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The moderating effects of contextual factors on a buyer's trust in e-commerce platforms and sellers

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THE MODERATING EFFECTS OF CONTEXTUAL FACTORS ON A BUYER'S TRUST IN E-COMMERCE PLATFORMS AND SELLERS

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Abstract

Drawing on trust transfer theory and signal theory, we investigate how perceived effectiveness of e-commerce institutional mechanisms (PEEIM) and perceived website quality of the seller (PWQS) moderate the relationships between trust in platform, trust in seller and purchase intention in the context of Consumer to Consumer (C2C) platforms. To test our proposed model, we surveyed 224 buyers of TaoBao, a major Chinese C2C portal. The results indicate that PEEIM has no effect on the relationship between trust in platform and trust in seller, yet it positively moderates the relationship between trust in seller and purchase intention. In addition, PWQS positively moderates the relationship between trust in platform and trust in seller, but negatively moderates the relationship between trust in seller and purchase intention. The theoretical and practical implications are discussed.

Keywords: Trust, Platform, Seller, Purchase intention, E-commerce institutional mechanisms, Website quality.

1 INTRODUCTION

As Consumer to Consumer (C2C) forms of electronic commerce have become increasingly competitive, how to motivate buyers to purchase remains a primary concern for online sellers (Hong and Cha 2013; Wells et al. 2011). Low purchase levels are a serious threat to the survival of online sellers (Kim 2012) who desire to convert potential buyers into long-term future purchasers (Kim and Gupta 2009). Therefore, understanding what factors enhance buyers' purchasing intentions is essential for the long-term profitability of sellers on C2C platforms.

Trust has been demonstrated to be one of the prerequisites for the success of e-commerce (e.g., Gefen 2002; Gefen et al. 2003b; Kim et al. 2009). Specifically, when a buyer trusts the seller, the buyer is unlikely to hesitate to make a purchase in the future. Trust transfer theory further indicates that trust transfers from a platform to a seller is a key facilitator of buyer purchasing intention (e.g., Hong and Cho 2011; Pavlou and Gefen 2004). However, it is necessary to investigate various boundary conditions under which trust operates (Gefen et al. 2008). Indeed, recent empirical studies reveal that the impact of trust on transaction intention varies under the different contextual conditions (Gefen and Pavlou 2012), such as habit (Chiu et al. 2012) and e-commerce institutional context (Fang et al. 2014). Unfortunately, previous research has largely assumed a direct relationship between trust and online purchase, ignoring the different conditions under which trust exerts varying effects on online purchase intention (Gefen and Pavlou 2006). Thus, exploring the moderating effects of the potential contextual factors is the first objective of this study.

Previous research has suggested that institutional context is an important moderator in online purchasing situations. For example, Gefen et al. (2008) argue that the e-commerce institutional context moderates the effect of trust on online behavioral intention. Fang et al. (2014) further demonstrate that perceived effectiveness of e-commerce institutional mechanisms (PEEIM) remains important in the online repurchase context. However, our understanding of how the trust transfer process is affected by different institutional contexts is still limited. In addition, on a C2C platform, buyers are served by two parties: the platform and the seller. The platform establishes policies and rules (e.g., institutional mechanisms) to decrease uncertainty and help build buyers' trust in sellers (Hong and Cho 2011). Luo et al. (2012) indicate that website factors offered by sellers can also function as a form of uncertainty mitigation, reducing the psychological distance between online buyers and sellers. Considering only the institutional context is inadequate and thus we also take sellers' conditions into consideration. As such, the second objective of this study is to consider the moderating roles of both the institutional context and the website factors of the seller, since these two phenomena can provide appropriate conditions that mitigate the negative impact of uncertainty in the environment for transaction activity.

