



Article

The Impact of the Physical Attractiveness and Intellectual Competence on Loyalty

Wen-Chih Yeh 1 , Chun-Chang Lee 2,* , Cheng Yu 2 , Pei-Shan Wu 2 , Jia-Yu Chang 2 and Jiun-Hau Huang 2

- Department of Real Estate Management, HungKuo Delin University of Technology, New Taipei City 23654, Taiwan; wen00126@mail.hdut.edu.tw
- Department of Real Estate Management, National Pingtung University, Pingtung 90004, Taiwan; 107257035@nccu.edu.tw (C.Y.); moon26548@gmail.com (P.-S.W.); cif033019@gmail.com (J.-Y.C.); a12378981@yahoo.com.tw (J.-H.H.)
- Correspondence: lcc@mail.nptu.edu.tw

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Abstract: This study aims to explore the factors determining consumer loyalty to real estate agents. Based on the past literature regarding the factors of loyalty, the study considers physical attractiveness and intellectual competence combined with a traditional loyalty model in proposing its conceptual framework. It then estimates the relevant parameters using a linear structural equation model (SEM). The subjects of the study consist of consumers in Kaohsiung City, Taiwan, aged at least 20 years old who have experience in engaging the services of real estate companies during housing transactions. A total of 300 questionnaires were distributed, with 268 valid ones being returned, for a valid return rate of 89.33%. According to the empirical results, physical attractiveness indirectly influences satisfaction through trust and intellectual competence, with satisfaction in turn affecting customer loyalty. The effect of physical attractiveness on satisfaction through trust is more significant than its effect on satisfaction through intellectual competence. These findings show that the relationship among physical attractiveness, intellectual competence, and trust plays an important role in determining satisfaction and loyalty. Past studies related to loyalty introduced various factors of loyalty; however, they rarely explored the effects of physical attractiveness and intellectual competence on loyalty. That is the difference between this study and past research.

Keywords: intellectual competence; physical attractiveness; trust; satisfaction; loyalty

1. Introduction

Within the market, customers are the main sources of profits for real estate companies, and they are, therefore, the most important assets of these companies. To real estate companies, customers are not just their main source of profits, but also important assets, and the only way to acquire customers is to develop a thorough understanding of their needs, so as to be able to meet profit objectives. Diener and Greyser [1] argued that 30~90% of customers who were not satisfied by a brand purchase would then choose not to purchase the products of the same brand in the future. This shows that the costs of complaints and brand transfers caused by dissatisfaction are considerably negative with respect to the profits of enterprises.

For individuals and families, the purchase of a house is among the most important transactions in life. Therefore, when purchasing a house, people typically exhibit great care in making key decisions and select a real estate company to assist in the transaction. Generally speaking, consumers' reasons for selecting real estate companies are as follows. With their professional knowledge and competence, real estate companies can recognize key housing information and help their customers to protect

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themselves. Furthermore, the reputation, brand, and attractiveness of such companies are also important factors in their selection [2,3]. The real estate industry is a service industry, so consumers may evaluate the image, perceptions, service attitude, and specialty resulting from the services provided by the real estate industry and individual real estate agents, and these factors may, in turn, further influence their confidence in, satisfaction with, and even loyalty towards those companies and agents [4]. A high degree of trust enhances the commitment of buyers and sellers and helps to maintain the relationship by reducing any intention to suspend the relationship, enhancing cooperation, reducing uncertainty, and even increasing the satisfaction of buyers and sellers [5]. Hence, trust can increase customer loyalty [6] and customer satisfaction. The issue of how to construct customer trust has, therefore, become a critical one. In addition, the above findings highlight the important role of trust in the service industry.

According to a TVBS News report from 2016 based on real estate industry statistics, transactions in the real estate market abruptly increased by 40% after Taiwan's 2015 presidential election. With this craze in housing trading, more and more people worked as real estate agents, and a trend emerged in which male and female agents were typically good-looking; they were physically attractive people with big eyes and pretty voices. In addition, their good-looking appearances resulted in more satisfying performances from the perspectives of their customers. Hence, in the real estate industry, a superior appearance allows an agent to achieve higher performance in terms of sales [7]. In other words, attractive real estate agents typically generate positive impressions among consumers. The expression "don't judge a book by its cover" is a common one. However, is it actually true that people do not make such judgments? According to past research, some factors that are unrelated to service content nonetheless influence customer satisfaction, including the attractiveness of service personnel. Physical attractiveness is one of the measures by which people make predictions about and classify others [8]. However, standards of physical attractiveness are based on personal subjectivity and can vary. Generally speaking, attractive or beautiful faces and figures and even dynamic communication skills, a sense of humor, and certain social techniques can result in greater customer preferences and higher satisfaction. Mobius and Rosenblat [9] stated that workers who are physically attractive and have jobs involving verbal expression earn higher wages. Physical attractiveness also strengthens workers' confidence and job satisfaction. When companies recruit advertising endorsers who are highly attractive in terms of their physical appearance, audiences will develop more positive advertising attitudes, trust levels, and purchase intentions toward the products of those companies. These effects result, in turn, in high satisfaction with and loyalty to the brands in question [10]. Furthermore, in addition to the influence of physical attractiveness on satisfaction, Robbins [11] argued that intelligence, fair rewards, job conditions, colleagues, and job attributes suitable for employees' personalities are associated with employees' job satisfaction. Among others, intelligence or intellectual competence is one of the key factors of such satisfaction. Relatedly, positive customer satisfaction reinforces customers' consumption intentions and establishes customer loyalty [12]. Based on the above, this study intends to determine whether or not real estate agents who are physically attractive and intellectually competent are more popular with customers and if those attributes enhance customer satisfaction, trust, and loyalty toward real estate services.

Real estate agents have various characteristics. This study adopts physical attractiveness and intellectual competence as the characteristics of interest for its analysis, exploring their relationship with customer satisfaction, trust, and loyalty (this study terms the relationship among the three the "traditional loyalty model"). Past studies related to loyalty introduced various factors of loyalty; however, they rarely explored the effects of physical attractiveness and intellectual competence on loyalty. That is the difference between this study and past research. In addition, past studies treated physical attractiveness and intellectual competence as manifest variables. In fact, physical attractiveness and intellectual competence should be treated as latent variables. Using structural equation modeling, this study coped with these latent variables and integrated the traditional loyalty model to establish the conceptual framework of the study.

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In the literature on physical attractiveness and intellectual competence (including professional competence), Chaker, Walker, Nowlin, and Anaza [13] pointed out that the physical attractiveness of managers positively influences the affective commitment of salespeople toward them, thereby enhancing the salespeople's trust in the managers. Physical attractiveness is helpful for increasing customers' satisfaction and purchase intentions. When salespeople make mistakes, their physical attractiveness can make it easier for customers to overlook their mistakes [14]. Furthermore, in the literature pertaining to intellectual competence (including professional competence), a majority of studies have concurred that professional competence has a positive influence on customer satisfaction, loyalty, and trust [15–17]. These studies, however, have not examined the factors of both physical attractiveness and intellectual competence together, with the exception of a study by Hwang, Han, and Choo [18]. Those authors employed a linear structural equation model to study the relationship between service personnel and players in the casino industry and suggested that the physical attractiveness and intellectual competence of casino service personnel can enhance their bonds with players, thereby enhancing customer satisfaction and commitment, as well as developing good customer citizenship behavior. Fang, Zhang, and Li [19] studied the effects of the physical attractiveness of service personnel in the tourism industry on the engagement of tourists. They suggested that when the personnel are physically attractive, the customers will feel gratified on a psychological level, thus increasing their willingness to interact with the service personnel and ultimately strengthening the degree of their engagement. Moreover, the influence of physical attractiveness on employee-customer interaction is mediated by the employees' professional competence. Of these two studies, the study by Hwang, Han, and Choo [18] did not take into account the relationship between physical attractiveness and intellectual competence, while the study by Fang, Zhang, and Li [19] merely adopted the mediating effects of physical attractiveness and did not take into account the relationship between both factors.

