The determinants of customer trust in buyer–seller relationships: An empirical investigation in rural India

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Abstract

This paper conceptualised a model of customer trust in buyer–seller relationships in rural India by integrating variables studied in developed countries with the emphasis of social aspects of market exchange by including generalised trust sources. We have applied Fishbein’s model of behavioural intention and Fafchamps’s (2002) trust theory in developing countries and proposed that the customer trust is not only based on often-studied personalised trust sources but also through generalised trust sources. In the model, we have included normative and informational social influences as generalised trust sources and product quality, service quality and customer dependence as personalised trust sources. We empirically validated our model with the survey data collected from farmers who buy chemical fertilisers from rural traders in India. We found that the generalised trust sources significantly impact customer trust for traders. Furthermore, we also found that the personalised trust sources impact customer trust for traders in a different way in rural India.

Keywords:
- Trust
- Buyer–seller relationships
- Generalised trust sources
- Personalised trust sources
- Rural India

1. Introduction

Trust is a basic concern in human interaction. This construct has been researched across several disciplines including economics, sociology, psychology, political science, management, information technology and also marketing. Marketing basically engages in buyer–seller interactions wherein the element of trust is inevitable. Over the years, trust has been theorised in marketing – in various sub-fields like industrial marketing, consumer marketing, marketing channels and retailing, and this has led to the creation of a new sub-field called relationship marketing. In relationship marketing literature, research has shown that trust facilitates customer loyalty (Morgan and Hunt, 1994; Doney and Cannon, 1997; Kennedy et al., 2001; Agustin and Singh, 2005), results in greater use of services (Maltz and Kohli, 1996) and thus encourages managers to develop trust in consumers (Anderson and Weitz, 1989; Doney and Cannon, 1997).

Most of these trust theories have been built with conditions prevailing in the Western countries, mostly the United States. Cunningham and Green (1984) and Frazier et al. (1989) called for fundamental research in international marketing by adapting the established marketing concepts to the realities of the international marketplace. Based on this, there have been research studies with regard to trust in marketing, which have been conducted in the developing countries (e.g., Andaleeb and Anwar, 1996 in Bangladesh, Batt, 2000 in Philippines, Lee and Dawes, 2005 and Leung et al., 2005 in China). These studies conceptualised trust with a base of well-defined variables in the Western context and adapted them to suit specific conditions within that country. There are no such empirical studies with regard to trust in the marketing discipline from an Indian context. Nonetheless, there are studies from other fields like social psychology and economic sociology where researchers studied trust construct in India via ethnography and argumentative essays that provide valuable information which can be used in trust theories of marketing (e.g., Harriss, 2002; Dwivedi and Varman, 2003).

In this paper, we conducted a study in rural India based on the review of trust studies from economic sociology and social psychology in the developing countries and trust studies in the Western (notably the United States) marketing literature. We embarked on a research to study the typical buyer–seller relationship in a rural Indian context that exists between rural traders and their customers. Traders here are individuals who buy fertiliser from wholesalers or manufacturing companies and sell them directly to the farmers. First, we define customer trust for rural traders on the basis of diverse literature on trust and then develop a
conceptual model that depicts the determinants of customer trust for traders in rural India. Finally, we discuss a number of theoretical and practical implications of our findings. For this, we conducted a survey on farmers who buy chemical fertiliser from rural traders. From the collected data we empirically validate our conceptual model of determinants of customer trust for traders in rural India.

2. Literature review

In the previous studies on trust in marketing in the developing nations, authors have struggled to capture distinctions from the developed nations while integrating variables from the latter. For example, Lee and Dawes (2005) studied the impact of a culturally distinct variable in China namely, guanxi (personal relationships) with dimensions such as mianzi (face), renqing (reciprocal behaviour) and gangqing (affect) on trust in salespersons besides variables drawn from trust studies in the Western context such as salespersons’ characteristics like expertise, status and social and business interaction. Similarly, Leung et al. (2005) studied the role of xinyong (personal trust) and guanxi in Chinese relationship marketing including variables drawn from trust studies in the Western context like supplier competence, conflict handling skill, commitment and satisfaction. Apart from the Chinese context, Andaleeb and Anwar (1996) examined trust in salespersons in Bangladesh with defined variables drawn from trust studies in the Western context, such as salesperson variables namely expertise, intention and likeability, customer variable namely trust disposition, and organisation variable namely trust in organisation, as determinants for trust in salespersons.

There are various studies on trust in the developing countries in disciplines other than marketing. Following Ibn Khaldun’s vision on the basis of social order, Gellner (2000) points out that “anarchy engenders trust and effective government destroys it”. In the same orientation, many trust studies from developing countries can be found in social psychology and economic sociology literature. Studying markets in the developing countries, Moore (1994, p. 819) states, “many transactions are so complex that law cannot possibly cover all contingent circumstances,” and Lyon (2000, p. 664) states, “in many developing countries there is no formal system of contracts anyway”. Harriss (2002) studied trust in Indian businesses via ethnography and found that most people tend to trust others on the basis of their kinship, caste, religion, language and region. Dwivedi and Varman (2003) studied the nature of trust in Kanpur industrial cluster of India by case study approach and found that trust was explained by characteristic-based identities like region, religion, language and caste.