To achieve these two objectives, in this study we address the moderating effects of PEEIM, which is a manifestation of the e-commerce institutional context, and perceived website quality of the seller (PWQS), which is a manifestation of the website factors of the seller, in the C2C online shopping situation. PEEIM refers to the safeguarding mechanisms in the e-commerce environment, which are perceived by online buyers as protecting them through the mitigation of potential risks (Fang et al. 2014). PEEIM stresses online buyers' perceptions of signals that the platform offers in its attempt to create a secure and guaranteed transaction environment. PWQS refers to online buyers' evaluation about whether their needs are met by the features of a seller's website and it reflects the website's overall excellence (Aladwani and Palvia 2002). PWQS emphasizes an online buyer's perception of all signals, including information quality, system quality and service quality, demonstrated by the seller in designing the website (Delone 2003; Hsu et al. 2011).

Signal theory indicates that in the context of asymmetric information and when difficult decisions about a product (or company) quality need to be made, buyers tend to rely on informational cues to assess the quality (Boulding and Kirmani 1993; Kirmani and Rao 2000). The credible signals impact the perceptions, attitudes and behaviors of buyers (Benlian and Hess 2011). Drawing on signal theory (Dimoka et al. 2012; Spence 1973), we investigate how PEEIM and PWQS serve as signals influence

the relationship between trust in platform and trust in seller and the relationship between trust in seller and online purchase intention.

2 THEORETICAL FOUNDATIONS

2.1 Trust Transfer Theory

Trust is a belief that the trusting party expects the trusted party will behave with ability, integrity and benevolence (Mayer et al. 1995; Pavlou and Gefen 2004). Trust plays a crucial role between these two parties, due to its ability to promote risk taking behavior when uncertainty and opportunism are emerged (McKnight et al. 1998). Trust has been widely found to be a key predictor of transactions in the online context (Ba et al. 2003; Gefen 2002; Gefen et al. 2003b). Indeed, without sufficient trust, a trade between two parties cannot be initiated (Hu et al. 2010). In particular, it is a formidable challenge to convince buyers to engage in any transaction with less-known online sellers because sellers need to induce a sufficient level of initial trust (Hu et al. 2010). Therefore, in order to enhance online buyers' assessment of seller's trustworthiness and engender an adequate level of initial trust, opportunities for trust production should be provided by a less-well-known online seller (McKnight et al. 2002a; McKnight et al. 2004).

The trust transfer process is one of the trust building mechanisms in e-commerce context (Wang et al. 2013). The trust transfer process is related to how one's trust in a familiar target can be transferred to another target because there exist certain associations (Kim 2008; Stewart 2003). Three actors are involved during the trust transfer process: the trustor, the trustee and a third person (Stewart 2003). The underlying logic among the three actors is that "when the trustor trusts in the third person and there is a close relationship between the trustee and the third person, the trustor's trust in the third person will be transferred to the trustee" (Wang et al. 2013, p. 1396). Following this logic, we argue that buyer trust in a platform can be transferred to a seller on this platform because of their perceptions of some association with the platform (Hong and Cho 2011; Pavlou and Gefen 2004).

However, prior studies on the trust transfer process assume a linear relationship between trust transfer process and online purchase intention, ignoring the boundary conditions. Gefen et al. (2008) further argue that trust operates differently under a variety of boundary conditions. Hence, we should consider the moderating effects on the trust transfer process by incorporating contextual conditions.

2.2 Signal Theory

Signal theory explains how product (or company) quality can be judged by people under a range of conditions, particularly when it is difficult or impossible for people to observe the quality directly (Benlian and Hess 2011; Spence 1973). The conceptual foundations of signal theory are dependent on the premise that different parties have asymmetric information in a transaction situation (Kirmani and Rao 2000). Signal theory is applicable to consumer research because when facing asymmetric information and unobservable quality, a buyer tries to rely on credible relay information about actions or artifacts of businesses as the informational cues to assess the product (or company) quality (Boulding and Kirmani 1993; Kirmani and Rao 2000). Product cues can be divided into intrinsic and extrinsic cues (Hu et al. 2010). Intrinsic cues are reflected through the product itself (e.g., ingredients), whereas extrinsic cues are reflected through product-related attributes (e.g., buyer testimonials and various assurances from independent third-parties) (Hu et al. 2010; Wells et al. 2011).