The key to the sustainable development and operation of a business lies in the support of loyal customers. When customers are satisfied, they will have the willingness to become loyal customers and may take the initiative to share their experiences and, thus, generate word-of-mouth marketing. This is also crucial for the real estate industry in terms of achieving sustainable development and success in ever-changing and competitive times. This study employed a traditional loyalty model with trust as the basis, in which trust generates customer satisfaction and feedback through satisfaction supports the development of loyalty. In order to improve the extensiveness of the traditional loyalty model, this study introduced the most approximate extrinsic and intrinsic factors (physical attractiveness and intellectual competence, respectively) that influence the current state of the real estate industry. By doing so, the development of satisfaction can be stimulated, loyalty can be maintained, and the goal of sustainable development can be achieved.

The first section of this paper consists of the Introduction. In the second section, the theoretical background regarding physical attractiveness and intellectual competence is elaborated. In the third section, related literature is reviewed, and the hypotheses of the study are established. In the fourth section, the research methods of the study are introduced. This study adopts the structural equation model (SEM) and integrates the traditional loyalty model to construct the causal relationships among real estate agents' physical attractiveness and intellectual competence and customer loyalty. In the fifth section, the data analysis of the questionnaire sample and the measurement of the reliability and validity of the questionnaire are discussed. Section 6 of the paper presents the empirical results and a related discussion. The last section of the paper provides conclusions and suggestions.

2. Theoretical Background

According to Xie et al. [20], the house price-to-income ratio of real estate in Taiwan is slightly high, which lowers the public's intention to purchase/sell houses. Moreover, owing to the complexity of real estate-related subjects, disputes were common when these subjects were first introduced. In recent years, the real estate industry has headed toward dedicated and branded services in order to elevate the quality of service, with such services being achieved through models based on differentiated

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advantage and deep focus [21]. Here, the differentiated advantage emphasizes providing unique customer service experiences, and the first and most important step is to require service personnel to have a good demeanor and appearance, while deep focus is directed toward a specific customer group (luxury housing or common apartments). Establishing goals through differentiated advantage and deep focus models are the targets and approaches adopted by the real estate industry for marketing and development purposes. Therefore, real estate companies often dispatch the employee with the highest level of intellectual competence and physical attractiveness to promote their business. When customers are satisfied with the company's services and professionalism, they will develop trust and will proactively share their experiences with their friends, thereby generating word-of-mouth marketing and increasing customer loyalty.

Based on the perspective of the development of Taiwan's real estate industry, in the past, Taiwanese real estate agents merely emphasized marketing tactics and neglected intellectual (professional) competence, which resulted in numerous disputes. Therefore, the Government of Taiwan stipulated the Real Estate Broking Management Act J (pertaining to sales contract procedures) in 1999 and the Land Administration Agent Act J (pertaining to housing transfer procedures) in 2001, both of which serve as mechanisms for regulating the profession. These acts ushered in a period in which certifications are required in the real estate industry, which is also the period in which the industry has become centered on professionalism (intellectual competence). Due to the impact of the economic slump, the survival of firms in the real estate industry depends on their efforts to maintain their brand images. In addition, as the reward system of the real estate industry differs from that of common companies (with high-ranking professionals being agents without a base salary who rely solely on sales incentives; intermediate professionals being those with a low base salary and high sales incentives; and common professionals being those with a high base salary and low sales incentives), the salaries of agents are determined based on their commissions. In light of these differences, a real estate company will create custom apparel and use vivid colors to enhance the extrinsic physical attractiveness of its employees, as well as to highlight the professionalism and diversity of its brand. In terms of the intrinsic factor of intellectual competence, meanwhile, companies will encourage their employees to take up relevant professional training programs and obtain relevant certifications in order to enhance their intellectual competence. The employees also receive additional incentives as a reward for obtaining these certifications. When a company has both extrinsic physical attractiveness and intrinsic intellectual competence, customers will generate trust in the company's brand, which is helpful for promoting their business. Therefore, whether such transformations are able to generate customer satisfaction and loyalty, i.e., the issue of the sustainable development of the real estate industry, is the topic discussed in this study.

2.1. Physical Attractiveness

The early literature in the field of psychology generally established the characteristics of individuals' physical attractiveness. For instance, certain types of faces and figures are attractive to others. Faces in particular are viewed as the most representative parts of individuals, and facial attractiveness is significantly related to overall physical attractiveness [22–24]. Charming faces result in positive affection from others [25]. Hence, faces are one of the most critical factors of physical attractiveness. Bower and Landreth [26] suggested that physical attractiveness refers to beautiful faces and graceful figures. Mobius and Rosenblat [9] stated that beauty is also associated with intelligence, social competence, and health. Physical attractiveness and a charming appearance can be the conditions of personal realization. Markowitz-Elfassi and Tsfati [27] studied the relationship between Israeli politicians' facial attractiveness and media exposure, and according to their findings, with a one unit increase on an attractiveness scale, a politician's exposure on TV news was increased by 34%. Nevertheless, facial attractiveness did not significantly influence the coverage in terms of unfavorable or neutral news. Therefore, although there are various definitions of physical attractiveness and although such attractiveness depends on the prevalent social trends of a given time period and the personal

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subjectivity of observers, a person' attractiveness, particularly their facial attractiveness, can be adopted to predict their personal popularity, social skills, and future life. Therefore, physical attractiveness tends to be regarded as an important clue by which people judge others.

In addition, in the field of psychology during the same period, literature from another school not only stated the key factors of attractive physical characteristics, but also emphasized that physical attractiveness is reflected in individuals' dynamic behavioral characteristics, such as their manner of dress, language, gestures, etc. Early research argued that physically attractive people tended to be regarded by others to have superior competence levels, personalities, and interpersonal relationships. For instance, Dion et al. [28] and Goldman and Lewis [29] stated that besides physical attractiveness, social activity competence is also one of the key factors of attraction. Eagly et al. [30] argued that according to general consumer cognitions, people with a high degree of physical attractiveness tend to be viewed as having characteristics such as social achievement, knowledge, concern about others, integrity, etc. During the same period, Riggio et al. [31] also emphasized that attractiveness is not limited to static dimensions, such as facial attractiveness, physical attractiveness, or how one dresses. Rather, they argued, authentic attraction should include dynamic aspects, such as social intelligence and social skills, including the performance of language behaviors, communication skills, sense of humor, sensitivity in responding to others, and proper self-disclosure. More recently, researchers have stated that people who are physically attractive are regarded by others as having better careers and positive social characteristics, such as thoughtfulness, kindness, tranquility, modesty, and extroversion, among others [32]. Keh et al. [33] conducted one experiment on physical attraction, emotional expressiveness, and helpfulness to others among retail industry employees and their effect on customer satisfaction and, according to the experimental results, found that the three attributes enhanced customer satisfaction. However, among the attributes, the effect of the employees' helpfulness to others was the most significant. In addition, the employees' emotional performance, physical attractiveness, and helpfulness to others influenced customer satisfaction. Sanya [34] stated that appearance is extremely important in terms of the impressions made on others. When we are satisfied with how we look in the mirror, our confidence is enhanced. Everyone knows that an intelligent appearance is an extremely critical characteristic. In the daily lives and careers of individuals, appearance is important. Therefore, in addition to its basic physical functions, the body also constantly demonstrates people's consciousness and views in a way that effectively constructs individual images of their appearance. According to one report in the field of psychology [35], the main factor determining confidence is appearance. Beautiful things and people not only result in positive images, but also trigger positive capacities such as trust and a sense of safety. Based on the above, one person's attractiveness can be fully demonstrated by individual physical movements and language expressions. The said attractiveness can be reflected in positive interactions with others, resulting in more superior social competence and a better career.