The above-mentioned phenomenon in India, namely caste, kinship, religion, region and language-based groups can be considered as distinguishable cultural groups. As per the Western literature, more specifically by Solomon (2006), these cultural groups are individually characterised by a distinct set of behavioural norms and turn them into reference groups in India, especially in the rural areas. Bearden and Etzel (1982) defined reference groups as “a person or group of people that significantly influences an individual’s behaviour” (p. 184). Reference groups influence individual’s behaviour by two types of social influences: normative and informational (Deutsch and Gerard, 1955; Burnkrant and Cousineau, 1975; Bearden and Etzel, 1982; Bearden et al., 1989). Here, first we will elaborate on normative social influence and later discuss about informational social influence in the subsequent paragraphs. Burnkrant and Cousineau (1975) defined normative influence as the tendency to conform to the expectations of others. Normative social influence is subdivided into value-expressive influence and utilitarian influence (Bearden et al., 1989; Park and Lessig, 1977).

Bearden et al. (1989) defined value expressiveness as, “it reflects the individual’s desire to enhance self-image by association with a reference group” (p. 474). Utilitarian influence is about the compliance of an individual based on the perceived rewards and punishments (Park and Lessig, 1977).

There is one more phenomenon specific to the developing countries which relates to informational social influence. While describing ‘informational barriers to trade’ in the developing countries, Casella (1999) points out that the formal arrangements are unreliable, difficult to access and/or too costly, so people build personal relationships to gather information. By these personal relationships they gather information for purposes like product details, market situation and opportunities and trustworthiness of other people like suppliers, buyers, and job and credit applicants (Fafchamps and Minten, 1999). In the developing countries, people’s decisions are also based on the information they gather or receive about the intentions and behaviours of the members of their socio-cultural groups. The role of public sources such as newspapers, radio, and public services is extremely marginal (Fafchamps and Minten, 1999). In addition to this, there is limited education which may also be the reason why people make decisions on the basis of information that they receive from others. To trust or to distrust somebody, an individual tends to receive information from others and the individual does not rely solely on their own reasoning (Ferreira, 1997). Similar to the above phenomenon that exists in the developing countries, informational social influence has been conceptualised in the Western literature. Deutsch and Gerard (1955) defined informational social influence as the tendency to trust information obtained from others as being an accurate representation of the truth. Informational influence indicates the uncertain situation of the influenced (Turner, 1991). It differs from normative influence as the former operates through an internalisation process wherein the individual accepts to be influenced as the individual perceives maximisation of personal values (Kelman, 1961), while normative influence operates through value-expressive identification and/or utilitarian compliance processes (Bearden et al., 1989; Park and Lessig, 1977).

Bearden et al. (1989) operationalised both these social influence concepts and measured them by means of individual difference construct, “susceptibility to interpersonal influence” with two dimensions namely, “susceptibility to normative influence” and “susceptibility to informational influence”. These two concepts have then been applied to a wide variety of consumption behaviours. Even though these social influence concepts have great implications in understanding an individual’s wide variety of judgements, marketing literature focuses on consumer’s judgements on product and product quality (e.g., Pincus and Waters, 1977), attitude towards advertising (e.g., Martin et al., 2008), word of mouth behaviour (e.g., Wangenheim and Bayon, 2004), global innovativeness (Clark and Goldsmith, 2006), consumer boycotts (Hoffmann and Müller, 2009) and furthermore on its effect on different cultures in the context of product purchase (e.g., Lee and Kacen, 2008; Lee and Green, 1991; Bagozzi et al., 2000; Lee, 2000). Trusting too is a judgement which has a great likelihood to get affected by normative and informational social influences, and these have not been explored by the vast research on trust in marketing so far.

As Bagozzi and Lee (2002) mention, “one’s willingness to act is determined by his or her personal evaluation of the action and by the social pressure to act, as attributed to significant others” (p. 226). Also, according to Fishbein’s behavioural intentions model (Fishbein and Ajzen, 1975), behaviour is viewed as the product of both individual level/cognitive factors and interpersonal/group influences. This model is an attempt to combine both orientations within a single paradigm. This means that an individual’s willingness to trust somebody is a product of both individual level factors and interpersonal/social influences.
In the same orientation, Fafchamps (2002) describes trust as rooted in both personalised and generalised sources. Personalised sources arise from repeated interpersonal interactions and generalised sources arise from general knowledge about the population of agents, the incentives they get, and the upbringing they have received. Furthermore, Fafchamps (2002) points out that “the generalised trust can theoretically be achieved via laws and courts” (p. 4) and attributes “the rise of the Western world is precisely due to the invention of institutions that protect property rights and make the state more effective at delivering public goods. Clubs, networks, and community-based voluntary organisations can achieve a modicum of efficiency in economic exchange and public good delivery. But they are second-best solutions”. It is clear from Fafchamps’s (2002) words that generalised trust is rooted in the influence of social norms and information in developing countries, and that it is present among all populations of developed countries through legal institutions and public sources of information, which is rather limited in the developing countries.