When an online buyer visits an unknown online seller in the first time, he or she is more likely to depend on both intrinsic and extrinsic cues to evaluate the trustworthiness of the online seller (Hu et al. 2010). Since online buyers cannot touch or smell the products, it is difficult for them to rely on intrinsic cues. Richardson et al. (1994) note that extrinsic rather than intrinsic cues can enhance a buyer's confidence because a buyer can assess the extrinsic cues without any knowledge of the product or expertise. Thus, buyers' evaluations of the trustworthiness of the online seller are more

dependent on extrinsic cues. Accordingly, PEEIM and PWQS can be considered as extrinsic cues which signal the trustworthiness of the online platform and the sellers.

2.3 Perceived Effectiveness of E-commerce Institutional Mechanisms (PEEIM)

PEEIM is defined as an online buyer's belief that the online safeguarding mechanisms can protect him/her against potential risks in the e-commerce environment (Fang et al. 2014). Online safeguarding mechanisms include escrow services, online credit card guarantees and privacy protection (McKnight et al. 2002b; Pavlou and Gefen 2004). For example, escrow services (e.g., PayPal, Alipay) can protect buyers' interests by authorizing payment only after buyers receive the goods (Hu et al. 2004; Pavlou and Gefen 2004). Online credit card guarantees from credit card companies can protect buyers against sellers' fraudulent behavior (Pavlou and Gefen 2004; Pavlou and Gefen 2005). C2C e-commerce involves buyers, each of whom may have different perceptions with respect to the effectiveness of e-commerce institutional mechanisms. The definition of PEEIM emphasizes the effectiveness of e-commerce institutional mechanisms in terms of perception (Fang et al. 2014).

According to Fang et al. (2014), these mechanisms guarantee all the transactions and are not transaction-specific or party-specific. The effectiveness of institutional mechanisms indicates that the managers of a platform invest effort to protect online buyers by cooperating with these third parties.

2.4 Perceived Website Quality of the Seller (PWQS)

A high quality website can facilitate transactions between buyers and sellers, exerting an impact on buyers' evaluations, and consequently driving their purchase intention (Liang and Chen 2009). PWQS refers to an online buyer's general perception of the extent to which the features of the seller's website meet his/her needs (Aladwani and Palvia 2002). Website quality includes information quality, system quality and service quality (Ahn et al. 2007). Buyers' perceptions of website quality are evaluated in these three dimensions (Delone 2003; Liang and Chen 2009). Specifically, information quality is related to the quality perceived by buyers in terms of information available on a seller's website (McKinney and Yoon 2002). System quality refers to the buyers' perception of overall performance of the seller's website systems, which can be reflected through the degrees of user friendliness (Hsu et al. 2011). Service quality is defined as the extent to which the buyers' evaluations of the service delivered by the seller via the website (Hsu et al. 2011; Liang et al. 2011).

The success of a transaction between a buyer and a seller depends on the high quality of a seller's website. In this view, website quality of a seller reflects seller-specific cues designed to induce buyers' online shopping behavior.

3 RESEARCH MODEL AND HYPOTHESIS DEVELOPMENT

Based on the above discussion, in this section a research model is developed to examine the moderating roles of PEEIM and PWQS on the relationships between trust in platform, trust in seller and purchase intention. Based on the trust transfer theory, we first argue that trust in platform can improve trust in seller, and consequently enhance purchase intentions. We draw on signal theory and then propose that PEEIM and PWQS positively moderate the relationship between trust in platform and trust in seller. We further propose that PEEIM and PWQS negatively moderate the relationship between trust in seller and purchase intention. These hypotheses are shown in Figure 1.