Physically attractive people tend to reveal advantages in interpersonal interactions through their body language and positive capacities. Langlois and Kalakanis [36] proposed the following views on physical attractiveness: (1) in our daily lives, stereo-typed images of beauty exist; (2) people with attractive appearances are considered to have more positive personality traits; and (3) people with attractive appearances are more easily treated in a friendly manner by others. Goldsmith et al. [37] stated that physical attractiveness is classified into appearance and specialty. Appearance can be a person's look. Generally speaking, the appearance of individuals plays a critical role in their personality development and social relationships; specialty, meanwhile, consists of the scope to provide correct information sources. Appearance tends to determine the way one is treated. People develop positive expectations because of others' physical attractiveness [38]. In daily life, social capacity is generally considered to be necessary. Attractive people tend to have good communication skills, and they can actively establish interpersonal relationships [39]. Based on the above, this study suggests that physically attractive people possess advantages in their interpersonal interactions and

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work. Moreover, they have more opportunities and show positive effects on the companies for which they work.

In terms of work, those who are physically attractive tend to acquire various advantages. For instance, they have more opportunities when searching for jobs, and their interactions with colleagues are generally more advantageous. They can also enhance customer satisfaction and corporate profits. Beehr and Gilmore [40] argued that in face-to-face communication, physical attractiveness is the key factor in drawing others' attention. With higher attractiveness, people perceive higher satisfaction in terms of social relationships and employment. Jobs involving face-to-face communication usually require the job-holder to be attractive. When companies recruit attractive employees, customers have higher intentions to pay for their products and services. This in turn increases the revenues and profits of the enterprises [41]. In addition, beautiful employees tend to have higher wages and better job performance [42]. Khan and De Angeli [43] stated that physical attractiveness can result in positive work personalities and active and positive behaviors toward others. According to their research, customers tended to develop and maintain higher evaluations of attractive agents. According to an empirical figure analysis of 180 university courses by [44], university teachers who are physically attractive positively influenced homeroom teachers' cognitive performance and university program performance in Northern Europe. This study suggested that in workplaces, real estate agents should cope with buyers and sellers and seek to maintain a professional image at the same time. Their external images and attractiveness should be among the key factors of their work.

Gupta, Etcoff, and Jaeger [45] suggested that physical attractiveness has a significant and positive influence on our psychological well being and also significantly reduces stress and depression. Li, Xie, Gao, and Guan [46] opined that the physical attractiveness of service providers has a significant and positive influence on customer citizenship behavior, in addition to generating numerous benefits for sales, such as increasing customer satisfaction and purchase intentions. Villi and Koc [14] suggested that customers often overlook the mistakes made by salespeople who are physically attractive. In other words, customers are less likely to vent their anger toward or express negative emotions toward salespeople who are physically attractive. Hwang, Han, and Choo [18] revealed that customers felt more gratified when they interacted with service personnel who are physically attractive and were more willing to strengthen their rapport, thereby enhancing customer satisfaction and commitment. Malkinson, Waldrop, Gunsolley, Lanning, and Sabatini [47] concluded that a person with the attribute of physical attractiveness often gives others a feeling of increased friendliness, trustworthiness, confidence, and intelligence. Moreover, the display of physical attractiveness is not only limited to supervisors, as first line service personnel with the attribute of physical attractiveness are more likely to achieve greater professional exposure and visibility, which is helpful for salary increases. Therefore, employees will take great care regarding their appearance and manners, in addition to enhancing their etiquette training [48].

2.2. *Intellectual Competence*

Chamorro-Premuzic and Furhnam [49] defined intellectual competence as individuals' competence in acquiring and maintaining knowledge over the whole life cycle. Such competence depends on not only traditional abilities, but also competence in terms of self-evaluations and individual personality traits. In workplaces, intellectual competence is generally defined as employees' competence in performing their duties. It includes industrial knowledge, as well as background and professional knowledge. For instance, accountants must have excellent mathematical abilities, while writers must possess strong spelling and grammar skills. Theoretical measurements of intellectual competence include several dimensions. Peterson [50] argued that intellectual competence is classified into two dimensions: academic mastery and intellectual resourcefulness. The American psychologists Guilford and Hoepfner [51] stated that human beings' intelligence is the demonstration of thinking. In psychological activities in general, thinking includes the content, operation, and production of thoughts. Butterfield and Metcalfe [52] suggested that intellectual competence refers to five kinds

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of ability: (1) Analysis: it combines complicated or diverse messages, collects and studies figures, and complements figures by intuition and experience. (2) Design: it develops creative solutions and translates messages into images. (3) Problem solving: it immediately recognizes and solves problems, collects and analyzes sophisticated messages, and develops alternative solutions. (4) Item management: it establishes item planning and coordinates items, communicates changes and progress, and manages the items of group activities. (5) Technique and skill: it evaluates personal advantages and shortcomings, pursues training and development opportunities, is devoted to the constant enhancement of knowledge and skills, and shares professional knowledge with others. In the past literature, most studies have demonstrated that in education and classes, intellectual competence positively influences students' potential via such factors as learning motivations, learning attitudes, learning effectiveness, problem solving, and interpersonal relationships [53]. In workplaces involving face-to-face communication, intellectual competence, professional knowledge, and the recognition of competence are associated with the degree of customer satisfaction [54]. In other words, with better intellectual competence, service personnel can provide professional service through abilities such as thinking, operations, and problem solving in order to meet customers' expectations and enhance their satisfaction. In addition, with respect to the relationship between intellectual competence and the performance of sales, according to research, salespersons' professional knowledge (intellectual competence) might influence their results in terms of sales [55]. In interactions between customers and agents, agents with attractive qualities such as intellectual competence, social ability, honesty, and integrity tend to be more persuasive [56]. Research by Wexler [57] showed that customers recognized agents' intellectual competence through information regarding their qualifications. As for the relationship between customer preferences and agents' social skills, when the intellectual competence of agents is higher, they are more attractive to customers. Thus, intellectual competence positively influences individuals' personal learning effects. Moreover, in workplaces, it positively draws customers' attention, reinforces customers' satisfaction, and increases performance in terms of sales. Therefore, the means of enhancing customer loyalty through the intellectual competence of real estate agents is an important issue that needs to be addressed by the real estate industry. Seema et al. [58] suggested that for customers to display their loyalty, businesses must first elevate their customers' perceived competence and follow up by increasing their engagement through their experiences, then strengthening the communication efficiency of the employees. All of these aspects contribute toward the application of intellectual competence to enhance customer loyalty in practical situations. Secchi, Roth, and Verma [59] pointed out that creativity improvisation competence has a positive influence on customer satisfaction. Newell, Wu, Leingpibul, and Jiang [15] opined that the professional competence of salespeople has an effect on long-term business relations and that professional competence has a positive effect on customer trust and loyalty. Yu and Tseng [16] suggested that the professional competence of salespeople directly generates a positive influence on customer loyalty or indirectly through the qualities of the salesperson-customer relationship, such as satisfaction, trust, and commitment. Arditto, Cambra-Fierro, Fuentes-Blasco, Jaraba, and Vázquez-Carrasco [17] pointed out that the professional competence of salespeople allows them to demonstrate their knowledge of a product and meet customer needs, thereby reinforcing the trust of customers. Meanwhile, professional competence can also reduce the customers' perceived risk and strengthen enjoyable interactions. In their business-to-business (B2B) sales model, Lussier and Hall [60] showed that professional competence has mediating effects on the customers' perceived salesperson cooperation and relationship outcomes. Hwang, Han, and Choo [18] suggested that salespeople with professional competence should ensure successful transactions and provide recommendations for customers, thereby reinforcing the salespeople-customer relationship, as well as enhancing customer satisfaction and commitment.

