0.406	0.603	0.675	0.757	<b>0.818</b>

**Table 7: Heterotrait-Monotrait Ratio (HTMT)**

ID	Construct	1	2	3	4	5
	Gym Goer's					
1	Exercise Intention					
2	Physical Attractiveness of Fitness Trainer	0.484 (0.357; 0.589)				
3	Trainer's Perceived Expertise	0.638 (0.534; 0.723)	0.617 (0.492; 0.723)			
4	Trainer's Perceived Health	0.63 (0.517; 0.715)	0.445 (0.316; 0.559)	0.71 (0.615; 0.788)		
5	Trainer's Perceived Likeability	0.652 (0.546; 0.736)	0.415 (0.287; 0.518)	0.612 (0.51; 0.695)	0.746 (0.664; 0.819)	
6	Trainer's Perceived Trustworthiness	0.647 (0.538; 0.741)	0.447 (0.312; 0.559)	0.665 (0.56; 0.745)	0.751 (0.666; 0.821)	0.839 (0.769; 0.891)

Note: The values in the brackets denote the lower and upper boundaries for the 95% confidence interval

The hypotheses test results are given in Table 8. Out of 13 hypotheses and their sub-hypotheses, only four are not supported. Results of all path coefficients and relevant p-values for the hypotheses testing are presented in the table below.

**Table 8: Findings on Hypotheses Testing**

Hypothesis: Relationship	Path Coefficient	P Value	Decision
H1: Perceived Expertise mediates the relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention			Supported
H1a: Physical Attractiveness of Fitness Trainer → Trainer's Perceived Expertise	0.542	<0.001	Supported
H1b: Trainer's Perceived Expertise → Gym Goer's Exercise Intention	0.265	0.002	Supported
H2: Perceived Trustworthiness mediates the relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention			Not Supported
H2a: Physical Attractiveness of Fitness Trainer → Trainer's Perceived Trustworthiness	0.406	<0.001	Supported
H2b: Trainer's Perceived Trustworthiness → Gym Goer's Exercise Intention	0.178	0.145	Not Supported
H3: Perceived Likeability mediates the relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention			Supported
H3a: Physical Attractiveness of Fitness Trainer → Trainer's Perceived Likeability	0.371	<0.001	Supported
H3b: Trainer's Perceived Likeability → Gym Goer's Exercise Intention	0.238	0.045	Supported
H4: Perceived Health mediates the relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention			Not Supported
H4a: Physical Attractiveness of Fitness Trainer → Trainer's	0.395	<0.001	Supported

Perceived Health				
H4b: Trainer's Perceived Health → Gym Goer's Exercise Intention	-0.042	0.331		Not Supported
H5: Physical Attractiveness of Fitness Trainer influences Gym Goer's Exercise Intention	0.058	0.184		Not Supported

Results for the first part of the research framework: hypotheses H1a, 2a, 3a and 4a (prior to the mediation paths), show that Physical Attractiveness of Fitness Trainer has a significant positive impact on trainer's perceived traits, including Expertise, Trustworthiness, Likeability, and Health (Hypotheses: 1a, 2a, 3a, and 4a are supported) which indicates that a physically attractive fitness trainer is provably perceived to be expert, trustworthy, likeable and healthy by gym goers.

This finding corresponds with the past literature. Previously, it was found that the trainers' expertise, competence and the level of knowledge were assessed based on his or her physical appearance and body shape (Boerner, 2013; Gadberry, 2009; Hutson, 2013, Morgenstern, 2016; Rotwein, 2003). Besides, a physically attractive person was often perceived to be more trustworthy (Ahearne et al., 1999; Eagly et al., 1991; Ebster & Reisinger, 2006; Garber Jr. et al., 2015; Ohanian, 1990). Hutson (2013), in his qualitative study, mentioned the importance of a trainer's physical appearance in establishing a trustful relationship with clients. 'Clients will be more trusting of his or her personal trainers if their trainers possess physical proof (i.e. fit, muscular, lean, etc.)' (Morgenstern, 2016, p.20). Moreover, a highly attractive person was often perceived to have favourable social competence (Ahearne et al., 1999; Eagly et al., 1991; Gadberry, 2009) and believed as being healthy (Hutson, 2013; Morgenstern, 2016; Phillips & Drummond, 2001; Wright et al., 2006).

As for the second part of the research framework: hypotheses H1b, 2b, 3b and 4b (post-mediation paths), the result exhibits that only Trainer's Perceived Expertise and Trainer's Perceived Likeability have significant positive impact on Gym Goer's Exercise Intention (Hypotheses: 1b and 3b are supported). Based on these results, Trainer's Perceived Expertise and Likeability are found to significantly mediate the relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention (Hypotheses 1 and 3 are supported).