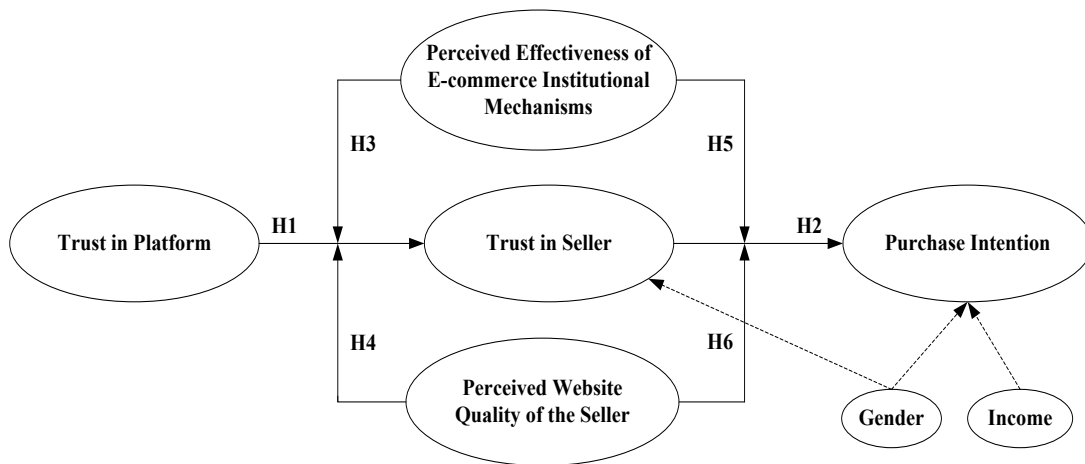


Figure 1. Research model

3.1 Trust in Platform and Trust in Seller

Trust transfer theory suggests that people’s trust in familiar targets can transfer to other targets because of their associations with one another (Stewart 2003). In this respect, we argue that trust transference can occur between the platform and a specific seller by virtue of their linked websites (Lee et al. 2011; Lu et al. 2011). Buyers’ positive perceptions and attitudes towards a C2C platform will transfer to the seller; the seller is then viewed as a trustworthy transaction partner. Hong and Cho (2011) also demonstrate that a buyer’s trust in the platform is positively associated with trust in a seller in an online marketplace. Hence, we propose that:

H1: Buyers’ trust in the platform is positively related to their trust in the seller.

3.2 Trust in Seller and Purchase Intention

Buyers’ trust transfer from a platform to a seller can also lead to buyers’ purchase intention with the seller. Trust in a seller can overcome social uncertainty, which allows buyers to begin a rational assessment (Gefen et al. 2003b). As such, a buyer’s trusting belief towards a specific seller is related to purchase intentions with the seller (Pavlou and Gefen 2004). It is well established that buyers’ trust in a seller can influence their purchase intention (Gefen 2002; Gefen et al. 2003b). Accordingly, we propose that:

H2: Buyers’ trust in the seller is positively related to their purchase intention.

3.3 The Moderating Effects of PEEIM and PWQS on the Relationship between Trust in Platform and Trust in Seller

According to trust transfer theory, a trustor’s trusting beliefs can be transferred relying on trusted “proof sources” (Doney and Cannon 1997). In this study, we suggest that “proof sources” include corroborations from the platform (i.e., PEEIM) as well as from the seller (i.e., PWQS). This means that the level of buyers’ trust transfer from the platform to the seller depends on signals delivered by the e-commerce institutional mechanisms and the quality of a seller’s website. From this perspective, PEEIM and PWQS are extrinsic signals which would influence the effect of trust in the platform on trust in the seller.