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3. Literature Review and Research Hypotheses

3.1. Relationship Among Physical Attractiveness, Intellectual Competence, Satisfaction, and Trust

According to past research, physical attractiveness refers to the degree to which an individual is considered to be aesthetically pleasing by other people [61]. In early studies on physical attractiveness, Furman and Flanagan [62] stated that there are four characteristics of physical attractiveness: (1) standards of physical attractiveness, which are based on height, figure, symmetry, sex-typical hormonal markers, and other specific physical characteristics; (2) judgments of physical attractiveness, which include the meaning of evolutionary psychology and the result of adaptations to the environment; (3) appearance clues of physical attractiveness, which are relatively associated with health, such as the waist–hip ratios and weights of females being significantly predictive of attractiveness and health; and (4) "What is Beautiful is Good".

It is generally believed that intelligence and physical attractiveness can be genetically inherited or achieved via physical conditioning. There is a positive correlation between intelligence and physical attractiveness, since they reflect personal genetics and the stability of developmental quality [63]. Attractive people are seemingly intelligent. According to the research of Jackson et al. [64] and Langlois and Kalakains [36], there is a significantly positive correlation between intelligence and physical attractiveness. In comparison to those who are less attractive, attractive people are considered to be more competent [64]. Good-looking people are treated as more intelligent and competent than unattractive people [65]. People believe that attractive individuals are more likely to have general attractive qualities, such as intelligence and likeability [66]. Research in psychology has consistently supported the finding that, among both children and adults, physical attractiveness shows a direct and positive correlation with intellectual competence. The appearances of individuals influence others' positive cognitions regarding those individuals' intelligence and personalities. Thus, this study proposes H1:

Hypothesis (H1): *Perceptions of physical attractiveness significantly and positively influence the recognition of intellectual competence.*

According to the research of [67], advertising endorsers' physical attractiveness significantly and positively influences customer satisfaction. Witz et al. [68] proposed the concept of aesthetic labor and suggested that beautiful faces, pleasant voices, and fit figures are the relevant qualifications in the recruitment of customer-contact employees in the hospitality industry. For managers, employees with those qualities not only attract more customers, but also convey a company's image in a positive manner. Khan and Sutcliffe [56] argued that in interactions between customers and agents, agents with attractive qualities such as intellectual competence, social ability, honesty, and integrity are more persuasive. They can easily enhance customer satisfaction. Relatedly, employees' presence, appearance, and characteristics influence customer cognitions of corporate images. When the degrees of employees' presence, appearance, and characteristics are higher, the cognitions regarding the associated corporate images are more significant. Once such employee qualities enhance a corporate image, the corporate image will, in turn, influence consumers' perceptions regarding the value of and their satisfaction with the company. Thus, this study proposes H2:

Hypothesis (H2): Cognitions regarding physical attractiveness significantly and positively influence consumer satisfaction.

In the service industry, the focus is often on the physical appearance of salespeople. Physical attractiveness is not only a feasible managerial tool, but also influences trust [13]. Attractive people tend to be more reliable in interpersonal interactions. Widgery [69] stated that the reliability of information from sources who are physically attractive was significantly higher than that from sources who are not physically attractive. Therefore, information conveyed by physically

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attractive people is more reliable. Kahle and Homer [70] argued that providers' physical attractiveness influences user attitudes toward products or things. Marty et al. and Till and Busler [71,72] further validated the finding that advertising endorsers with higher physical attractiveness show higher persuasive effects. According to the research findings of Bower and Landreth [26], consumers tend to trust advertising endorsers with high degrees of attractiveness. Cleeremans [73] suggested that the attractiveness of individuals in terms of appearance can predict their reliability. Thus, this study proposes H3:

Hypothesis (H3): Cognitions regarding physical attractiveness significantly and positively influence consumer trust.

Real estate agents serve as intermediaries between housing transactions. Their main job is to provide information to buyers and sellers alike, as well as applying their professional skills (intellectual competence) during contract signing [3]. Gardner [54] argued that intellectual competence, professional knowledge, and cognitions of competence are associated with the degree of customer satisfaction. According to Robbins [11], intelligence, fair rewards, job conditions, colleagues, and job characteristics suitable for employees' personalities are related to employees' job satisfaction. Irma and Rajiv [74] mentioned that different job characteristics should be based on different knowledge management procedures in order to enhance satisfaction effectively. Thus, this study proposes H4:

Hypothesis (H4): Cognitions regarding intellectual competence significantly and positively influence consumer satisfaction.

3.2. Relationships Among Satisfaction, Trust, and Loyalty

Satisfaction derives from perceptions of the functions and characteristics of products and their outcomes and individuals' feelings or disappointment caused by their expectations regarding said products [75]. Gronholdt et al. [76] argued that customer satisfaction is the key issue for all enterprises in terms of enhancing customer loyalty in order to create superior sales performance. It is regarded as the key factor for reinforcing loyalty. Customers with high satisfaction have more intentions to repurchase; they also exhibit positive word-of-mouth and recommend products to others [77,78]. When consumers' perceived satisfaction is higher, their intentions to repurchase will be higher. Therefore, satisfaction is the main predisposing factor of repurchase intentions [79]. Customer loyalty is based on the satisfaction of customers with their past consumer experiences, and satisfied customers typically intend to maintain the relationship [80]. A study by Lee et al. [3] indicated that the search costs in real estate transactions significantly affect customer loyalty through customer satisfaction. Furthermore, providing customers with high quality services increases their satisfaction, which elevates their repurchase intentions and loyalty [81]. Thus, this study proposes H5:

Hypothesis (H5): Cognitions regarding satisfaction significantly and positively influence customer loyalty.

Trust can prevent perceptions of complications and fragility among consumers in transactions since with trust, consumers can subjectively eliminate the possibility of improper behavior by the other party in the transaction [82]. Trust not only allows enterprises to reduce the cost of developing new customers, but also means that the products and services provided are more likely to satisfy customers' internal needs. Trust is the key factor that influences long-term relationships between customers and enterprises [78,83]. When customers have strong confidence in enterprises, they value their transactions with those enterprises; furthermore, their satisfaction is higher, and they exhibit the intention to establish long-term transaction relationships [84,85]. Thus, this study proposes H6:

Hypothesis (H6): Cognitions regarding trust significantly and positively influence customer satisfaction.

