Predictors and outcome of customer satisfaction: moderating effect of social trust

Sara Javed · Md. Salamun Rashidin · Wang Jian

Abstract The purpose of this paper is to present an integrative model of predictors and outcome of customer satisfaction in the fast food industry and also examined its effects. Moreover, we also examined the contingent effect of social trust on the relationship between customer satisfaction and brand loyalty. Both offline survey and online survey were conducted with four hundred Pakistani fast food customers; valid data were assessed and analyzed through structural equation modeling and moderation step-by-step approach. Results demonstrate that restaurant stimuli such as food quality, service quality, restaurant atmosphere, restaurant location, price and a variety of food have strong significant effects on customer satisfaction, and customer satisfaction engendered brand loyalty. Social trust has a positive significant impact on the relationship between customer satisfaction and brand loyalty. Customers with high social trust have a positive strong bonding with restaurants than those who held low social trust. This study has practical implications for both restaurateurs and government. Restaurateurs should keep a close eye on the changing needs of the customer, ensure the safety standards of foods, disclose the menu information, and permit to often visit the kitchen; in this way it strengthens consumer specific trust and general trust on society. Moreover, the government can take an initiative to set proper policy and maintain the food safety standards by regulation.

Keywords Customer satisfaction · Brand loyalty · Social trust · Service quality · Fast food industry

Introduction

Since 1980, the restaurant sector has grown considerably. From 1980–2011, the sales of the restaurant industry increased drastically from US $42.8 billion to US $536.7 billion which is more than ten times (Chen et al. 2015). Due to this development in the restaurant industry, a number of studies on the consumption in restaurants have been carried out. In some of these studies researchers have been more focused on customer dining behavior because food is a vital element to comprehend one’s society or culture (Chang et al. 2010; Lee and Hwang 2011; Min and Lee 2014) while other researchers have been
interested in identifying the important service dimensions of restaurant which are menu, cleanliness, style, price, ambience, location (Prendergast and Man 2002) food quality (Namkung 2009; Ryu and Han 2010a), chef, service staff, and atmosphere (Law et al. 2004, N. Ping et al. 2017). These service dimensions determine the dining behavior and revisit intention of the clientele. Moreover, studies on restaurant found that (Ryu and Jang 2008; Liu and lee 2018; A. Namin 2017), menu (Wansink and Love 2014a; McCall and Lynn 2008; Hartwell and Edwards 2009a, b), location (Liang and Zhang 2009), and atmosphere (Ryu and Jang 2007; Dutta et al. 2014a, b) affect customer satisfaction and the ultimate brand loyalty. Furthermore, brand loyalty is the outcome of customer satisfaction (Kim et al. 2004; Getty and Thompson 1994; Magnini and Parker 2009; Mohammed Ismail El-Adly, 2018; Hwang et al. 2019). It enables the restaurant patron to decline to move/switch to another restaurant (Palazón and Delgado 2009), no matter how effective the marketing is and whatever the situation is (Rahi et al. 2018). Cultivating brand loyalty is important as far as the service sector is concerned, especially where service providers render services with minor distinctions and fight in turbulent environment particularly in the fast food industry as suggested by Santouridis and Trivellas (2010) and Ariffin et al. (2012).

Numerous studies have examined the relation of brand trust with brand loyalty (Erciş et al. 2012; Upamannya et al. 2014; Alhaddad 2015) even though the role of social trust on customer routine dealings and its ultimate effect on brand loyalty have not yet been explored. This is due to the fact that the customer’s collective thought about people is greatly influenced by his personality traits (like tolerance, faith on people, cooperative, optimistic, pessimist, etc.) (Uslaner 1999) and whatever is going on in a society (Maloney et al. 2001a). Customer responses towards any situation clearly depict how much contented they are with their society as well as with their personal lives. A customer’s lack of trust in the society greatly affects his links with restaurants (Fatoohi 2013) as it is operating in a society, where he generally starts distrusting others and reduces his trustworthiness behavior (Delhey and Newton 2003). Moreover, strong relational ties, higher satisfaction with society leads to trustworthiness (Fatoohi 2013; Gaudencio et al. 2017; Kim and Bachman 2019; Farley et al. 1994). According to Boix and Posner (1998), who further describe the notion of Putnam (1993), a clientele who has low trust may be dissatisfied with a restaurant when the restaurant doesn’t meet some standard of honesty more than once and eventually results to the customer taking a decision of continuing or discontinuing. The individual personality traits play a crucial role in this decision, though this ‘moral yardstick’ decreases social trust. Moreover, adding to the previous example, clientele believes that people cannot be trusted or infers all people come in the same category, especially in societies where customers hold low social trust (Hardin 1998). In this manner, customer revisit intention is negatively affected (Nbudzi 2007) and vice versa.

Brand loyalty is a big challenge in the restaurant industry, and it has declined over the years (Pat Conroy 2013). It calls upon the researcher’s attention to pinpoint the crucial factors in the eye of restaurant patrons, because switching cost of restaurants customers is very low (Rondan-Cataluña and Rosa-Diaz 2014). A number of extant studies investigate the predictors of brand loyalty (Kim et al. 2004; Law et al. 2004; Prendergast and Man 2002) and of customer satisfaction (Mathe et al. 2015). The study fills the aforementioned gap by presenting an integrative model of predictors and outcome based on customer satisfaction. Moreover, we also examined the contingent effect of social trust on the relationship between customer satisfaction and brand loyalty, though how individual social trust influences his routine matters/dealings have been overlooked.

The basic premise of this study is to fill the slot in the existing body of literature by giving an integrated model to examine the effect of customer satisfaction on brand loyalty due to certain drivers. More specifically, (1) examining the factors that bring back the customer in fast food restaurants for another meal, (2) investigating the effect of factors on customer satisfaction, (3) examining the direct effect of customer satisfaction on brand loyalty, (4) the indirect effect of factors on brand loyalty through customer satisfaction, (5) moderating effect of social trust on the relationship between customer satisfaction and brand loyalty. The study theoretically contributes to the literature on customer satisfaction by providing an integrative model on customer satisfaction with predictors and outcome. The present study also makes a contribution to the studies on restaurant perspective by integrating the model of predictors and outcomes of customer
satisfaction. The study validates the interactive effect of moderating variable social trust with customer satisfaction which helps strengthen the association between customer satisfaction and brand loyalty, and this effect that has never been investigated earlier. Furthermore, the study extends current literature by demonstrating that customer satisfaction fully mediates between predictors (food quality, service quality, restaurant atmosphere, restaurant location, price, and menu) and outcome variable (brand loyalty). For practitioners, the findings of the study give suggestions to fast food restaurateurs to devise some effective strategies to keep them satisfied by incessantly evaluating their feedback, ask for suggestions, keep an eye on complaint boxes, being aware of their complaints, etc. For the government, this study gives insight that customer brand loyalty and customer satisfaction are influenced, to some extent, by societal trust therefore governments need to devise some strategies to increase the individual general trust of the society.