In a C2C platform, PEEIM is not dependent on online sellers. Buyers’ perceptions of risk or uncertainty about transaction environment can be mitigated by high PEEIM (Grabner-Kräuter and Kaluscha 2003). This implies that high PEEIM can serve as a signal of risk mitigation functions to buyers. Such a stable transaction environment influences an individual’s perceptions associated with the goodness of the environment (McKnight et al. 1998). Under this condition, sufficient signals (i.e.,

high PEEIM) are delivered by the platform to facilitate trust transferring. When PEEIM is high, buyers' fears can be overcome, which enables them to be more willing to count on the platform (McKnight et al. 2002a). As such, buyers do not need to evaluate all sellers on this platform, but rather infer from trust in the platform. Under this condition, buyers can judge an unknown seller based on their general feelings towards the platform. This implies that the influence of buyer trust in the platform on trust in the seller is strengthened under such a secure transaction environment.

In contrast, when the transaction environment cannot be protected by institutional mechanisms and thus transmit a signal about a state of high uncertainty, buyers will question trust transference from the platform to the seller. In particular, low PEEIM triggers buyers to look for new signals to build their trust in the seller rather than depending on past trustworthiness of the platform. In other words, buyers need to reevaluate the trustworthiness of the seller in such an uncertain context (McKnight and Chervany 2002). This implies that the influence of trust in the platform on trust in the seller is weak. Thus, we propose that:

H3: PEEIM positively moderates the relationship between trust in the platform and trust in the seller.

While a buyer is inclined to depend on trust in the platform transferring to trust in the seller, the level of reliance depends on the website quality of the seller. When PWQS is high, buyers' initial impressions are solidified by experientially feeling of the seller's presence (McKnight et al. 2002b). High PWQS can reduce anxiety and perceived risk of online buyers by providing reliable information and services to them (Liang and Chen 2009). Consequently, buyers experience positive perceptions from knowing the seller's website. Buyers will ascribe the quality of a seller's website to a signal that the seller conveys to foster buyers' trust, thus their initial trust in the platform can easily transfer to the seller under such a context. In addition, supplied with reliable information and services by the seller, buyers are more likely to trust a seller based on a good impression toward the platform. In this view, PWQS serves as a reliable extrinsic signal to strengthen the influence of buyers trust in the platform on trust in the seller.

On the other hand, when PWQS is low (i.e., buyers perceives the transaction environment of the seller to be risky or uncertain), the effect of trust in the platform on trust in the seller is reduced by the uncertain situations of the seller because low PWQS causes buyers to doubt the applicability of a platform's trustworthiness to new conditions. Buyers may need more information to judge the trustworthiness of the seller even if the trustworthiness of the platform matches their taste. In other words, buyers' trust in the platform cannot transfer to the seller under such a situational uncertainty context. This implies that the influence of buyers' trust in the platform on trust in the seller is diluted. Therefore, we propose that:

H4: PWQS positively moderates the relationship between trust in the platform and trust in the seller.

3.4 The Moderating Effects of PEEIM and PWQS on the Relationship between Trust in Seller and Purchase Intention

Trust can reduce uncertainty (Morrison and Firmstone 2000), due to something that cannot be accurately predicted by the perception of an individual (Milliken 1987). The level of contextual uncertainty (i.e., PEEIM strength or PWQS strength) may influence the roles of trust on purchase intention (Jarvenpaa et al. 2004). In situations involving high uncertainty (i.e., low PEEIM or PWQS), people depend more heavily on trust to form purchase intention because no useful signals allow them to interpret the behavior of others (Chiu et al. 2012). When there is little uncertainty (i.e., high PEEIM or PWQS), enough signals enable people to judge others' behavior, and thus people may rely less heavily on trust (Jarvenpaa et al. 2004).

Mayer et al. (1995) note that when the level of buyers' perceptions of risk is less than the level of buyers' perceptions of trust, trust plays a more significant role in facilitating buyers' risk-taking behavior (e.g., purchase intention). Indeed, trust exerts a weak influence on purchase intention under buyers' perceptions of low risk (i.e., high PEEIM) (Schlosser et al. 2006). Luhmann et al. (1979) propose that in situations of low uncertainty, trust plays a less significant role in facilitating the development of people's behavioral intentions. As high levels of PEEIM provides explicit regulatory

assurances to mitigate contextual risks or uncertainty in the transaction context, the importance of trust in a seller in enhancing purchase intention will decrease (Schlosser et al. 2006). In other words, when high PEEIM is available to regulate the transaction environment, the impact of buyers' trust in the seller on purchase intention is lessened.