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In order to acquire customer loyalty, the trust of customers is the priority [86]. Maxham and Netemeyer [87] argued that when consumers trust sellers and are satisfied, this significantly and positively influences the consumers' repurchase intentions. According to the research findings of Simpson et al. [88], with an active attitude, it would result in consumers' strong confidence in the companies and their products. Trust ultimately reinforces customer loyalty. When consumers trust specific products, services, and brands, this leads to consumer loyalty and positive word-of-mouth regarding those products, services, and brands [89]. According to the research findings of Kim et al. [90], trust, satisfaction, and service quality positively and significantly influence intentions of continuous use. Many studies have demonstrated that confidence in brands significantly and positively affects consumer loyalty [91,92]. Thus, this study proposes H7:

Hypothesis (H7): Cognitions regarding trust significantly and positively influence customer loyalty.

4. Research Design

4.1. Research Framework

According to the basic background, literature review, and organization of the hypotheses described above and based on the relationship among satisfaction, trust, and loyalty (which this study calls the traditional loyalty model), this study integrates the traditional loyalty model with two latent variables, intellectual competence and physical attractiveness, to yield a new conceptual framework is shown in Figure 1.

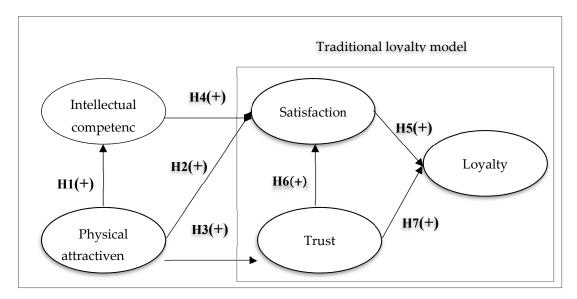


Figure 1. Loyalty study framework.

4.2. Questionnaire Design

The questionnaire used in this study included two parts. Part 1 consisted of queries regarding the subjects' basic information, including gender, age, occupation, income, and past experiences in dealing with real estate companies. Part 2 consisted of items regarding latent variables such as intellectual competence, physical attractiveness, satisfaction, trust, and loyalty. A 5 point Likert scale was provided for the subjects' responses to these items, where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

As for physical attractiveness, according to the dimensions of physical attractiveness proposed by Richins [93] and Striegel-Moore et al. [94], this study classified physical attractiveness into beautiful faces and slim bodies. Furthermore, based on the dimensions of physical attractiveness developed

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by Bower and Landreth [26], this study divided physical attractiveness into appearance, reliability, and specialty. The study included 4 items to measure physical attractiveness. As for intellectual competence, the American psychologist Sternberg [95] argued that intellectual competence consisted of three different kinds of ability, including: componential intelligence, which consists of the effective processing of messages in the cognitive process; contextual intelligence, which consists of practical intelligence in adapting to changes in the environment in order to accomplish one's life purpose; and experiential intelligence, which refers to individuals' ability to recognize their experiences to accomplish their goals. Since past research did not propose a scale to measure consumers' views regarding real estate agents' intellectual competence, this study attempted to design a proper scale. It was mainly based on Sternberg's [95] definition of intellectual competence and thus classified it into componential intelligence, contextual intelligence, and experiential intelligence; the scale included 3 items intended to measure intellectual competence is shown in Appendix A Table A1.

As for trust, this study reviewed the statements of Doney and Cannon [96] and Chaudhuri and Holbrook [97] on brand trust and classified trust into dependability and benevolence as sub-dimensions of its measurements. The study included 8 items to measure trust. As for customer satisfaction, based on Fornell [98] and Pappu and Quester [99], who treated customer satisfaction as an overall perception, and the questionnaire developed by Bettencourt [100], this study selected proper items, including three questions, to measure customer satisfaction. Finally, as for loyalty, early definitions and measurements of customer loyalty mostly emphasized consumers' behaviors. In other words, they measured customer loyalty in terms of "repurchase behavior". However, with the development of marketing research, it has been demonstrated that repurchases are not equal to customer loyalty [101]. Based on the measures of customer loyalty proposed by Oliver and Cossío-Silva et al. [102,103], this study classified customer loyalty into attitude loyalty and behavior loyalty. The study included 5 items to measure brand loyalty.

4.3. Sampling Design and Acquisition of Samples

First, in sampling, the number of samples selected was important as it affected the precision of the estimated results. This study assumed a tolerable error of d = 0.05 and a significance level of α =10%. Thus, the number of samples needed to obtain a 90% confidence level was n = 271. The study retrieved 268 valid samples, which was close to the above requirement that the number of samples must be higher than 271. As for its research scope, this study focused on more crowded areas in Kaohsiung City, including the areas around the TRA Kaohsiung Station, the Pier-2 Art Center, and Taroko Park, and distributed the questionnaires for its survey in those areas. The research subjects were those who were at least 20 years old and who had experienced at least one housing transaction involving their receipt of the services of a real estate company. This study adopted convenience sampling and a one-to-one field questionnaire survey. The questionnaire survey lasted from 1 July to 31 August 2016. It distributed a total of 300 questionnaires and retrieved all 300. After eliminating 32 invalid questionnaires, a final total of 268 valid questionnaires was obtained, for a valid return rate of 89.33%.

5. Information of Samples

This study conducted its statistical analyses using the AMOS statistical program of SPSS for Windows 22.0. In order to explore the characteristics of the sample, it first described the statistics of the sample. Secondly, it conducted reliability and validity analyses of the constructs of intellectual competence, physical attractiveness, trust, satisfaction, and loyalty.

5.1. Statistical Description of the Sample

Among the study subjects who returned valid questionnaires, fifty-one-point-five percent were male (138 subjects) and 48.5% were female (130 subjects). As for marital status, the percentages of married and unmarried subjects were 50% each (that is, 134 subjects in each category). As for their

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age, the average age if the subjects was 37 years; the youngest was 21, and the oldest was 65. As for education, subjects with a university education (including four-year and two-year colleges) accounted for the largest proportion of the sample at 47.4% (127 subjects), followed by subjects with senior school education and subjects with vocational school education, with both groups each accounting for 21.6% (58 subjects) of the total sample. As for occupation, the percentage of subjects working in the service industry was the highest at 35.8% (96 subjects), followed by the percentage of subjects working in the manufacturing industry at 14.2% (38 subjects). As for personal average monthly income, the percentage of subjects earning NTD 30,001~NTD 40,000 was the highest at 41.0% (110 subjects), followed by the percentage of subjects earning NTD 20,001~NTD 30,000, which was 26.1% (70 subjects). The percentage of subjects who had received real estate service in buying a house was the highest at 51.5% (138 subjects). The percentage of subjects who had received real estate service in selling a house was 14.9% (40 subjects). The percentage of subjects who had received real estate services in both the selling and buying of houses was 33.6% (90 subjects) (the correlation matrix of the measured variables is provided in the Appendix A Table A2).