Based on Fafchamps’s (2002) trust theory on developing countries and also the existing theory on behavioural intention (Fishbein and Ajzen, 1975; Bagozzi and Lee, 2002), we propose that customer trust arises from the sources of generalised trust as well as personalised trust. Due to the fact that generalised trust is granted through effective legal institutions and provision of public sources of information and the limited presence of kinship, caste, religion, region and language-based groups’ influence on interpersonal relationships, most of the trust studies in marketing omitted the generalised trust sources’ and conceptualised trust from the personalised trust sources’ perspective. This aspect was rightly argued by Miniard and Cohen (1979) as, “marketing researchers have concentrated solely on attitudes as predictors” (p. 102) and avoided interpersonal/group influence factors (generalised trust sources) in trust studies in marketing.

Accordingly, studies on trust in marketing from developed countries mostly rely on dyadic experience-based variables (personalised trust sources) such as communication, competence, satisfaction (Selnes, 1998), product performance, product output, after-sales service, account support, communication between supplier and customer, cooperation and harmonisation of conflict, replaceability, switching costs and switching risks (De Ruyter et al., 2001), direct mail, preferential treatment and tangible rewards (De-Wulf and Odekerken-Schroder, 2003), satisfaction, salesperson competence, low-pressure selling tactics, product quality, service quality, manufacturer’s ethical concerns, general tendency to trust, and familiarity with the product (Kennedy et al., 2001), shared values, communication and opportunistic behaviour (Morgan and Hunt, 1994), communication, cultural similarity, goal congruence, power asymmetry, reputation of the partner and support by the partner (Anderson and Weitz, 1989), and communication and cooperation (Anderson and Narus, 1990) as the determinants of customer trust.

The nature of trust and its process of development in developing countries is different from developed countries. We have tried to figure this out in this section through the often-cited definition on trust by Rotter (1967). He (1967, p. 651) defined trust as, “a generalised expectancy held by an individual that the word, promise, oral or written statement of another can be relied on”. Trust has two components namely cognition and affect (Swan et al., 1999). Cognition is the belief that the other party has both the necessary competence and the motivation to be relied upon and affect is feeling secure or insecure about relying on the other party. In developed countries, cognition is based only on the experience that the actors gain from dyadic interaction, but in developing countries, it is also based on the knowledge on the effectiveness of the institutions and the influence of various types of social norms and information that they receive from their personal networks. Consequently, affect is dependent on more variables in developing countries which otherwise seem to be easier in developed countries. This is also a reason for the poor economic development due to increased transaction costs (Arrow, 1972). Furthermore, Andaleeb and Anwar (1996) point out the left out component of trust namely conation on in a developing country, which is again influenced by many variables. Hence, with respect to the affect component of trust, we could strongly consider trusting somebody in a developing country as to risking himself/herself unless his/her generalised trust sources are stronger.

3. Research hypotheses

As it has been mentioned earlier, interpersonal trust is rooted in both generalised trust and personalised trust sources. In the developing countries, generalised trust sources are social norms and information from personal relationships. The extent of impact of social norms and information on a particular individual can be understood by the constructs developed by Deutsch and Gerard (1955) namely, susceptibility to interpersonal influence with two dimensions such as susceptibility to normative influence and susceptibility to informational influence. With respect to personalised trust sources, the Western literature in marketing has identified a number of constructs on the basis of context-specific dyadic interaction experience. For our study, we identified constructs from the Western literature that suit the customer-trader interaction experience from rural India.

Fig. 1 presents the proposed conceptual model of sources of customer trust for rural traders. Generalised trust sources such as susceptibility to normative influence and informational influence impact customer trust for traders. Personalised trust sources such as customer dependence, product quality and service quality impact customer trust for traders. The rationale for research hypotheses of our study are grouped into the following two categories: generalised trust sources and personalised trust sources.

3.1. Generalised trust sources

3.1.1. Normative influence

Norms define what actions are considered acceptable or unacceptable by others or a reference group (Lyon, 2000). Fukuyama (1995) explains how trust emerges from the acquisition of shared values; that is, the capacity to trust is learned from rules or habits that give members of a community grounds for trusting one another. As mentioned in the literature review section, Burnkrant and Cousineau (1975) defined normative influence as the tendency to conform to the expectations of others. Individuals who have this tendency to conform to the expectations of others are more likely to trust others because they are confident that other community members will also conform to the norms of the community. Furthermore, it also means that they are more dispositional towards trust. Quite a few empirical studies have proved the impact of disposition to trust of individuals on their trust on others. Andaleeb and Anwar (1996) empirically proved the effect of disposition to trust of customers on their trust on retail salespersons in the context of a developing country. Kennedy et al. (2001) found that the customers’ general tendency to trust impacted their trust on the...
For most rural people, the important source of income is trade for themselves (Heide and John, 1988; Frazier et al., 1989). The partner may be in a position to create more favourable terms of firm-firm relationship, dependence may make one firm vulnerable of alternative avenues to reach that goal. In the context of an interaction, dependence makes one firm mediator and the perceived availability of other as a multiplicative function of two factors: the value of the other entity mediates and the perceived availability. When perceived product quality is high, customer trust for traders will increase.