To further confirm these mediation effects, total indirect effect (Physical Attractiveness of Fitness Trainer → Gym Goer's Exercise Intention) and specific indirect effects (Physical Attractiveness of Fitness Trainer → Trainer's Perceived Expertise → Gym Goer's Exercise Intention and Physical Attractiveness of Fitness Trainer → Trainer's Perceived Likeability → Gym Goer's Exercise Intention) were assessed; results are presented in Table 8 and 9. Both the p-values for total indirect effect and the specific indirect effects show significant results, validating indirect-only mediation via Trainer's Perceived Expertise and Likeability. As for the direct impact of the Physical Attractiveness of Fitness Trainer on Gym Goer's Exercise Intention, the p-value is insignificant (Hypothesis 5 is not supported), indicating that the physical attractiveness of a fitness trainer does not directly influence gym goer's exercise intention, rather through specific traits perceived in a trainer.

**Table 9: Total Indirect Effect**

Relationship	Path Coefficient	T Statistics	P Values
Physical Attractiveness of Fitness Trainer → Gym Goer's Exercise Intention	0.349	6.422	0.001

**Table 10: Specific Indirect Effects**

Relationship	Path Coefficient	T Statistics	P Values
Physical Attractiveness of Fitness Trainer → Trainer's Perceived Expertise → Gym Goer's Exercise Intention	0.143	2.834	0.041**
Physical Attractiveness of Fitness Trainer → Trainer's Perceived Trustworthiness → Gym Goer's Exercise Intention	0.072	1.338	0.181
Physical Attractiveness of Fitness Trainer → Trainer's Perceived Likeability → Gym Goer's Exercise Intention	0.089	1.848	0.065*
Physical Attractiveness of Fitness Trainer → Trainer's Perceived Health → Gym Goer's Exercise Intention	0.045	1.137	0.256

Note: \*\* Significant at 5%; \* Significant at 10%

Seeking motivation and relying on good qualities, including positive traits perceived, are the common reasons that persuade clients to engage with their trainer and/or instructor (Mears, 2007; Gadberry, 2009). The importance of the two qualities of expertise and likeability in the selection criteria of a preferred fitness trainer was mentioned in prior studies of Gadberry (2009), Melton et al. (2011), Morgenstern (2016) and Rotwein (2003). Correspondingly, this study also discovers that gym goers are mainly motivated by the attributes of likeability and expertise perceived in a fitness trainer. The distinct feature of these attributes is that they are immediately visible to the gym goers. The gym goers could easily recognise the expertise of a fitness trainer in a matter of seconds and then, be motivated to signing-up for the exercise programme. A trainer with likeable personality would further be a motivation for clients to engage and train with.

When comparing the significance of mediating effect between trainer's perceived expertise and likeability, it is obvious that perceived expertise has the highest significant level. Respondents of this study exhibited their concern about the expertise level of their potential fitness trainer. A trainer who is perceived as an expert, gives confidence that he knows what he is doing and thus, his exercise programme is believed to be more effective. In other words, a trainer's attractive physique is a walking testimony of his exercise programme's effectiveness. Similarly, in previous studies, trainer's level of expertise or competence was verified as the most common standard of gym goers, in deciding who was their favourite trainer (Morgenstern, 2016; Rotwein, 2003). In the context of celebrity's endorsement, Nguyen (2021) revealed the perceived expertise of an endorser as the most important aspect in influencing consumers' brand perception. Perceived expertise was even found to be highly relevant in predicting consumers' brand loyalty (Baniya, 2017). Although it was significant at only 10 percent, likeable trait still represents a pivotal social factor in gym goer's selection criteria of their preferred fitness trainer.



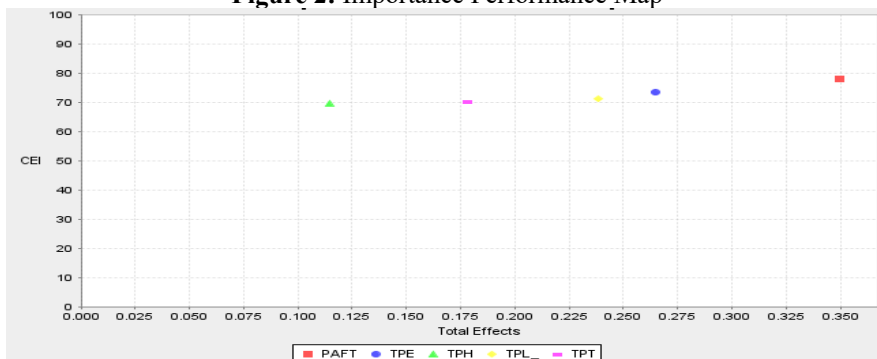
The p-values in Table 7 also reveal that Physical Attractiveness of Fitness Trainer has a significant positive influence on the Trainer's Perceived Health (TPH) implying that a physically fit trainer gives a healthy impression to the gym goers (H4a is supported). However, TPH does not affect gym goer's exercise intention (H4b is not supported). Trainer's fit physique would represent his or her ability in getting his or her self and potential clients to a healthy state (Hutson, 2013) and might influence client's intention to sign up for an exercise programme offered. However, this study finds that gym goer's perception of a healthy trainer does not necessarily motivate them to engage in the exercise programme offered.