This study considered consumers who had received services from the real estate industry as its subjects. For the questionnaire survey, the problem of socially desirable responding (SDR) should be considered. SDR refers to the severity of common method variance (CMV), that is the variance resulting from measurement methods and not research constructs. The general procedure for coping with CMV is based on Harman's [104] one factor test. Podsakoff and Organ [105] treated the measure as a post hoc remedy. It inputs the scores of all the items in a questionnaire for factor analysis. In an unrotated situation, it can judge the severity of CMV based on the number of factors extracted. The basic concept is that the unrotated first principle component is the optimal factor for reflecting CMV. According to this test, if there is only one or several factors obtained and one of them is a "general" factor, then that factor elaborates the principal variance of the independent and dependent variables. Hence, serious CMV exists in the research. This study also applied Harman's one factor test, and by that factor analysis, in an unrotated situation, it extracted factors with an eigenvalue > 1, acquiring 4 factors. The first principle component explained 37.61% of the variation, which showed that the first principle component did not explain the principal variance of the dependent and independent variables. Therefore, the maximum variance explained by a single factor of this study was only 37.61%. This showed that serious CMV did not exist.

5.2. Reliability and Validity Analysis

5.2.1. Reliability Analysis

Reliability refers to the dependability and consistency of data. This study adopted Cronbach's α for its reliability analysis. DeVellis [106] argued that a Cronbach's α value of at least 0.70 is the standard. The reliability of the dimensions in this study ranged from 0.711~0.851, with all the Cronbach's α values being higher than 0.70. These results indicated acceptable reliability. Generally speaking, the questionnaire used in this study revealed consistency and stability is shown in Table 1.

Dimension	Cronbach's α
Intellectual competence	0.779
Physical attractiveness	0.711
Trust	0.826
Customers' satisfaction	0.789
Loyalty	0.851

Table 1. Reliability analysis of dimensions.

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5.2.2. Validity Analysis

The validity of this study included its content validity, convergent validity, and discriminant validity. As for content validity, the questionnaire used in this study was based on its research purposes and revised according to the questionnaires used in past related research. Every item in the questionnaire was discussed with professional researchers, and the items and their grammar were revised accordingly. The questionnaire used in this study should exhibit a certain degree of content validity; in addition, as for convergent validity, it was based on the loading of the items of the constructs. When the standardized factor loadings of all dimensions were higher than 0.5 and were significant, that meant there was convergent validity [107] The standardized factor loadings of the dimensions in this study ranged from 0.591~0.879 and were significant. That meant that there was convergent validity the questionnaire used in this study revealed consistency and stability is shown in Table 2. Thirdly, as for discriminant validity, according to the suggestion of Fornell and Larcker [108], the square root of the dimensions' average variance extracted (AVE) has to be higher than the correlation coefficient among pair variables of the other dimensions. Such a result means that there is good discriminant validity among the dimensions the questionnaire used in this study revealed consistency and stability is shown in Table 3. This study met the standard, exhibiting discriminant validity.

Table 2. Analysis of reliability, loading, and variance extracted from the scale. AVE, average variance extracted.

Variables	Loading Λ (Unstandardized)	Loading Λ (Standardized)	Error Variances σ_{ε}^2 or σ_{δ}^2	Reliability of Variables	Composite Reliability (CR)	iability Extracted Ed	
Intellectual competence					0.892	0.736	0.306
Intelligence 1	1.172	0.815 **	0.147	0.665			
Intelligence 2	0.994	0.717 **	0.198	0.514			
Intelligence 3	1.000	0.681	0.245	0.464			
Physical attractiveness					0.812	0.506	_
Attractiveness 1	1.109	0.670 **	0.317	0.448			
Attractiveness 2	1.157	0.619 **	0.451	0.383			
Attractiveness 3	0.960	0.591 **	0.360	0.350			
Attractiveness 4	1.000	0.598	0.376	0.358			
Customers' satisfaction					0.887	0.723	0.658
Satisfaction 1	0.872	0.747 **	0.185	0.559			
Satisfaction 2	0.895	0.741 **	0.203	0.549			
Satisfaction 3	1.000	0.744	0.248	0.554			
Trust					0.604	0.518	0.478
Benevolence	1.000	0.835	0.096	0.697			
Dependability	0.979	0.842 **	0.088	0.709			
Loyalty					0.931	0.871	0.682
Attitude	1.000	0.879	0.083	0.773			
Behavior	1.133	0.851 **	0.138	0.725			

Note: * denotes p < 0.05, ** denotes p < 0.01.

Table 3. Correlation matrix of latent variables.

Variables	Intellectual Competence	Physical Attractiveness	Customers' Satisfaction	Trust	Loyalty
Intellectual competence	0.858				
Physical attractiveness	0.553	0.711			
Customers' satisfaction	0.520	0.634	0.850		
Trust	0.382	0.691	0.773	0.720	
Loyalty	0.423	0.550	0.820	0.694	0.871

Note: the diagonal line refers to the square roots of AVE of the dimensions.

6. Empirical Results and Discussion

As for the structural equation analysis conducted in this study, it consisted of two parts. In Part 1, this study evaluated its conceptual framework model in order to determine if the model fit met the standard. Part 2 consisted of a linear structural model analysis.

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6.1. Validation of the Conceptual Model

As for the evaluation of the conceptual model fit, this study adopted preliminary fit criteria, the fit of the internal structure of the model, and the overall model fit proposed by Bagozzi and Yi [109], as described in the following subsections.

6.1.1. Preliminary Fit Criteria

These criteria are adopted to test model error and errors of identification or input. According to Table 3, the factor loadings of the measures of the five latent dimensions were significant, and all the factor loadings were higher than 0.5. Besides, the error variances in the measurements were not negative. The R^2 values of the four structural equations were 30.6%, 65.8%, 47.8%, and 68.2%. Among the others, the R^2 value of intellectual competence was lower since the variable was affected only by physical attractiveness. Generally speaking, the basic fit standard was acceptable.

6.1.2. Fit of the Internal Structure of the Model

These criteria were used to evaluate the significance of the estimated parameters and measurements and the reliability of the latent variables in the model. According to the suggestion of Bagozzi and Yi [109], the following three common measures can be adopted: (1) The individual item reliability of manifest variables: The individual item reliability is used to measure the construct reliability of the measurement variable in question on the latent variable. Is the factor loading at least 0.5? Are all loadings statistically significant? In this study, except for some variables that showed loadings lower than 0.5, the factor loadings of the rest of the variables were at least 0.5 and were statistically significant (Table 2); (2) The composite reliability (CR) of latent variables: The CR of latent variables consists of the composition of the reliability of all the measurement variables. It shows the internal consistency of constructs. When reliability is higher, the consistency of the measures is higher. According to the suggestion of Fornell and Larcker [108], CR should be at least 0.6. The CR values in this study ranged from 0.604~0.931 and were all above 0.6. (3) The AVE of the latent variables: The AVE measures the explained power of the variance of the latent variables on all the measurement variables. Hence, when the AVE is higher, the latent variables show higher reliability and convergent validity. According to the suggestion of Fornell and Larcker [108], the AVE should be above 0.5. Based on Table 3, the AVE values in this study were all above 0.5. Thus, the model of this study exhibited a good internal structural fit.