**3.1.2. Informational influence**

As mentioned in the literature review section, Deutsch and Gerard (1955) defined informational influence as the tendency to accept information from others as evidence about reality. Informational influence may occur in two ways. Individuals may either search for information from knowledgeable others or make inferences based upon observation of the behaviour of others (Park and Lessig, 1977). Informational influence has been found to affect consumer decision processes regarding product evaluations (Burnkrant and Cousineau, 1975). The susceptibility to informational influence is a general trait that varies across individuals and that an individual’s relative influenceability in one situation tends to have a significant positive relationship on his/her influenceability in a range of other social situations. As such, it is the tendency to learn about products and services by observing others and/or seeking information from others (Bearden et al., 1989). Rural consumers are less risk taking and less innovative (Anderson and Ishwaran, 1965). They are likely to be strong information seekers and go beyond mass-media information to seek the recommendations of experts and social acquaintances. This is more likely in a rural Indian environment as it has a narrower area of interaction. The predominant part of interaction is occupied by primary contacts and highly personal, relatively durable and sincere relationships (Dubey, 1969). Trust is a process (Johns, 1996) and develops according to the information a person obtains about another person. This information is gathered from various sources (Laing and Cotton, 1996).

Hence:

**H1a.** Higher the levels of customer susceptibility to normative influence, higher the levels of customer trust for traders.

**H1b.** Higher the levels of customer susceptibility to informational influence, higher the levels of customer trust for traders.

**3.2. Personalised trust sources**

**3.2.1. Customer dependence**

Emerson (1962) defines an entity’s degree of dependence on another as a multiplicative function of two factors: the value of the goal that the other entity mediates and the perceived availability of alternative avenues to reach that goal. In the context of an inter-firm relationship, dependence may make one firm vulnerable to the power of another (Krapfel et al., 1991). The more powerful partner may be in a position to create more favourable terms of trade for themselves (Heide and John, 1988; Frazier et al., 1989). For most rural people, the important source of income is agriculture, which is influenced by many uncontrollable factors in the environment. Only when farmers get a good harvest do they make consumption as well as investment decisions for the next crop on their own. Otherwise they have to depend either on local moneylenders or traders to purchase the products under the trader’s credit terms. If a particular trader cannot offer products on credit, they have to search for another. Rural market relations are highly embedded such that other traders might be defensive and suspicious to offer their products on credit which in turn forces the customers to stick to a particular trader. Thus, in this kind of relationship, the trader is in a powerful position and is expected to make the terms in his/her favour (Heide and John, 1988; Frazier et al., 1989). According to the literature, it would be rational for customers to try to terminate such relationships and replace them with those having a more favourable power balance. Therefore:

**H2.** Increased levels of customer dependence on the traders have a negative impact on customer trust for traders.

**3.2.2. Product quality**

Fornell et al. (1996) defined perceived product quality as an evaluation of the most recent experience and subdivided the product quality into (1) customisation, or the degree to which it meets specific needs, and (2) reliability, or the degree to which it is free from defects. Johnson et al. (1996) emphasised the performance aspect of product quality and insisted that the customers’ perception of the product quality is related to the price they pay or the value they perceive from the purchase. Both the above explanations of perceived product quality are important in the context of rural market where rural traders are relevant to the customers as their immediate seller and not the remote urban-based manufacturer. As such, rural customers really value the worthiness of the product that they purchase from the trader against the price they had paid for the product and expect the trader to customise the product according to their needs. When the trader offers a worthy product that meets the customers’ expectations, it impacts customer satisfaction and also expresses goodness of the trader for performing his task. Several researchers have found that product quality is a determinant for customer satisfaction (e.g., Churchill and Surprenant, 1982; Cronin and Taylor, 1992). Empirically, Kennedy et al. (2001) found the product quality to be positively associated with trust on salespersons.

Hence:

**H3.** When perceived product quality is high, customer trust for traders will increase.
The questionnaire in Tamil language was used for conducting the interviews and the lead author of this article is proficient in Tamil language. He personally visited the villages and conducted face-to-face interviews with the farmers. The author interviewed the farmers personally without the presence of other farmers or friends who would have probably influenced them to provide socially acceptable responses. As such, the interviews were mostly conducted when the farmers were at their home or in their farms, and on an average the interviews lasted for about 30 min. First, the author introduced himself and informed the respondents that their name was chosen from the list provided by the VAO of their respective village to participate in the survey. Then the purpose of the research was explained to the respondents. All the respondents who were available during the author’s visit to the village agreed to participate in the survey.

To make the respondents feel comfortable in answering the statements from the questionnaire, a chart that described the scale in legible text and was handed over to them and a brief explanation about the scale was also provided to them before asking the scale-based questions. The author read out the statements one by one and requested the respondents to provide their extent of agreement to the read-out statement by seeing the scale. This procedure was specifically followed to avoid the tendencies of respondents to just answer at the mid-point and/or at the extreme ends of the scale. Also, this procedure helped the respondents to comprehend the statements properly and answer them appropriately.

4.2. Measurement of the variables

A majority of the constructs were measured using multiple items where the respondents were asked to indicate the extent of their agreement on a scale from 1 (strongly disagree) to 7 (strongly agree). Other scale types are explained along with a discussion on the variable. All the measurement scales are mentioned in Appendix A.