The remaining part of the study is presented as follows: “Research model and hypotheses development” Section discusses the theoretical framework and model development, “Methodology” Section presents the adopted methodology, analysis and major findings, and “Discussion” Section makes the final discussion on results as well as draws the conclusion followed by outlining the practical and theoretical implications, limitations and future directions for forthcoming researchers.

Research model and hypotheses development

Food quality

Food quality is one of the central features of a restaurant’s dining experience (Lee et al. 2012; Jang and Namkung 2009; Pettijohn et al. 1997). It is among the attributes that affect consumer behavioral intentions regarding restaurant dining (Bujisic et al. 2014; Namkung and Jang 2007). Offering quality food is extremely important in satisfying the target market and increases the long-term success of the restaurant (Ha and Jang 2012). Food quality is recognized as one of the determinants of customer patronage and thus provides an opportunity to increase market share for the business (Ryu and Han 2011). Since food quality is considered as a key element in defining the success of

Service quality

The term service can be defined in a variety of ways depending on the field in which it is used. Kotler and Keller (2009) defined the concept service as “any intangible act or performance that one party offers to another that does not result in the ownership of anything”. It is also defined as total features and the attributes of the product and services that satisfy the real or implied needs of the customers (Kotler et al. 2002). Service quality is defined as a customer’s perception about the services that may meet or exceed his expectations (Zeithaml et al. 1990). It is
considered as a momentous feature of restaurant dining. Service quality is equally important as of food quality (Qu 1997) and plays a vital role in building up the perception to re-patronage (Chow et al. 2007; Namkung and Jang 2007). In restaurant setting, studies emphasized that service quality is an imperative determinant of customer satisfaction (Kim et al. 2004) and re-patronage (Weiss et al. 2004). In turbulent market environments, service quality is identified as a crucial element for the success of fast food restaurants as it has a great impact on consumer behavior as it either induce satisfaction or dissatisfaction (Wong and Fong 2010); hence improvement in service quality helps fast food operators to compete (Gregory et al. 1998), retain the existing customers and attract new customers (Zeithaml and Bitner 1996). Past studies emphasized the role of service quality in the determination of customer satisfaction which customer encounters at the restaurant setting (dimensions: friendliness staff, courteous, quick service line, waiting time, etc.) (Qu 1997; Pettijohn and Luke 1997) as well as the consumer’s behavioral intention to revisit (Ha and Jang 2012; Kandampully et al. 2015). Thus, we can extrapolate from previous findings that improved service quality results in a satisfied or contented customer (Ennew and Binks 1999; Spreng et al. 1996) which leads to brand loyalty. Therefore, we can hypothesize that:

H2 There is a positive association between service quality and customer satisfaction in fast food industry of Pakistan.

Atmosphere

In restaurants industry, atmosphere is perceived as a crucial element (Bitner 1992; Johns and Howard 1998; Kivela et al. 1999). This is because it influences customer’s emotions and expectations (Baker et al. 1994; Reimer and Kuehn 2005; and Wall and Berry 2007) as well as dining experience (Dutta et al. 2014). According to Bitner (1990) and Zeithmal (1993), customers initially look upon the atmosphere to take any services; the buildup perception about the servicescape may affect the customer’s reaction to the services delivered in restaurants (Bitner 1990; Zeithaml et al. 1993). The perceived atmosphere draws cognitive responses, which further influences the patron beliefs about a place, services, staff, and products (Bitner 1992). Moreover, if a customer has a high perception about the restaurant atmosphere, then customers’ expectations for service could also be high (Ryu et al. 2011). The perception about the restaurant servicescape directly influences customer satisfaction (Kim and Moon 2009). According to Auty (1992), in restaurant setting after food quality, variety of food, and price, atmosphere is considered as a major element that differentiates one service provider from another. Thus we can say that the atmosphere has become essential in restaurant settings because customers tend to be provoked by atmospheric stimuli such as lights, ambiance, style, cleanliness, comfortable seats or aesthetic elements, music, noise (Liu et al. 2014; Liu and Jang 2009; Bhuian 2008; Choi et al. 2008; Kivela et al. 1999 and Pettijohn et al. 1997) which subsequently increases the behavioral intention or repeat patronage (Wakefield and Blodgett 1994). Furthermore, Chang (2000) recommended that perception about physical surroundings is a direct marker of a customer’s satisfaction; in this manner, customer satisfaction is directly linked with the facet of constructive behaviors. Thus, we can hypothesize that:

H3 Restaurant atmosphere has significant influence on customer satisfaction in fast food industry of Pakistan.

Restaurant location/convenience

Gone are the days when food quality was a prime focus of restaurateurs; nowadays customer put their attention to other factors too like atmosphere, variety of food and location (Olsen 2002). Location is recognized as the most influential factor for the success of a restaurant (Baker et al. 1994; Prendergast and Man 2002). Klassen et al. (2005) carried out a study about the scheduling of food services in a campus setting. The results of the study indicated that because students have less time to go out of the university, they prefer to purchase from the university cafe in order to satisfy their hunger need because they like short walking distance for a quick meal. Another study by (Mattila’s 2001) found out that customers prefer to visit the restaurant which is located at a convenient place. Moreover, the study executed by Kivela et al. (2000) based on restaurants themes where the author put the parking area under the category of convenience. The result indicated that a parking area really matters for
the customers of the restaurant. Bowen and Shoemaker (1998) found in his study that short walking distance got importance among the clientele of restaurants, a convenient location is related with customer satisfaction (Haghighi et al. 2012) purchasing intention (Leung and Cheuk 2000; Lim and Loh 2014), and ultimately brand loyalty (Prendergast and Man 2002). If restaurateurs would like to get clientele satisfaction, they should make sure that there is easy accessibility as well as a convenient location (Hassan and Rahman 2012). According to Hassan and Rahman (2012), urban life-style imposes time constraints, so customer seeks convenience and wants to satisfy their hunger with minimum hassle. Customers of restaurants always suppose a fine location of restaurant where they can easily park their car (Swoboda and Schramm-Klein 2007). Car parking facility has a substantial impact on creating brand loyalty, consequently. Restaurants try to provide free parking for customers that facilitate them (Hassan, Sade and Rahman 2013). Therefore, we can propose that:

H4 There is a positive influence of restaurant location on customer satisfaction in fast food industry of Pakistan.