6.1.3. Model Fit of Overall Conceptual Framework

Using the maximum likelihood method (ML), this study conducted parameter estimates and measured the model structure fit in terms of the overall model fit. According to the concepts of Hair et al. [110], such fitness is classified into three types: absolute fit measures, incremental fit measures, and parsimonious fit measures. (1) Absolute fit measures: These measures are adopted to find the covariate or correlation matrix degree predicted by the overall model. According to Table 4, the chi-squared value of this study was 202.656 9 (p = 0.001). This result meant that the difference between the conceptual model and the observed model was significant. Although it is unfitted, the chi-squared value is extremely sensitive to the size of samples. When the sample size is too large, the chi-squared value will be higher and will tend to reject the null hypothesis. When the sample size is too small, the chi-squared value is insignificant, and it is less likely for researchers to reject the null hypothesis. Thus, other fit measures should also be relied upon [111]. The χ^2 /df, GFI, RMR, and RMSEA values found in this study were all acceptable or nearly acceptable. (2) Incremental fit measures: These measures are applied to compare a developed theoretical model with the null model. According to Table 5, the incremental fit measures of the overall conceptual framework model in this study were all acceptable or nearly acceptable. (3) Parsimonious fit measures: These measures consist of adjusted fit measurements used to determine the fit of estimated parameters. Based on

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Table 5, the parsimonious fit measures of the overall conceptual model of this study were all acceptable. Generally speaking, based on all the measures, the overall fit of the conceptual framework model was good.

Statistical Test		Standard of Ideal Fit	Result	
Absolute fit measures	χ^2 (<i>p</i> -value)		202.656 (p = 001)	
	χ^2/df	Lower than 5	2895	
	GFI	Higher than 0.90	0.899	
	RMR	The lower the better	0.031	
	RMSEA	The lower the better and lower than 0.05 is favorable	0.084	
Incremental fit measures	AGFI	Higher than 0.90	0.848	
	NFI	Higher than 0.90	0.884	
	CFI	Higher than 0.90	0.920	
Parsimonious fit measures	PNFI	Higher than 0.50	0.680	
	PGFI	Higher than 0.50	0.599	

Table 4. Fit measures of the conceptual framework model.

Table 5. Estimated results of the linear structural equation.

Hypotheses	Relationship Among Variables	Estimated Coefficients	Standard Deviation	T Value	<i>p</i> -Value
H1	Physical attractiveness-> Intellectual competence	0.553	0.097	5.755	0.001 **
H2	Physical attractiveness-> customers' satisfaction	0.056	0.138	0.495	0.620
H3	Physical attractiveness->Trust	0.691	0.099	7.217	0.001 **
H4	Intellectual competence-> customers' satisfaction	0.243	0.093	3.161	0.002 **
H5	Customers' satisfaction->Loyalty	0.706	0.113	5.964	0.001 **
H6	Trust-> Customers' satisfaction	0.641	0.123	6.134	0.001 **
H7	Trust-> Loyalty	0.148	0.121	1.375	0.169

Note: * denotes p < 0.05; ** denotes p < 0.01.

6.2. Empirical Results and Discussion

The empirical results are shown in Table 5 and Figure 2. The estimated results were elaborated by the standardized coefficients. The estimated coefficient of physical attractiveness on intellectual competence was 0.553, a value that met the 1% significance level. Thus, if the consumers' perceived the real estate agents' physical attractiveness to be higher, it enhanced their perceptions of the agents' intellectual competence. Physical attractiveness reflects the ideal image that an individual has in his or her mind, and this image can invoke feelings of pleasure in the individual [66]. Berscheid and Walster [65] argued that good-looking people are considered intelligent and competent. There is a significantly positive correlation between physical attractiveness and intelligence [36,64]. Hatfield and Sprecher [66] suggested that research in psychology has always supported this concept. In other words, people believe that attractive people are more likely to possess general attractive qualities, such as intelligence and likeability. In other words, the appearance of individuals influences others' cognitions regarding the individuals' intelligence and personality. H1 was supported.

The estimated coefficient of physical attractiveness on customer satisfaction was 0.056 and was insignificant. In other words, consumers' cognitions regarding physical attractiveness did not significantly and positively influence their satisfaction. This showed that an increase in consumers' perceived physical attractiveness would not lead to an increase in consumers' cognition of satisfaction. The statement was not supported by the empirical results of this study. In other words, H2 was not supported. However, the empirical results of this study showed that although consumers' cognitions of real estate agents' physical attractiveness did not directly influence customer satisfaction, the physical attractiveness of real estate agents could indirectly influence customer satisfaction through intellectual competence. Furthermore, the physical attractiveness of real estate agents positively influenced

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customer satisfaction through trust. The empirical results indicated that when customers interacted with real estate agents, the agents' physical attractiveness would enable customers to perceive their professionalism and thus strengthen their trust, and both of these factors further enhanced customer satisfaction.

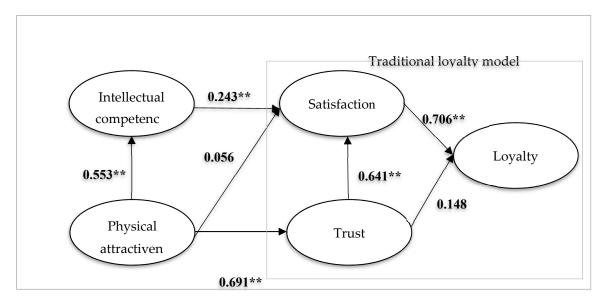


Figure 2. Linear SEM (standardized coefficient). Note: * denotes p < 0.05; ** denotes p < 0.01.

The estimated coefficient of physical attractiveness on trust was 0.691, a value that met the 1% significance level. In other words, physical attractiveness significantly and positively influenced trust. This meant that when consumers perceived real estate agents' physical attractiveness to be higher, it would reinforce their trust in the agents. Customers often perceive that agents who exhibit physical attractiveness are more friendly and trustworthy. This finding was consistent with the research findings of Till and Busler [72] and Marty et al. [71]. Endorsers who are physically attractive, when used in advertising and in making product recommendations, show superior persuasive effects and are more likely to obtain the trust of consumers. H3 was supported.

The estimated coefficient of intellectual competence on customer satisfaction was 0.243, a value which met the 1% significance level. In other words, intellectual competence significantly and positively influenced customer satisfaction. Hence, when consumers perceived real estate agents' intellectual competence to be higher, it would reinforce customer satisfaction. When the agents exhibited their robust professional competence to help fulfill their customers' needs, these customers' satisfaction toward their services would be increased. When customers are satisfied, Irma and Rajiv [74] argued that different job characteristics should be based on different knowledge management procedures in order to upgrade satisfaction effectively. According to the view of Gardner [54], intellectual competence and professional knowledge significantly and positively influence customer satisfaction. That is to say, professional services can be provided through service personnel's competence in thinking, operating, and problem solving in order to meet customers' expectations and enhance their satisfaction. Robbins [11] suggested that intelligence, fair rewards, job conditions, colleagues, and job characteristics suitable for employees' personalities were associated with employees' job satisfaction. H4 was supported.

The estimated coefficient of customer satisfaction on loyalty was 0.706, a value that met the 1% significance level. In other words, customer satisfaction significantly and positively influenced loyalty. Thus, when consumers' satisfaction with real estate agents was higher, it enhanced their customer loyalty. When a customer was satisfied with the services provided by a salesperson, they were more willing to maintain contact with and seek the assistance of the salesperson when they were in need, which ultimately increased their loyalty. This empirical result validated the views of Gronholdt et al. [76].

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The enhancement of customer satisfaction could strengthen customer loyalty to result in better sales performance. H5 was supported.

The estimated coefficient of trust on customer satisfaction was 0.641, a value that met the 1% significance level. This meant that when consumers' perceived trust in real estate agents was higher, their satisfaction with real estate agents would also be higher. When customers demonstrated trust toward salespeople, they would feel more relaxed throughout the transaction, and thus enhance their satisfaction. This matched the view of Pavlou [84]. When customers strongly trust enterprises, they value the transactional relationship, and that leads, in turn, to higher customer satisfaction and establishes long-term intentions to engage in further transactions. Ouyang [112] argued that trust significantly and positively influences satisfaction. H6 was supported.