4.2.1. Susceptibility to interpersonal influence

The customer’s susceptibility to interpersonal influence was measured using the scale developed by Bearden et al. (1989). It is a two-factor, 12-item scale comprised of eight normative influence items and four informational influence items to measure customer susceptibility to interpersonal influence. The informational influence and normative influence factors reported a Cronbach alpha coefficient of 0.82 and 0.88 respectively.

4.2.2. Customer dependence

Customer dependence was developed by Batt (2000) to measure farmers’ dependence on their potato seed suppliers. Originally, the scale had three factors namely independence, availability of alternatives and comparison of alternatives with six items, three items and one item respectively. The reported Cronbach alpha coefficient for the factors such as independence and availability of alternatives was 0.93 and 0.65 respectively. The scale was revised to suit the applicability of this study. Consequently, this study used only five items of the first factor namely, independence, which described how despite the financial obligations between farmer and seed supplier, most farmers were not unduly influenced by the demands imposed upon them by their seed supplier.

4.2.3. Product quality

Batt (2000) measured seed supplier offer quality by 14 items three-dimensional scale, which included service dimensions such as competitive pricing and reliable delivery besides product dimension such as seed quality. Present study views product quality as a distinct variable and hence only three-item measure of

H4. When perceived service quality is high, customer trust for traders will increase.
perceived seed quality developed by Batt (2000) was used as a basis of the scale to assess the perceived product (fertiliser) quality. The scale reported a Cronbach alpha coefficient of 0.76.

4.2.4. Service quality

Traditionally, service quality is measured using the SERVQUAL scale proposed by Parasuraman et al. (1985). Cronin and Taylor (1992) analysed service quality by a performance-based measure (SERVPERF), which was shown to be more efficient than the SERVQUAL. SERVPERF is a unidimensional 22-item scale and the scale reported Cronbach alpha coefficients of 0.88, 0.93, 0.93 and 0.96 in fast food, banks, dry-cleaning and pest control examples respectively. In this study, the scale is modified to suit the rural fertiliser selling context and thus only 10 items from the SERVPERF scale were selected.

4.2.5. Trust for the trader

Sales trust scale developed by Holden (1990) was used to assess customer trust for traders. Holden’s (1990) original scale developed to assess trust in an industrial buyer–seller relationship had eight items and reported a Cronbach alpha coefficient of 0.92. The same scale was also used by Kennedy et al. (2001) to assess the trust for salespersons in their research and had a Cronbach alpha coefficient of 0.97. The scale was further revised to suit the context of the study.

5. Analysis and results

5.1. Measurement model

We used AMOS 17.0 for the analyses. First, we assessed the measurement model followed by the structural model for hypotheses testing using the guidelines suggested by Anderson and Gerbing (1988). In this section, we first report the results of our confirmatory factor analysis (CFA) for all the measures to test their convergent validity. The product quality measure moderately fits with the data with significant factor loadings ($\chi^2(2) = 12.90$, $p = 0.00$, TLI = 0.93, CFI = 0.98, RMSEA = 0.19). It also has a very good composite reliability (product quality = 0.88).

Other measures such as normative influence dimension of susceptibility to interpersonal influence dependence, service quality and trust required some refinement due to weak factor loadings and poor fit indices. We used a minimum cut-off loading of 0.6 for all the measures. Following this procedure, we removed some of the items from service quality, dependence and trust measures. The remaining items provided better fit and also strong factor loading (service quality – $\chi^2(1) = 1.05$, $p = 0.31$, TLI = 0.99, CFI = 1, RMSEA = 0.67; trust – $\chi^2(1) = 3.37$, $p = 0.07$, TLI = 0.98, CFI = 0.99, RMSEA = 0.09; dependence – $\chi^2(1) = 0.56$, $p = 0.45$, TLI = 1.00, CFI = 1, RMSEA = 0.00). All these measures had a good composite reliability (service quality = 0.67; trust = 0.87; dependence = 0.82).

As susceptibility to interpersonal influence measure being a two-dimensional measure, we performed a second order CFA and removed some items from normative influence dimension due to low factor loading. Rest of the items provided better model fit ($\chi^2(13) = 21.94$, $p = 0.06$, TLI = 0.98, CFI = 0.99, RMSEA = 0.03) and strong factor loading with their respective dimensions. Furthermore, both normative influence and informational influence dimensions had significant factor loading with the second order factor namely susceptibility to interpersonal influence (normative influence = 0.54; informational influence = 0.94). Table 1 summarises the results of the confirmatory factor analysis for all the individual measurement models.

Once the convergent validity for all the measures was established, we proceeded to the next step of testing discriminant validity with CFA among the related measures. The results are shown in Table 2. The measurement models for all the pairs had a good fit with the data. Furthermore, we used confidence interval test to check the correlation between these measures.

The confidence interval test involves calculating a confidence interval of plus or minus two standard errors around the correlation between the factors, and determining whether this interval includes 1.0. If it does not include 1.0, then discriminant validity is

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<td>0.80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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demonstrated (Anderson and Gerbing, 1988). In our study, except product quality and service quality pair, all other pairs had discriminant validity. The confidence interval test for product quality measures produced 1.0.