Price

Price has been perceived as an important factor in elucidating the behavior of customers. It can be defined as, what the customer paid or sacrificed to get the product or services (Zeithaml 1988). It is an influential and persuasive tool to attract customers to buy from a particular brand. Similarly, Pride and Ferrell (2003) and Rao and Monroe (1989) considered price as a tool which tells the customers about the worth of the product. Customers usually estimate the value of the product or services offered via price (Sadia et al. 2011). In the restaurant industry, the price of the items on the menu varies from restaurant to restaurant. Due to intense competition in the restaurant industry, customers may develop internal reference prices (Gronoos 2001). It is a price embed in customer’s mind that works as a base for comparing the real prices with the expected prices (Grewal et al. 1998). The restaurant must charge for the services offered in accordance with what the people are willing to pay or provide the services at competitive prices according to customer expectations (Yuksel 2002; Skindaras 2009). Few studies examined the association between price and customer satisfaction and behavioral intentions of re-patronage. Oliver and Swan (1989) considered the price as an antecedent of customer satisfaction. They also stated that the customer makes a comparison of his or her existing payment with expectation, assessing whether the actual compensation is high or low than what he thinks is required. The more he found balance in price/value trade off, the more he tends to be satisfied with the services of the restaurant. Klassen et al. (2005) conducted a study in which he found that 62% of the students believed that price is the most imperative reason for making a decision to dine out from a particular restaurant. In addition to this, Bolton and Lemon (1999) found a direct link of price with customer satisfaction. Once customers are certain that they are getting paramount quality of product or service, they tend to be loyal in the long run. Moreover, Haghighi et al. (2012) suggested that the perceived price had a positive impact on customer satisfaction. If the product or service gives more value in terms of attributes then such type of customers is ready to pay a premium price in the restaurant sector (Lau 2006). Many investigators found perceived price as an imperative determinant of customer repeat buying behaviors. Therefore, we hypothesize that,

H5 Price has positive influence on customer satisfaction in fast food industry of Pakistan.

Variety of food

Variety of food is also recognized as variety in menu (Josiam et al. 2014). Majority of the studies indicated that variance in food (Park 2004) greatly influences a patron’s perception about the restaurant setting (Van der Vorst et al. 2002) and developed a perception which influences the customer satisfaction (Hoch et al. 1999) and repeat-restaurant patronage (Nield et al. 2000). The accessibility of a variety of products/services is of importance in the restaurant industry and increases the likelihood of repeat patronage of variety seekers (Lumpkin and McConkey 1984). It is in line with Kahn (1995) study in which he viewed the importance of variety-seeking in the service sector. It is defined as “the tendency of individuals to seek variety in their choices”. According to Ratner et al. (1999), it is in human nature that he looks towards
change because he gets bored by using similar stuff. That’s why, restaurant customers seek out different types of food, try new food, and taste. Zandstra et al. (2000) conducted a study on the consumption of meat sauce at dinner time in home that last longer 10 weeks at dinner time. The results indicated that as the days passed, it became the cause of boredom among the family members and lowered down their consumption. Another study conducted by Lähteenmäki and van Trijp (1995) revealed that sandwiches with different fillings would bring some variety in taste. Whereas, on the other side, the study on consumption of eight sandwiches, with different fillings indicated that; it would bring the customers maximum diversity in taste. Therefore, we hypothesize that,

H6 Variety of food has positive influence on customer satisfaction in fast food industry of Pakistan.

Brand loyalty

The notion of brand loyalty has changed over the decades (Worthington 2009). Earlier it was considered a univariate measure in terms of repeat buying behavior (Cunningham and Ross 1961 and Farley and Johnes 1964). Subsequently, it was felt as a complex multi-dimensional construct (Majumdar 2005). Brand loyalty is defined as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior” (Oliver 1999). Moreover, the present study measured the brand loyalty by the suggested three dimensions of brand loyalty which are affective/emotive loyalty, cognitive/attitudinal or evaluative loyalty and behavioral loyalty. The first approach to brand loyalty is affective loyalty as admiration or conformity propensity which is thoroughly manifested in favor of a brand than rival brands in the market. The second approach of brand loyalty is cognitive/evaluative loyalty with brand. It refers to as the positive evaluation of a specific brand by the customer on set criteria. The third approach to brand loyalty is behavioral loyalty towards the specific brand. It refers to the upbeat reaction towards buying and consumption activities (Sheth 1974). From behavioral perspective in the case of restaurant setting, loyalty demonstrates the number of visits (Nilsson and Olsen 1995).

The concept of brand loyalty is relatively more important for services sector, especially for those who provide services with minor distinctions and contend in dynamic environment particularly in fast food industry (Santouridis and Trivellas 2010). The matter of the fact is that loyal customers are more likely to spend chunks of money on the restaurant products or services and are less sensitive to price. This cohesive bonding between customer and restaurant placed a positive impact on its profitability (Flavian et al. 2006). That’s why restaurants use defensive marketing strategies to grab more market share and profits by establishing the brand loyalty (Tsoukatos and Rand 2006).

Customer satisfaction and brand loyalty

Satisfaction is defined as customer evaluative judgments about specific products/services (Giebel Hausen et al. 2016; Mohammed and Rashid 2018; Saleem and Raja 2014) and purchasing experiences (Tse and Wilton 1988 and Oliver 1997). Customer satisfaction plays a pivotal role particularly in restaurant industry (Baig and Khan 2010; Kozub 2008; Novikova 2009). According to Cronin and Taylor (1992), customer satisfaction is directly associated with revisits intentions of customers. Many past studies have identified a profound association between customer satisfaction and re-visit intention in the hospitality industry. Han and Back (2006) examined the satisfaction of guest in hotel industry. The findings of the study indicated that guest intention of re-patronage is connected with satisfaction with the services rendered to them, while Han and Ryu (2006) claimed that improvement in customer satisfaction is needed in order to increase the customer’s visits in restaurants as satisfied customers are the loyal ones a claim that has also been proved by many investigators (Kandampully and Suhartanto, 2000; Szymanski and Henard 2001; and Abdullah et al. 2012). Therefore, we can hypothesize that:

H7 Customer Satisfaction has a positive influence on brand loyalty with fast food restaurants of Pakistan.
Social trust

*Trust is one of the most important synthetic forces within society* (Simmel 1950). Previously, social trust was the main concern of researchers to understand how general the trust is in people (Dehley et al. 2011), its influence on attitudes and misanthropy (Rosenberg 1956, 1957) but how its influence on consumer routine dealings/matter have been ignored yet. It is defined as general “conviction on the honesty, truthfulness and faith in people”. It does not suggest that individual place a trust on others because they know each other personally, but it signifies a broader spectrum how people can be trusted in general (Dhley 2003), and without trust social bonding is unfeasible (Chalabi 1996). Numerous service organizations (in context of restaurant setting) are operating in society. There are two broad schools of thought who viewed social trust differently, first is, *social psychological thought* believes on individualism while *societal school of thought* believes on collectivism. According to social-psychological school of thought, trust is an essential element of an individual personality trait (Erikson 1950; Cattell 1965; Uslaner 1999; Rosenberg 1956, 1957 and Allport 1961; Naderi et al. 2018). This is because an individual learning about trust starts from their home, and this childhood socialization is changed with the passage of time as experience is gained (Uslaner 1999, 2000; Liu and Lee 2018). Moreover, social trust is not only reliant on the reciprocity of experience, but also closely linked with the subjective feelings and the kind of the personality that individual have, as suggested by Uslaner (1999). Scholarly studies found that individual “belief in just world” is greatly associated with interpersonal trust and subjective well-being (Lerner 1980 and Begue 2002). Faith in people and faith in the world are primary features of “belief in just world”. The *societal school of thought* viewed that trust is not the property of an individual but that of a society (McCall and Lynn 2008; Luhmann 1979; Bourdieu 1983; and Coleman 1988 and Giddens 1990; Pride and Ferrell 2003). The focus of this approach is on how people evaluate the society in which they find themselves rather than their personality. Moreover, it is the top–bottom phenomenon that is developed by society and daily experience that recommends acting in a trusting and distrusting way (Levi et al. 1996; Rothstein 2000; and Maloney et al. 2001a). Consumer who has been deceived in shops, exploited at workplace, served unjustly, betrayed, or lied by acquaintances on daily basis (Hardin 1998) has low social trust and infers that people cannot be trusted in general which will ultimately effects their specific trust (use preexistent schemas) with restaurant (Lewis and Shoemaker 1997; Brewer 2008). Applying this notion into the context of this study, according to Boix and Daniel (1998) that further describes the notion of Putnam (1993), low-trust clientele remains satisfied with a restaurant when restaurant is failed to meet some standard of honesty at once. But if this could have happened more than once, he might have switched the restaurant, and this ‘moral yardstick’ further decreases his social trust. But the decision could be different if the customer possesses personality traits such as high tolerance level, faith on people, cooperative, optimistic, forgiving nature, etc. Because Boone et al. (1999b) found that specific personalities are strongly associated with an individual’s behavior. In case of any negligence, a customer fully cooperates with a restaurateur and does not disappoint with the services (Levi and Stoker 2000 and Ledyard 1995). The customer is still satisfied with the restaurant setting and plans to continue purchasing and talk favorably about the restaurant with others. Customer who possesses this sort of personality is less affected by the prevailing societal factors that lower the social trust of an individual but still believes that people can be trusted in general (*his relational trust are less affected by his general trust*). This trust could ultimately lead towards long-term commitment, greater share of wallet and positive word of mouth. Thus, we can hypothesize that:

H8 Social trust positively moderates the relationship between customer satisfaction and brand loyalty with fast food restaurants of Pakistan.

**Methodology**

**Measures**

The scale was adapted (slightly modified according to the context of current study) from indicators of extant studies which are food quality, service quality, restaurant atmosphere, restaurant location, price, variety of food, customer satisfaction, brand loyalty
and social trust. A five-item scale was used to measure perceived food quality (Raymond and Yen 2001), a five-item scale was used to measure perceived service quality (Liang and Zhang 2009), a four-item scale was used to perceive restaurant atmosphere (Liang and Zhang 2009), a three-item scale was used in restaurant location (Raymond and Yen 2001), a three-item scale was used to measure price (Liang and Zhang 2009), a three-item scale was used to measure variety of food (Liang and Zhang 2009), and a six-item scale was used to measure customer satisfaction (Raymond and Yen 2001). Moreover, a seven-item scale was used to measure brand loyalty (Sahagun and Vasquez-Parraga 2014, Zeithaml et al. 1996; Sirdeshmukh et al. 2002; Alhabeeb 2007; and Chaudhuri and Holbrook 2001) and, further conceptualized into three dimensions as behavioral, affective and cognitive loyalty. Moreover, to measure social trust the standard survey question was asked in this study to measure the individual trustworthiness about society around them (Putnam 2000; Newton 2001). “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” (Glaeser et al. 2001; Dehley and Newton 2003; Ding et al. 1995). Moreover, the scale was adapted in the context of restaurant, drawn from societal school of thought and social psychological school of thought: role of individual personality traits and role of society/social system in building individual general trust. First, role of individual personality traits in building trust on society was gauged by proposed two-item scale adapted from (Dehley and Newton 2003), a two-item scale of tolerance adapted from (Kaiser 1974; Dehley and Newton 2003), a two-item scale of general faith on people adapted from Rosenberg (1957), whereas role of social system in building trust (restaurants are operating in society/part of society) was measured by proposed three-item scale on perception about current societal conditions adapted from (Dehley and Newton 2003) and a two-item scale of social network of individuals adapted from Kim et al. (2003); Dehley and Newton (2003).

We validated our scales and measurement model using multiple methods. First, following Ruyter and Bloemer (1999), we executed EFA to confirm the underlying factors using varimax rotation and extracted five factors: food quality (FQ), service quality (SQ), restaurant atmosphere (RA), restaurant location (RL), price (PR), variety of food (VR), customer satisfaction (CS), brand loyalty (BL) and social trust (ST). Most of the factor loadings (FLs) were above 0.80 except social trust (SC3(FL = 0.267)) relevant to social trust, and thus excluded for further proceedings. Moreover, eigenvalues 1.391, 1.600, 2.239, 2.733,1.012, 1.591, 2.503, 3.276 and 4.130, of factors cumulatively explained 80.616% of the total variance, respectively. The scale used for the measurement of the abstract variables was 5-point Likert scale, ranging from “strongly disagree = 1” to “strongly agree = 5”. Secondly, two professors of hospitality ensured the face and content validity of the scale items. Furthermore, we conducted a pilot study taking data from 100 respondents who frequently visit restaurants. The Cronbach’s alpha ($\alpha$) values were found to be FQ = 0.841, SQ = 0.925, RA = 0.871, RL = 0.823, PR = 0.861, VR = 0.834, CS = 0.890, BL = 0.886, and ST = 0.790. The Cronbach’s alpha ($\alpha$) test exhibited all score greater than 0.70, which evidenced sufficient reliability. In short, all our results have been drawn using statistical method, which built our confidence of the findings and their generalizability.