In contrast, if buyers' perceptions of uncertainty or risks of e-commerce environment (i.e., PEEIM is low), they will need additional assurance to increase their confidence in purchasing intention from the online seller. To obtain the additional assurance, buyers must rely more on trust in the seller (Corritore et al. 2003; Mayer et al. 1995). Thus, we propose that:

H5: PEEIM negatively moderates the relationship between trust in an online seller and purchase intention.

Signal theory also suggests that website quality of the seller signals a secure transaction environment by mitigating uncertainty (Benlian and Hess 2011; Wells et al. 2011). Mayer et al. (1995) argue that trust is needed for buyers only under an uncertainty situation. As high PWQS reduces uncertainty, the need for a buyer's trust in facilitating transaction intention is lessened. When PWQS is high, information search can be facilitated and the likelihood of a mismatch can be reduced (Luo et al. 2012), which enables buyers to depend less heavily on trust to purchase from the seller. Furthermore, the need for trust decreases with experience (Gefen et al. 2003a), indicating that buyers' trust in seller has little effect on purchase intention with buyers experiencing the quality of seller's website. This implies that the influence of trust in the seller on purchase intention is diluted.

On the contrary, when PWQS is low, the buyers' purchase intention may be associated with more uncertainties. In this situation, buyers may rely on their trust in the seller to make the purchase intention. Therefore, we propose that:

H6: PWQS negatively moderates the relationship between trust in an online seller and purchase intention.

4 RESEARCH METHOD

4.1 Measurement Development

All the measurement items used in this study were adapted from prior studies. Some minor changes were made in order to fit the research context. A five-point Likert scale, ranging from "strongly disagree" to "strongly agree", was used to measure all items. Given that we conducted this research in China, we translated the English questionnaire into Chinese according to the norms suggested by Van de Vijver (1997). Further, we hired a professional translator who was unfamiliar with our study to translate the questionnaire from Chinese back to English. When compared the translated questionnaire with the original English version, we found no semantic discrepancies. In order to assess the content validity, the measurement items were reviewed and critiqued by four MIS PhD students who had shopping experience on TaoBao.

Specifically, trust in platform was measured by three items adapted from Chen et al. (2009). Trust in seller was assessed by five items adapted from Chiu et al. (2012), Chiu et al. (2006), and Qureshi et al. (2009). Purchase intention was measured by three items adapted from Pavlou and Gefen (2004). Moreover, PEEIM was assessed by three items adapted from Fang et al. (2014). PWQS was measured by twelve items adapted from Zhou (2012). Additionally, both gender and income that might affect trust in seller and purchase intention were included in our model as control variables.

4.2 Research Design

To test the proposed model, a survey was conducted to collect the data. As TaoBao is the dominant C2C platform in China and Chinese buyers are familiar with it (Zhang et al. 2012; Zhao et al. 2012), choosing TaoBao as the research context was appropriate.

A convenience sample of students and staff in a large university in China were used. We invited those targeted participants who were TaoBao users to participate in the survey. We distributed 650 questionnaires, including 120 to a random sample of university staff and 530 to a sample of students who attended business courses at undergraduate and postgraduate levels. Altogether, 238 questionnaires were returned. We carefully examined those returned questionnaires and removed incomplete and invalid questionnaires. The final number of complete questionnaires was 224, with a response rate of approximately 36%. Table 1 shows the demographic information of those respondents.