The estimated coefficient of trust on loyalty was 0.148 and insignificant. In other words, trust did not significantly and positively influence loyalty. That is to say, when consumers' perceived trust in real estate agents was higher, their cognition of loyalty to real estate agents became higher as well. However, this effect was not significant. H7 was not supported. Maxham and Netemeyer [87] suggested that consumers' perceived trust significantly and positively influenced repurchase intention. That view was not supported, however, by the empirical results of this study. Although trust cannot directly influence loyalty, it indirectly affected loyalty through the mediating effect of satisfaction.

7. Conclusions and Suggestions

This study investigated the structural causal relationships among physical attractiveness, intellectual competence, trust, customer satisfaction, and loyalty. The research subjects consisted of consumers who had received real estate agents' services. The study established its conceptual framework model through a literature review. According to the study results, the fit of the overall conceptual model was acceptable. Thus, the model was supported. This study introduced the most approximate extrinsic and intrinsic factors (physical attractiveness and intellectual competence, respectively) that influence the current state of the real estate industry. By doing so, the development of satisfaction could be stimulated, loyalty could be maintained, and the goal of sustainable development could be achieved.

This study integrated physical attractiveness and intellectual competence into a traditional loyalty model as the key factors determining consumer loyalty to real estate agents. According to the empirical results, physical attractiveness did not significantly and directly influence satisfaction. However, physical attractiveness could indirectly influence satisfaction through trust and intellectual competence. Furthermore, by enhancing satisfaction, physical attractiveness increased loyalty. The effect of physical attractiveness on satisfaction through the mediating effect of trust $(0.691 \times 0.641 = 0.443)$ was higher than its effect on satisfaction through the mediating effect of intellectual competence $(0.553 \times 0.243 = 0.134)$. Hence, the relationships among physical attractiveness, intellectual competence, and trust critically influence satisfaction.

This study demonstrated the importance of physical attractiveness and intellectual competence when analyzing consumer loyalty to real estate agents. Physically attractive people enjoy advantages in interpersonal interactions due to their body language and positive capacities. Those who are physically attractive show their advantages in their interactions with others; furthermore, in workplaces, they have more opportunities to influence companies positively. At work, real estate agents should not only cope with both buyers and sellers, but should also maintain a professional image. Their external image and attractiveness become key factors in their workplaces. In addition, most of the studies in the relevant past literature have demonstrated that in education and classes, intellectual competence positively influences students' potential in terms of learning motivations, learning attitudes, learning effects, problem solving, and interpersonal relationships. According to the findings of this study, intellectual competence positively enhanced consumer satisfaction with the real estate industry.

This study manually distributed questionnaires to collect data. The research subjects consisted of customers who had received real estate services. The places in which the questionnaires were

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distributed were crowded areas in Kaohsiung City (namely, the areas around the TRA Kaohsiung Station, Pier-2 Art Center, Dream Mall, and Taroko Park). However, due to limitations in terms of the real distribution situation and places, the study could not thoroughly contact different groups of people. This resulted in the representativeness of the study sample that received the questionnaire being restricted and might have led, in turn, to errors in the calculated results. Future researchers can conduct larger scale and complete questionnaire surveys through online communities and Google lists in order to produce more representative research findings. In addition, the five dimensions of this study may change with the interviewees' perceptions over time. In other terms, the five dimensions remain dynamic over long periods of time, and this cannot be solved through SEM.

As for the dimensions of the research, the effects of personality traits and professional competence on satisfaction and trust are also worth considering. Personality traits consist of personal characteristics, temperament, competence, and physical characteristics in adapting to environments. They include the following five characteristics: agreeableness, conscientiousness, extraversion, emotional stability, and openness, which reveal individual differences. In addition, when real estate agents possess broad professional knowledge, they will be more reliable for consumers, such as speed of reaction and internal professional competence and knowledge. Future researchers can include these two latent factors in order to explore their relationships with satisfaction, trust, and loyalty.

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Appendix A

Table A1. Questionnaire items of this study.

Dimensions	Items of Questionnaire	Source		
(1) Physical attractiveness				
Physical attractiveness	Attractiveness 1: The agent's appearance is attractive to me Attractiveness 2: The agent's slim bodies are important Attractiveness 3: The agent's friendliness to customers is attractive to me Attractiveness 4: The agent's attention on their dress	Richins [93]; Striegel-Moore et al. [94] Bower and Landreth [26]		
	and appearance is attractive			
(2) Intellectual competence				
Intellectual competence (3) Trust	Intelligence 1: It is important that the agent can immediately respond to all situations or needs of different customers Intelligence 2: It is important that the agent can immediately provide the latest housing information Intelligence 3: It is important that the agent provide suggestions for consumers according to their professional experience	Sternberg [95]		
(-)	1. I believe that the real estate agent's services			
	are reliable			
Dependability	I believe that the real estate agent follows through on their commitments	Doney and Cannon [96]; Chaudhuri and		
Беренциянну	3. The real estate agent's service is sincere	Holbrook [97]		
	4. The real estate agent sells the products from the customers' perspective			

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Table A1. Cont.

Dimensions	Items of Questionnaire	Source
Benevolence	 I get along with the real estate agent as a friend I believe that the real estate agent treats customers' profits as a priority The real estate agent handles transactions with customers honestly The real estate agent can respond to all the questions of customers 	Doney and Cannon [96]; Chaudhuri and Holbrook [97]
(4) Satisfaction		
Satisfaction	Fornell [98]; Pappu and Quester [99]; Bettencourt [100]	
(5) Loyalty	estate agent	
Attitude loyalty	 I support this real estate agent's service In comparison to other real estate agents, I am willing to pay higher service fees to this real estate agent I am satisfied with the service of this real estate agent 	Oliver [102]; Cossío-Silva et al. [103]
Behavior loyalty	 Next time, I will still receive the service provided by the current real estate agent I have decided to continue supporting the service of the current real estate agent 	Oliver [102]; Cossío-Silva et al. [103]

Table A2. Correlation matrix of the measured variables.

Intelligence 1	1													
Intelligence 2	0.601	1												
Intelligence 3	0.542	0.481	1											
Attractiveness 1	0.256	0.167	0.219	1										
Attractiveness 2	0.181	0.148	0.178	0.595	1									
Attractiveness 3	0.349	0.257	0.389	0.354	0.216	1								
Attractiveness 4	0.315	0.274	0.360	0.326	0.265	0.545	1							
Satisfaction 1	0.299	0.217	0.301	0.304	0.274 *	0.295	0.269	1						
Satisfaction 2	0.275	0.248	0.280	0.285	0.367	0.139	0.238	0.581	1					
Satisfaction 3	0.354	0.297	0.326	0.272	0.242	0.357	0.293	0.564	0.534	1				
Dependability	0.260	0.169	0.360	0.355	0.451	0.318	0.301	0.514	0.445	0.517	1			
Benevolence	0.255	0.256	0.269	0.347	0.413	0.300	0.346	0.418	0.471	0.558	0.704	1		
Attitude	0.291	0.302	0.295	0.367	0.362	0.292	0.331	0.545	0.543	0.509	0.513	0.511	1	
Behavior	0.336	0.294	0.305	0.388	0.315	0.263	0.297	0.505	0.573	0.476	0.474	0.499	0.749	1

Note: * denotes p < 0.05.

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