Sampling and data collection

The questionnaire was based on two sections. The first section was related to demographic characteristics of the respondents which comprised of four close ended questions. The second section was related to research constructs which contained 51 close ended questions. The participants of the study were Pakistani fast-food restaurant customer. Both self-administered and web-based survey techniques were adopted in the context of predictors effecting the brand loyalty of fast-food restaurants. The structured-questionnaire commenced with a cover letter which narrated the purpose of study, ethical statement to keep their personal information confidential, define the variables. For self-administered survey, researcher personally visited four big cities of Punjab province (i.e., Islamabad, Lahore, Multan and Faisalabad) to get contact with respondents on convenient basis. And approached other province participants through online survey, via posting a web-link of Google docs among different groups on Facebook, Instagram and WhatsApp. A total of four hundred and fifty questionnaires were distributed among the respondents. A total of 300 self-administered questionnaires were dispersed to the
students of different universities and general public as well. Out of the 300 self-administered questionnaires, 225 questionnaires were received back. 225 questionnaires were completed in all respects while the remaining seventy-five incomplete questionnaires were discarded. The remaining responses were obtained through web-based survey and resulting in a total of 400 responses. Based on the calculation of $G^*$ power analysis, the study had a sufficient sample size as it exceeds the minimum sample requiring 55. Moreover, a sample of 200 to employ structural equation modeling (SEM) method and the study sample fulfills this threshold for justifying the use of SEM (Kline 2005; Ali et al. 2018; Provencher et al. 2009).

The convenience sampling was used for data collection, as this sampling technique has been questioned to generalize their findings. Past studies imply to us that this technique is applicable for data collection through self-administered survey (Javed. S et al. 2018; Rahi et al. 2018) and online survey (Saunders et al. 2012, Rashidin. S et al. 2020; Sahagun and Vasquez-Parraga 2014). Moreover, it is the most suitable technique if the measure items got relevancy with the participants, and our study satisfied the recommended condition of Elbeltagi and Agag (2016).

Demographic characteristics

Table 1 shows the demographic characteristics of the respondents. Female respondents are greater in numbers than male respondents. The sample of this study consists of 400 people, of which 222 (55.5%) were women and 178 (44.5%) were men. The middle age group 31–45 years had a higher representation (41.75%) than the other age groups of 18–30 years (38.25%) and above 45 years (20%). The percentage of middle age groups is higher than other two groups because majority of this age group was having employment or businesses as evident from the collected data. As regards the profession, service respondents had major proportion (34.5%) in comparison with students (24%), businessman (13.25%) unemployed (13.25%) and others (15%). Respondents were also asked about the restaurants they visit frequently. Three possible options were given to them, i.e., McDonalds, KFC and others (local/national). The results indicate that majority of the respondents visited restaurants other than McDonalds and KFC with a higher percentage of 41.75% while the remaining 32.5% and 26% of the respondents visited KFC and McDonalds, respectively. Moreover, the findings also revealed that over half percentage 72% of Pakistani inhabitants have low trust about society around them (need to be careful) followed by 28% having high social trust (e.g., high generalized trust on society).

Common method variance

The data collected from single source at a single point in time, common method variance might be an issue in the data, though Harman’s single-factor test was used (Podsakoff et al. 2003; Simamora 2005). As common method was opted in study, we therefore checked dubious amount of covariance among the variables. For this, exploratory factor analysis (EFA) was performed for all the indicators of the variables, which demonstrates that nine components cumulatively explained 75.046% of variance among the constructs. The first factor explained variance of 18.431%, second factor accounts for 12.609%, third 11.207%, fourth, fifth, sixth, seventh, eighth, and ninth explained variance of 7.8% respectively.
fifth, sixth, seventh, eighth, ninth component explained variance by 8.232%, 7.781%, 5.598%, 4.687%, 4.107% and 2.393%, respectively. The common method variance (CMV) is not an issue in our data, though not even a single component is held accountable for large sum of variance.

Measurement model

The study performed statistical analysis by using SPSS Amos Graphics version 21. We followed two-stage procedure of Anderson and Gerbing’s (1988) for statistical analysis in Structural Equation Modeling (SEM). By employing this approach, we initially analyzed the reliability and validity by the measurement model, and later we perform path analysis by the structural model. The basic premise behind using this approach, prior testing the structural association between constructs, we first assessed the reliability and validity of latent constructs.

Confirmatory factor analysis was used to assess the reliability and validity of unobserved variables. The output generated by confirmatory factor analysis indicates a good model fitness ($\chi^2 = 161.223$, df = 915; $\chi^2$/df = 1.772, RMR = 0.048, IFI = 0.951, TLI = 0.944, CFI = 0.950, PCFI = 0.840, PNFI = 0.790; RMSEA = 0.044) (Hu and Bentler 1999). The fit indices illustrate that unobserved variables are perfectly measured by their items. Reliability was tested from the scores of Cronbach alpha and composite reliability (CR). Table 2 shows that all unobserved constructs CR scores are ranging from 0.89–0.96 and they are above the cutoff level 0.70 (Hair et al. 2011) and $\alpha$ scores also exceed the recommended threshold level > 0.70 (Hair et al. 2010) ranging from 0.85–0.94. With regard to convergent validity, we followed Fornell and Larcker (1981) approach, all items should have factor loading score greater than 0.70 and should be significant. The table vividly exhibits that all items have factor loadings above 0.70 with loadings ranging from 0.788*** to 0.951*** and significant at $p < 0.001$. The average variance extracted is above the suggested threshold > 0.50 with values ranging 0.51–0.88 (Fornell and Larcker 1981; Hair et al. 2011) and thus got the convergent validity (Hair et al. 2010). We ensured the discriminant validity by employing two tests; first, the square root of average variance extracted or diagonal value should be greater than the correlation among the constructs at the resultant rows and columns (Fornell and Larcker 1981) and another, the correlation midst the variables shouldn’t exceed 0.85 (Kline 2005).