As both the product and the accompanied service are the two components of the offer provided by the rural trader to their customers, and also rural customers consider traders as their immediate sellers, it appears that the rural customers perform quality evaluation of the offer rather than the product and the accompanied service separately. Hence, the product quality and the service quality measures were checked for second order CFA with trader offer quality as the second order factor. Initially, one item of service quality was removed as it had a low factor loading and later one item from product quality dimension was also removed as it affected the goodness of fit. The revised second order CFA for offer quality measure was performed and the results are reported in Table 3. The revised model had strong goodness of fit indices ($\chi^2(1) = 1.88$, $p = 0.17$, TLI = 0.98, CFI = 0.99, RMSEA = 0.05) and both product quality and service quality had significant factor loading with the second order factor – offer quality (product quality – 0.79; service quality – 0.99).

Furthermore, we also performed discriminant validity test between offer quality and dependence measures. The results are shown in Table 4. The measurement model was found to have a good fit and the results of the confidence interval test also suggest good discriminant validity.

5.2. Structural model

A full structural cum measurement model analysis was performed to test the fit of our proposed theoretical model with the data. The results are provided in Table 5. Fit indices such as TFI, 

Table 2
Assessment of discriminant validity among selected pairs of constructs.

<table>
<thead>
<tr>
<th>Correlations between</th>
<th>Estimate</th>
<th>SE</th>
<th>95% confidence interval</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>df</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PQ ↔ SQ</td>
<td>0.70</td>
<td>0.15</td>
<td>-0.40</td>
<td>1</td>
<td>31.55</td>
<td>0</td>
<td>8</td>
<td>0.94</td>
<td>0.97</td>
</tr>
<tr>
<td>PQ ↔ DE</td>
<td>0.02</td>
<td>0.14</td>
<td>-0.26</td>
<td>0.29</td>
<td>19.77</td>
<td>0.01</td>
<td>8</td>
<td>0.97</td>
<td>0.99</td>
</tr>
<tr>
<td>SQ ↔ DE</td>
<td>0.03</td>
<td>0.13</td>
<td>-0.24</td>
<td>0.30</td>
<td>17.24</td>
<td>0.03</td>
<td>8</td>
<td>0.96</td>
<td>0.98</td>
</tr>
</tbody>
</table>


Table 3
Second order confirmatory factor analysis for offer quality measure.

<table>
<thead>
<tr>
<th>Construct/items</th>
<th>Regression coefficient</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>df</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>Comp. reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offer quality</td>
<td>1.88</td>
<td>0.17</td>
<td>1</td>
<td>0.98</td>
<td>0.99</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product quality</td>
<td>1</td>
<td>0.79</td>
<td>1</td>
<td>0.89</td>
<td>0.89</td>
<td>0.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.84</td>
<td>0.72</td>
<td>2</td>
<td>0.84</td>
<td>0.84</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service quality</td>
<td>1</td>
<td>0.94</td>
<td>1</td>
<td>0.70</td>
<td>0.70</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1.03</td>
<td>0.64</td>
<td>2</td>
<td>1.03</td>
<td>1.03</td>
<td>0.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4
Assessment of discriminant validity between offer quality and dependence.

<table>
<thead>
<tr>
<th>Correlations between</th>
<th>Estimate</th>
<th>SE</th>
<th>95% confidence interval</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>df</th>
<th>TLI</th>
<th>CFI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OQ ↔ DE</td>
<td>-0.01</td>
<td>0.14</td>
<td>-0.29</td>
<td>0.27</td>
<td>27.17</td>
<td>0.01</td>
<td>12</td>
<td>0.96</td>
<td>0.98</td>
</tr>
</tbody>
</table>

OQ – offer quality; DE – dependence.

Table 5
Summary of results for structural model.

<table>
<thead>
<tr>
<th>Path</th>
<th>Hypo-theeses</th>
<th>Standardised estimates</th>
<th>Critical ratio</th>
<th>$p$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susceptibility to interpersonal influence → trust</td>
<td>$H_{1a}$ + $H_{1b}$</td>
<td>0.65</td>
<td>3.65</td>
<td>0.00</td>
</tr>
<tr>
<td>Dependence → trust</td>
<td>$H_2$</td>
<td>0.08</td>
<td>1.439</td>
<td>0.15</td>
</tr>
<tr>
<td>Offer quality → trust</td>
<td>$H_3$ + $H_4$</td>
<td>0.88</td>
<td>6.36</td>
<td>0.00</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>192.06</td>
<td>112</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$p$</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLI</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFI</td>
<td>0.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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CI and RMSEA suggested a good fit with the data except \( \chi^2 \) fit index \( (\chi^2(290) = 464.31, p = 0.00, \text{TLI} = 0.95, \text{CFI} = 0.95, \text{RMSEA} = 0.05) \). However, it has been noted that the \( \chi^2 \) test of model fit is sensitive to sample size, rejecting virtually any model if it is large enough (Bagozzi, 1981). Overall, the theoretical model was found to have a satisfactory fit with the data.