The findings further show that Physical Attractiveness of Fitness Trainer has a direct and positive influence on the Trainer's Perceived Trustworthiness (TPT). Hutson (2013), in a qualitative study, revealed that trainer's physical appearance was an important factor in establishing a trustful relationship with his or her clients. However, the trustworthiness perceived in the trainer did not influence gym goer's exercise intention. The results reveal that gym goer's perception towards a trainer's physique increases their trust in the trainer but trustworthiness as such does not increase their intention to exercise. Likewise, Baniya (2017) found that an endorser's perceived trustworthiness was insignificant in predicting consumers' brand attitude. Aspect of trust could be more substantial in a longer period interaction when a relationship has been established. It might be a significant determinant to exercise adherence, rather than that to exercise intention.

#### 4.1. Importance-Performance Map Analysis (IPMA)

A post hoc Importance Performance Map Analysis (IPMA) was carried out with Gym Goer's Exercise Intention as the target variable. IPMA helps in assessing the performance and significance of each construct's relationship with the target variable separately (Ringle & Sarstedt, 2016; Nathan et al., 2019). The results of IPMA are given in Figure 2 – Importance Performance Map. The Y axis measures the performance of the constructs. The X axis measures the total effect which depicts the importance of each construct in the model. The result shows that Physical Attractiveness of Fitness Trainer has the strongest influence in persuading gym goer's intention to exercise.

**Figure 2: Importance Performance Map**



Since the direct relationship between Physical Attractiveness of Fitness Trainer and Gym Goer's Exercise Intention is insignificant in the model, the total effect for Physical Attractiveness of Fitness Trainer reflects mostly on the indirect effects. Among other variables having a direct

relationship with Gym Goer's Exercise Intention, Trainer's Perceived Expertise has the strongest influence on exercise intention with a performance value of 73.458 and total effect size of 26.5. Trainer's Perceived Likeability and Trainer's Perceived Trustworthiness have performance values of 71.155 and 70.163 along with an effect size of 0.238 and 0.178 respectively. Trainer's Perceived Health has the lowest influence on Gym Goer's Exercise Intention as compared to other variables studied, with a performance value of 69.586 and total effect size of 0.114.

## **5. LIMITATION AND FUTURE RESEARCH**

Future studies could consider gathering inputs from gym goers in multiple cities which aid in a comparative study to distinguish rural versus urban gym goers. As this study finds significant mediating role of trainer's perceived expertise and likeability on gym goer's exercise intention, future studies could expand this model to look at the significant role that gym as a social centre plays in the life of gym goers, especially on the role of trainer as a coach and peer co-trainees as social circles in the gym. Future studies could also investigate the motivation to exercise among gym goers and how it influences their decision making with regard to their perception towards a fitness trainer, exercise programme and intention to exercise.

The pandemic situation forced many gyms to shut down, some have changed their business models to offer virtual gym sessions. Future studies could also investigate the virtual gym classroom and physical attractiveness phenomena in online setting. The pandemic has also required many employees to work from home putting their fitness state at risk. Recent studies also highlighted the importance of company's commitment to its employees' well-being through providence of policies and support for promotion of physical activities and fitness at work (Görgényi et al., 2021). Future studies can investigate well-being of employees as well as company's commitment to fitness and physical activities among employees.

There are also growing interest among Malaysians as well as consumers from multiple regions of the world to foster healthier eating and lifestyle habits, such as the move towards consumption of organic foods (Nathan et al., 2021). Hence, future studies may investigate the impact of role models and the physical attractiveness phenomena in fitness as well as diet and food industry.

## **6. CONCLUSION**

Physical attractiveness of service personnel and its impact on perceived service performance has been an interesting phenomenon albeit illusive in sports marketing and exercise psychology. This study was designed to understand the effect of the physical attractiveness of a fitness trainer, and how it affects the perceptions and behaviour of gym goers, especially with their ultimate goal of deciding to exercise.

As hypothesised, physical attractiveness of fitness trainers has a significant impact on gym goer's intention to exercise. This study also finds that trainer's perceived expertise and perceived likeability significantly mediate the relationship between fitness trainer's physical attractiveness and the gym goer's exercise intention.

Gym goers are not merely motivated by the positive results of exercising, but also largely by the social elements found in a gym as a workout arena where social atmosphere, sensory perceptions and interactions with trainers play a significant role in their exercise motivations.

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