Structural model

Measurement of research model fitness

The results of measurement model indicate a good model fitness. The structural model was tested in SPSS Amos Graphics version 21.0. The results of structural model demonstrate goodness of fit ($\chi^2$/df = 2.201 CFI = 0.97; NFI = 0.95; IFI = 0.97; TLI = 0.96; AGFI = 0.85; PCFI = 0.84; RMSEA = 0.03; SRMR = 0.05). The fit indices are in reasonable and acceptable range (Hu and Bentler 1999; MacCallum and Hong 1997; Hooper et al. 2008, 2008b; Schreiber 2008; Hau-siu Chow et al. 2007). Thus, these results demonstrate that structure of proposed research model efficiently illustrates the association between latent constructs (Hair et al. 2011).

Hypotheses testing

Structure Equation Modeling technique (SEM) with maximum likelihood estimation was employed to test the hypothesized relationship. After following first step of Anderson and Gerbing (1988) approach of statistical analysis, eventually we carried out second step, performed path analysis by the structural model. For this, we first check multicollinearity in SPSS which is an important assumption prior to test the research model in SEM. Table 3 indicates that all predictor variables had variance inflation factor (VIF) ranging from 1.044–2.572. It shows that no multicollinearity exists among the predictor variables as they satisfy the suggested criteria $< 3$. The path coefficients are displayed in Fig. 1. The results of hypothesized relationship are presented in Table 4. As Table 4 demonstrates that food quality has positive effect on customer satisfaction ($\beta = 0.378$, $t = 27.998$, $p < 0.001$); therefore we accepted H1. Service quality has profound significant effect on customer satisfaction ($\beta = 0.303$, $t = 21.877$, $p < 0.001$); thus, we accepted H2. Restaurant atmosphere has gained support as it has positive significant effect on customer satisfaction ($\beta = 0.227$, $t = 18.619$, $p < 0.001$) so, we accepted H3. Restaurant location ($\beta = 0.121$, $t = 2.572$, $p < 0.001$) has also significant effect on customer satisfaction; therefore we accepted H4.
Table 2  Measurement Model

Please rate the following constructs; food quality, service quality, restaurant location, restaurant atmosphere, price and variety of food of your favorite restaurants

| Constructs            | Items   | Statements                                                                 | SFL   |
|-----------------------|---------|----------------------------------------------------------------------------|-------|
| Food quality          | F1      | Taste                                                                      | 0.831***|
| $a = .921$, $CR = .914$, $AVE = .727$ | F2      | Fresh and rich flavor                                                     | 0.901***|
| $\sqrt{AVE} = .852$   | F3      | Nutritional content                                                       | 0.865***|
| Service quality       | SQ1     | Quickness of service line                                                 | 0.744***|
| $a = .907$, $CR = .899$, $AVE = .690$ | SQ2     | Order fulfillment time                                                     | 0.817***|
| $\sqrt{AVE} = .831$   | SQ3     | Attentive staff                                                           | 0.901***|
| Restaurant atmosphere | RA1     | Cleanliness                                                                | 0.861***|
| $a = .92$, $CR = .895$, $AVE = .510$, $\sqrt{AVE} = .714$ | RA2     | Comfortable environment                                                   | 0.927***|
| Price                 | P1      | Good value for the price charged                                          | 0.864***|
| $a = .898$, $CR = .901$, $AVE = .753$, $\sqrt{AVE} = .867$ | P2      | Appropriate portion size                                                  | 0.810***|
| Variety of food       | V1      | Food choices (menu)                                                       | 0.951***|
| $a = .89$, $CR = .895$, $AVE = .730$, $\sqrt{AVE} = .851$ | V2      | Ready to deliver (in stock)                                               | 0.803***|
| Customer Satisfaction | CS3     | I’m satisfied with restaurant atmosphere                                  | 0.884***|
| $a = .939$, $CR = .939$, $AVE = .795$, $\sqrt{AVE} = .891$ | CS4     | I’m satisfied with restaurant location                                    | 0.889***|
| Brand Loyalty         | BL1     | I have been with my favorite fast-food restaurant for a long time         | 0.866***|
| $a = .960$, $CR = .960$, $AVE = .883$, $\sqrt{AVE} = .939$ | BL2     | I am planning to continue relying on my favorite fast food restaurants for a longer period | 0.882***|
| Social Trust          | CL1     | When I decide to stay with a fast-food restaurant, I make sure that it is a competent one | 0.873***|
| $a = .937$, $CR = .935$, $AVE = .611$, $\sqrt{AVE} = .782$ | CL2     | Client loyalty in fast-food restaurants is based on good experiences      | 0.873***|
|                       | Per1    | Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? | 0.754***|
|                       | Per2    | When I face any problem in restaurant, it couldn’t influence me negatively | 0.753***|
|                       | T1      | When I face any problem in restaurant, it couldn’t leads me to untrustworthiness | 0.722***|
|                       | T2      | I can tolerate if restaurant doesn’t meet standard of honesty once         | 0.785***|
Table 2 continued

Please rate the following constructs; food quality, service quality, restaurant location, restaurant atmosphere, price and variety of food of your favorite restaurants

| Constructs | Items | Statements | SFL |
|------------|-------|------------|-----|
| F1         | I believe, today’s restaurants are more inclined to accommodate their customers/cooperative | 0.753*** |
| F2         | I am careful when dealing with fast food operators | 0.743*** |
| SC1        | I am satisfied with safety standards (security) | 0.788*** |
| SC2        | I feel safe when I dine in my restaurant | 0.825*** |
| SN1        | I mostly visit restaurants recommended by my friends | 0.783*** |
| SN2        | My trust on restaurant is affected by my friend opinion | 0.780*** |

SFL standardized factor loadings, αCronbach alpha, CR composite reliability, AVE Average variance extracted, √AVE discriminant validity