We now turn our attention to the results of our hypotheses testing. Table 5 shows the results of our hypotheses testing. The results indicate that trust for the trader was influenced positively in the order of importance by offer quality (standardised coefficient = 0.61; critical ratio = 6.62) and customer susceptibility to interpersonal influence (standardised coefficient = 0.32; critical ratio = 3.78) with a \( p \) value less than 0.01. Furthermore, unexpectedly the customer dependence (standardised coefficient = 0.11; critical ratio = 1.86) was found to have significant positive association with trust with a \( p \) value of 0.15.

6. Discussion, implications and limitations

The results of this study broadly identified two types of determinants of customer trust for traders in rural India, namely generalised trust and personalised trust sources. Generalised trust sources such as normative social influence and informational social influence and personalised trust sources such as customer dependence and customer perceived offer quality were found to positively impact customer trust for traders in rural India. In this section, we discuss these results and their implications on marketing theory and practice.

By applying Fishbein’s model of behavioural intention and Fafchamps’s (2002) trust theory on developing countries, we contended in the literature review section that interpersonal trust is not only based on often-researched personalised trust sources but also on generalised trust sources. The personalised trust sources are interpersonal interaction-based variables which are well researched in the developed countries. The importance given to generalised trust sources in generating interpersonal trust is relatively lesser in developed countries as compared to developing countries because it is granted by the system in the former through structured and effective legal mechanisms and public sources of information (mass media). Uneven presence of such systems in developing countries (and lack of such systems especially in rural areas) encourages individuals to be susceptible to norms and information (Moore, 1994; Lyon, 2000; Harriss, 2002; Dwivedi and Varman, 2003). Therefore, normative influence and informational influence become the sources of generalised trust in rural India. This kind of distinction for determinants of customer trust is new to the marketing literature.

Although appropriate systems for business transactions like contracts and other legal recourses are in place in developed countries, managers in developed countries must also realise the importance of generalised trust sources for the development of customer trust for their organisation. It becomes particularly necessary when the companies from developed countries do business in developing countries. When they operate in developing countries, the managers must be extra cautious and invest more time and effort in building generalised trust sources while also giving equal importance to personalised trust sources.

Generalised trust sources such as normative influence and informational influence variables impact trust for traders in rural India. This finding is new to the marketing literature. Although variables such as generalised tendency to trust (Kennedy et al., 2001) and broad scope trust (Grayson et al., 2007), which are closely related to generalised trust, were included in previous studies in developed countries for the development of customer trust, we do not sufficiently explain the role of social norms and information that are required for the development of customer trust in a developing country. Impact of social norms and information are well researched in social psychology and economic sociology literature (Lyon, 2000; Harriss, 2002; Dwivedi and Varman, 2003; Solano et al., 2003; Ferreira, 1997), but limited empirical evidence is provided.

After Deutsch and Gerard’s (1955) seminal article on ‘social influences on individual judgements,’ the impact of two social influences namely normative influence and informational influence have been studied extensively on several consumer judgements on product, product quality, word of mouth, etc. However, the earlier research studies on social influences negated their impact on buyer–seller relationships. Our research highlights the importance of these influences on customer trust for traders in rural India.

The significant positive impact of susceptibility to normative influence on customer trust for traders has strong implications for marketers in rural India. As discussed earlier in the literature review section, the presence of social groups such as kinship, caste, religion, language and region are widely prevalent in rural India and people are highly influenced by the norms of these social groups. Hence, the score on susceptibility to normative influence would be more in rural India as compared to the developed countries, and predictably, its impact on customer trust. Marketers in rural India can make use of this finding in building customer trust by way of involving their company in promotional campaigns along the lines of norms prevalent in the social groups of that locality. For example, companies may sponsor events like village temple festivals and promote their company. Also, the trader could inform a customer about social groups which trust him and this practice would eventually increase the particular customer’s trust for that trader.

The significant positive impact of susceptibility to informational influence on customer trust for traders also has practical managerial relevance while operating in rural India. Basically, it implies that wherever the customers are most likely to be influenced by information received from others as reality, they appear to trust their traders. In rural India, limited presence and use of public sources of information (mass media) drive the people to be more susceptible to informational influence than developed countries. If many people speak positively about a particular trader, the customer’s trust for that particular trader increases. This is evident from the successful practice of agricultural department officials to promote innovative farm technologies in rural India. They identify opinion leaders in every village and provide information about the innovations and motivate them to adopt these innovations who eventually influence other farmers of that village to adopt these innovations.

Personalised trust sources in rural India provide unique findings as compared to the studies of developed countries. Offer quality was found to be the strongest driver of customer trust for traders. This is similar to previous studies in developed countries (Selnes, 1998; Batt and Rexha, 1999; Kennedy et al., 2001), except on one aspect of our results. Our results question existing theories suggesting that the product is independent of the accompanied services and operationalising the quality evaluation of product and accompanied service as two distinct variables. Because the customers in developing countries evaluate the total offer which includes both, it is not meaningful to distinguish product from services in every market instance. This result leads us to suggest that the academicians and practitioners must rethink their emphasis on separating products from services especially in the trade services.