***p < 0.001

Table 3 Discriminant Validity

| Constructs | Mean | S.D  | VIF  | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
|------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| FQ         | 3.87 | 1.05 | 1.925 | .852 |     |     |     |     |     |     |     |     |
| SQ         | 3.96 | 1.01 | 1.935 | .831 |     |     |     |     |     |     |     |     |
| RA         | 3.89 | 1.11 | 1.110 | .197** | .257** | .714 |     |     |     |     |     |     |
| RL         | 3.77 | 1.14 | 1.178 | .230** | .222** | .141** | .857 |     |     |     |     |     |
| PR         | 3.85 | 1.08 | 2.572 | .268** | .233** | .210** | .315** | .867 |     |     |     |     |
| VR         | 3.85 | 1.04 | 2.311 | .177** | .136** | .159** | .150** | .743** | .851 |     |     |     |
| CS         | 3.84 | .859 | 1.215 | .358** | .344** | .138** | .157** | .201** | .170** | .891 |     |     |
| BL         | 4.06 | .924 | 1.191 | .225** | .172** | .128** | .121** | .368** | .322** | .166** | .939 |     |
| ST         | 4.03 | .832 | 1.044 | –.039 | –.097 | .032 | –.015 | –.040 | .033 | –.141** | .001 | .782 |

The bold digits in the diagonal are square root of AVE

1—food quality (FQ), 2—service quality (SQ), 3—restaurant atmosphere (RA), 4—restaurant location (RL), 5—price (PR), 6—variety (VR) 7—customer satisfaction (CS), 8—brand loyalty (BL), 9—Social Trust (ST)

**p < 0.01

$t = 7.994$, $p < 0.001$, price ($β = 0.151$, $t = 12.055$, $p < 0.001$) and variety ($β = 0.102$, $t = 10.358$, $p < 0.001$) exert a positive significant impact on customer satisfaction; therefore H4, H5 and H6, respectively, gained support. Customer satisfaction exerts robust effect on brand loyalty; therefore, H7 is supported.

Figure 1 demonstrates the explanatory power ($R^2$) of outcome constructs. The predictive power of $R^2$ explained the total variance in outcome variable due to predictor variables. The results show that 99% of variance in customer satisfaction and 49% of variance in brand loyalty. Our $R^2$ results are above the suggested threshold level of Falk and Miller (1992) > 10%. On the basis of recommendation of Cohen’s (1988), we checked the ample effect size ($f^2$) of our model, small size effect size 0.02, medium effect size 0.15, and large effect size 0.35. We found that both customer satisfaction and brand loyalty have large effect size ($f^2 = 0.99$ and $f^2 = 0.960$).

Moderation and simple main effects

To test the effects of moderator (social trust) through interaction effects, we used IBM SPSS version 23.0. Using the moderation step by step, we examined first,
the direct effect of predictor variable on outcome variable and then, main direct effects of interaction of moderators with predictor variable on outcome variable. We found that direct effects of customer satisfaction on brand loyalty are positively significant ($\beta = 0.384, p < 0.001$), and main direct effects of customer satisfaction and social trust (customer satisfaction*social trust) on brand loyalty are also positively significant ($\beta = 0.109, t = 2.181, p < 0.05$). Moreover, after getting the significant interaction effects, we followed Aiken, West and Reno (1991) suggestions to examine the nature of interactions by allocating the data of moderators into two groups—high and low—by using dummy variable. We observed the simple main effects of customer satisfaction on brand loyalty at both high and low level of social trust. We found that customer satisfaction has positive significant impact on brand loyalty when customer social trust is high ($\beta = 0.082, t = 3.165, p < 0.001$), and customer satisfaction has an insignificant impact on brand loyalty when customer societal trust is low ($\beta = 0.024, t = 1.096, p > 0.01$). Therefore, social trust positively moderates the relationship at higher level of social trust, and we accept H8.

### Discussion

**Major Findings**

Prior studies on restaurant setting conferred that customer satisfaction is vital determinant of brand loyalty (Mohammed Ismail El-Adly and Amjad 2018, Hwang et al. 2019). In context of fast-food industry (Naderi et al. 2018; Liu and lee, 2018 and A. Namin, 2017), restaurant stimuli play a crucial role in creating customer satisfaction (Tabachnick and Fidell 1989; Yinghua Liu 2009; Ryu and Han 2010a, Dutta et al. 2014a, 2014b) which in turn establishes brand
loyalty (Yinghua Liu 2009). In Pakistan, fast food industry is rapidly growing over last decade. They are found in every nook and corner. In the salad day of millennium, brand loyalty is a big challenge for fast food operators. Thus, this study on brand loyalty adds noteworthy value to restaurant industry. The study develops an integrative model on predictor and outcome of customer satisfaction drawn from previous literature.

Our findings suggest that restaurant stimuli such as food quality, service quality, restaurant atmosphere, restaurant location, price and variety of food have profound impact on customer satisfaction. These findings are in line with (Tabachnick and Fidell 2007; Tabachnick et al. 2011; Vincent C.S. Heung 2012; Ryu and Han 2010a, Dutta et al. 2014a, 2014b, Liang and Zhang 2009) empirical studies. It demonstrates that these stimuli are crucial for fast food restaurant customers and have paramount impact on their satisfaction. Our study findings also verify that customer satisfaction has significant effect on brand loyalty. This result also completely agrees with prior empirical research findings (Vincent C.S. Heung 2012; Mohammed Ismail El-Adly 2018, Hwang et al. 2019; Tinsley and tinsley 1987). At this point, customers decide on either re-patronage or discontinuity. Moreover, the findings revealed that customer satisfaction acts as a strong mediator between restaurant stimuli and consumer behavioral intentions. Any negligence in aforementioned stimuli hurts the customer satisfaction and ultimately brand loyalty with restaurants. In addition to this, results demonstrate that ($\beta = 0.70^{**}$) 70% satisfied customer turns them to be brand loyal.

Finally, our last result is about social trust which suggests us that Pakistani inhabitants social trust is not so high as greater percentage (72%) of people believe that they need to be careful when dealing with others and only 28% believe that people can be trusted in general. This finding is consistent with World Value Survey Report which indicated that only 22.2% Pakistani citizens believed that people can be trusted in general, whereas 73.8% respondents believed that people needs to be careful while dealing with others (WVS 2010-2012 2012). Moreover, our results on moderating variable social trust suggest that consumer social trust positively moderates the relationship at higher level between customer satisfaction and brand loyalty. Consumer relies on their preexistent schemas of having beliefs about the general trustworthiness of people and thus, this general trust (social trust) has an impact on their specific and relational trust (Brewer 2008; Messick and Kramer 2001; Wong 2013; Wu 2013) with their restaurants. Based on the conceptualizations of societal school of thought, findings suggest that the consumers who possess low social trust hold a view that people cannot be trusted in general, tend to switch to other restaurants easily, as once or twice get dissatisfied with the services rendered by particular restaurant because their specific trust gets affected due to general trust. For example, applying this notion in the context of restaurant sector, customers may have come across experiences from different sources like friends (share a pic that shows bug found in food), news or TV channels break a news that a particular restaurant is being sealed due to providing unhygienic food, using sub-standards products (dead meat, poor quality oil, etc.), untidy kitchen (cockroaches, mouse are found there) which effect already build up specific/relational trust (faith on people) on quick meal restaurants (operating in society), and in turn affect their satisfaction and brand loyalty with their mostly visited restaurants. Shifting towards social psychological school of thought, customers respond to diverse scenarios (like mistakenly threw a drink/food on customer, find a bug in food, etc.) is affected by the customer personality traits (tolerance, understanding, cooperative, optimistic, low anxiety, forgiver nature, etc.) which in turn effects brand loyalty (Zhang and Ke 2003). Thus, the response to any situation in a restaurant setting is decided by customer personality traits (possessing these positive personality traits leads to high generalized trust) along with the trust gained from the society (Uslaner 1999). Our findings suggest that, customer who holds positive social trust has strong bonding with restaurants and make maximum effort that his relational trust will not get affected due to his general trust.

**Conclusion**

The present study found that restaurant stimuli food quality, service quality, restaurant atmosphere, restaurant location, price and variety of food are crucial factors that significantly influence customer satisfaction and ultimate brand loyalty. Our present study contributes to the literature (of brand loyalty, customer
satisfaction, social trust) by presenting an integrative model of predictors (restaurant stimuli) and outcomes (brand loyalty/continue to purchase) of customer satisfaction, and addressing how factors are affecting the brand loyalty or in terms of re-patronage. The findings suggest on the importance of restaurant stimuli in developing customer satisfaction which in turn creates brand loyalty. We found the moderating effect of social trust on the relationship between customer satisfaction and brand loyalty. Moreover, these associations recommend that a consumer’s general trust on his society affects his satisfaction which leads to behavioral intentions. We find that customer brand loyalty gets negatively affected due to having low social trust on their society and vice versa.

Our proposed model offers a detailed investigation and elucidation of factors that are crucial in the eye of customers, and how consumer social trust effects his relationship with restaurants which have not yet been examined. This study provides valuable insights to fast food restaurants, restaurant managers and government. By focusing on our findings and recommendations, such as evaluating clients’ feedback on continuous basis, asking for suggestions, keeping an eye on complaint boxes, never ignoring clients’ complaints, keeping an eye on the changing needs of customer, etc., restaurants will benefit by augmenting the brand loyalty. For government, this study gives insight that customer brand loyalty and customer satisfaction are influenced to some extent by his societal trust, they should take some measures and devise strategies to increase the individual general trust on society which has a positive ultimate effect on the customer routine dealings/matters.

**Implications**

**Theoretical implications**

Our study is first to empirically examine the integrative model of predicting customer satisfaction outcome, though the predictors and outcome of satisfaction are not new. Moreover, our study theoretically contributes to the literature of customer satisfaction, brand loyalty and social trust. The extant literature has comprehensively examined the drivers of customer satisfaction (Peng et al. 2017; Dutta et al. 2014a, 2014b; Wansink and Love 2014a), and predictor of brand loyalty (Mohammed Ismail El-Adly 2018, Hwang et al. 2019). Numerous studies have been carried out in context of fast food industry loyalty (Ryu and Jang 2008; Scarcelli 2007; A. Namin 2017), but effects of integrative model had not been explored yet. Therefore, it contributes to the literature by examining the effects of restaurant stimuli (food quality, service quality, atmosphere, location, price and variety of food) on customer satisfaction and on brand loyalty through customer satisfaction (indirect effect). In the context of fast food industry, the extant literature examined the role of brand trust in establishing brand loyalty (Erciş et al. 2012; Upamannya et al. 2014; Alhaddad 2015; Song et al. 2019). But the role of customer social trust affecting the brand loyalty has not been examined before. Therefore, we incorporate social trust as a moderator in our proposed model to offer new insight, and make worthy contribution in the literature of social trust. In particular, the consumer social trust affects his connection with restaurant because customer moral yardstick of general trust on society affect his specific trust on restaurant, but extant literature has been overlooked.

**Practical implications**

The study finds that restaurant stimuli have a positive effect on customer satisfaction and ultimately on brand loyalty. On the basis of these findings, the study gives some recommendations to fast food operators that could be useful to develop and maintain long lasting relationship with customers as well as sustainable growth in a competitive market. The customer’s prime concern is not only to get good quality of food but also good services and a variety of food in an aesthetic atmosphere. It is thus essential to provide good services and to reduce time between order placement and order fulfillment, to provide quick service, and to give respect to customers. Moreover, there is much need to provide serenity and sound environment and also to work harder to make it more charming, and to improve interior as well as outer look. All foodstuff should be available at a competitive price; therefore, management needs to revise their processes in order to cut down the cost. Fast food operators should keep a close eye on the changing needs of the customer, take feedback from customers on a regular basis. With regard to social trust, fast food operators ensure the safety standards of foods, disclose
the menu information, and permit to often visit the kitchen; in this way it strengthens their specific trust and general trust as well. The study also gives insights to the government about the social trust that have impact on consumer connections with a particular restaurant. In the context of the restaurant, the government augments the customer general trust to society, by activating the Pakistan Food Testing Authority to constantly regulate the food safety standards in restaurants, and permanently close those restaurants that play with the health of people by using sub-standard products.

Limitations and future directions

No study exists without limitations. Our study underlies the following limitations and offers directions to future researchers. First, the study used cross-sectional data; future research can employ longitudinal data, or could use another design like experimental design. Second, this study context is general, future study could categorize restaurants into upscale, medium-scale and low-scale restaurants and assess the differences. Third, due to cultural differences, diverse scenarios of competition, level of social trust, consumer behavior, we recommend future research to cross-validate the proposed model in other developing countries or in different contexts generalize the results of the present study. Fourth, the study only used social trust as a moderator, future scholars could consider WOM (positive and negative word of mouth) as a moderator to investigate how it influences the relationship of customer satisfaction and brand loyalty. Finally, the present study is limited to the fast food industry; measure the attributes affecting brand loyalty through customer satisfaction, to augment the robustness of model it can apply to other service industries like the hotel industry.

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Compliance with ethical standard

Conflict of interest All the authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent Informed consent was obtained from all individual participants included in the study.

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