Regarding the impact of customer dependence on customer trust for traders, this study found a positive relationship with a \( p \) value of 0.15. This result stands in stark contrast to our initial hypothesis and to extant literature in developed countries. The

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tant literature in developed countries suggests that the dependence of one party on the other party provides power only to the stronger party and the dependent party might not trust the stronger party and behave opportunistically (Ganesan, 1994). This finding implies that the dependent party instead of behaving opportunistically behaves cooperatively with the stronger party. This finding is significant in that it points to a more complex relationship between dependence and trust than has been theorised.

This research also contributes to the methodology of conducting survey-based quantitative research in rural India. The questionnaire has to be translated into local (Tamil) language. The interviewer should be proficient in local language and should interact with the respondents in local language. Furthermore, to elicit responses for scale based statements of the questionnaire, the interviewer should explain the scale well and also hand over a chart that mentions the scale for their ready reference. This practice essentially reduces the tendency of respondents to answer in the middle or at extreme ends of the scale.

As it has been mentioned earlier, our research adapted the marketing concepts studied in developed countries and conceptualised customer trust for traders with the conditions prevailing in rural India. The findings of this study are limited to the chemical fertiliser purchase situation in rural India. The chemical fertiliser purchase situation is different from other fast moving consumer goods purchase. Hence, in fast moving consumer goods purchase situation, personalised trust sources such as offer quality and customer dependence might impact differently on customer trust in comparison with chemical fertiliser purchase situation. Furthermore, while applying the findings of this research in other countries one has to be cautious. Rural India is comparatively different from urban India. In urban India, systems of market exchanges are better structured than in rural India. Hence, to some extent in urban India, the sources of generalised trust such as normative and informational social influences might not operate in the same way as in rural India. This leads us to understand that the generalised trust sources in urban India might be potentially similar to generalised trust sources in developed nations.

7. Conclusions and suggestions for further research

This study conceptualised customer trust for traders in rural India by reviewing the trust theories from economic sociology and social psychology literature in developing countries and adapting the established marketing concepts from the Western countries. The results from this study provide several unique vistas to the existing trust theories in marketing which confirm, extend and challenge the studies conducted in the developed countries.

In rural markets of developing countries, interpersonal relationships are strong, very frequent and socially significant. Rural people's purchase decisions are markedly influenced by a web of family members and relatives, neighbours, caste members, political affiliations and friends. This phenomenon is captured in this research through significant generalised trust sources such as normative influence and informational influence. Our study calls for emphasis also on social aspects of market exchanges for trust studies in the developed countries.

The research also concludes that the often-studied personalised trust sources in developed countries operate differently in rural India. This could inspire the personalised trust sources studies in developed countries. Importantly, in sidelinig presumptions on the negative aspects of dependence opens up empirical questions looking into the nature of its interactions and how it works for each in the buyer–seller dyad.

The traders offer products and accompanied services together as their total offer. The customers evaluate the quality of each purchase based on their experience with the total offer. As such, offer quality was found to be the strongest driver of customer trust for traders. The customers’ mental association of the quality of the product with the traders’ offer implies that the traders have to be careful in providing good quality products and to create trust in the customers. Also, customers may not particularly blame the manufacturers for a bad quality product, but a bad quality product could reduce customer trust for traders.

Our result on the significant positive impact of customer dependence on customer trust has immense managerial implications. In-depth research examining customer dependence would be especially promising, as would further work examining coordinative behaviours between buyers and sellers under conditions of asymmetric dependence. Finally, our research could be extended to compare the impact of generalised trust sources on customer trust in urban India or urban areas of any developing countries with developed countries.

Acknowledgement

The authors are grateful to Mr. Sheikh Ubaidullah for his comprehensive editing of the manuscript.

Appendix A. Items of the measurement scales

A.1. Customer susceptibility to interpersonal influence

A.1.1. Normative influence

1. I achieve a sense of belonging with others by purchasing the same products that others purchase.
2. If I want to be like someone, I often try to buy the same company products that they buy.
3. I identify with other people by purchasing the same products they purchase.

A.1.2. Informational influence

1. To make sure I buy the right product, I often observe what others are buying and using.
2. If I have little experience with a product, I often ask my friends about the product.
3. I often consult others to help choose the best alternative available from a product class.
4. I frequently gather information from friends or family members about a product before I buy.

A.2. Offer quality

A.2.1. Product quality

1. The fertiliser from my trader is consistently good.
2. The fertiliser I obtain from my trader substantially improves the productivity of my crop.

A.2.2. Service quality

1. My trader has the knowledge to answer customers’ questions.
2. My trader’s operating hours is convenient to all customers.

A.3. Customer dependence

1. My trader decides what fertilisers I should use.
2. My trader controls all the information pertaining to decision making in our relationship.

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3. My trader has all the power in decision making in our relationship.

A4. Customer trust

1. My trader would not tell a lie even if he could gain by it.
2. My trader always maintains his principle of honesty and morality even though his business is not doing particularly well.
3. My trader can be trusted.

References


Bagozzi, R.P. 1981. Evaluating structural equation models with unobservable variables and measurement error: A comment. Journal of Marketing Research 18 (August), 375–381.