	N	Percentage
Gender		
Male	118	52.68%
Female	106	47.32%
Age		
Below 20	15	6.70%
20–30	207	92.41%
31 or above	2	0.89%
Educational Level		
High school	10	4.46%
Undergraduate	62	27.68%
Master or above	152	67.86%
Online Shopping Frequency (monthly)		
1–3	155	69.20%
4–6	53	23.66%
Above 6	16	7.14%
The Price of the Products I Bought Recently (in RMB)		
Below 10	9	4.02%
11–50	34	15.18%
51–100	67	29.91%
101–300	80	35.71%
301–500	16	7.14%
501–1000	7	3.13%
Above 1000	11	4.91%

Table 1. Sample demographic (N=224)

Given that we collected data from university-based personnel, we further examined the sample representativeness. We first made a comparison between the respondent demographics and the information of current online buyers in China. According to the information of CNNIC (2012), the typical current online buyer was male, aged 18-30, with a bachelor or above degree. In this respect, the information between our demographic data and the statistics from CNNIC were basically consistent. We also compared the respondent demographics with those from CNIT-research (2012). Consistent with our survey sample, CNIT-research stated that university students accounted for the highest proportion of online buyers (about 30%) in China. Zhao et al. (2012) indicate that the majority of online buyers on TaoBao are university students. Thus, the sample representativeness was not a significant issue.

To examine non-response bias, we followed Armstrong and Overton's (1977) suggestions by comparing early and late responses. We used two tailed t-statistics across all the constructs to compare responses between early 25% and late 25% respondents. No significant differences among all constructs' means were identified, suggesting that non-response bias was not a concern in our study.

Furthermore, we also assessed common method bias because all the data collected were perceptual and from a single source at the same time. We followed Harmon's single-factor method to test common method bias (Carr 2007). The results showed that four constructs have eigenvalues higher

than 1.0, explaining 61.00% of the total variance. Meanwhile, the first factor accounted for 22.97% of the variance. Thus, common method bias was not a significant issue with the data.

5 RESULTS

5.1 Measurement Model

We examined the validity and reliability of the constructs by using Confirmatory Factor Analysis (CFA). To assess convergent validity, we tested the value of factor loading and average variance extracted (AVE). As shown in Table 2, the results revealed that the loadings for all items of this study were above 0.6. The AVEs of all constructs were above 0.6, higher than the recommended value of 0.5 (Fornell and Larcker 1981). The results demonstrated a good convergent validity of our measurement model. The values of Cronbach's alpha ranged from 0.693 to 0.856, which were above the benchmark value of 0.6 (Flynn et al. 1990). Composite reliability scores ranged from 0.829 to 0.903, which were above the recommended value of 0.7 (Fornell and Larcker 1981). Thus, our measurement model had good reliability.

Construct	Loading Range	Cronbach's Alpha	Composite Reliability	AVE
Trust to Platform (TP)	0.667–0.858	0.693	0.829	0.621
Trust in Seller (TS)	0.708–0.849	0.856	0.899	0.642
Purchase Intention (PI)	0.815–0.899	0.838	0.903	0.758
Perceived Effectiveness of E-commerce Institutional Mechanisms (PEEIM)	0.825–0.837	0.774	0.869	0.688
Perceived Website Quality of the Seller (PWQS)	0.840–0.897	0.831	0.899	0.749

Table 2. Results of confirmatory factor analysis

To assess discriminant validity, we compared the square root of the AVE of each construct with the correlations among constructs (Chin 1998). As shown in Table 3, the square roots of the AVEs for all constructs were larger than the correlations between constructs, suggesting good discriminant validity. Given that one inter-construct correlation value was higher than 0.6 criteria, multicollinearity may be a potential issue for this study. We further analysed the Variance Inflation Factors (VIFs) and the tolerance values to assess multicollinearity. Multicollinearity is considered to exist only when a VIF score is above 10 or a tolerance value is less than 0.1 (Mason and Perreault 1991). The results revealed that the highest VIF was 2.174, which indicated that the multicollinearity was not a serious concern of this study.

Variable	Mean	S.D.	1	2	3	4	5	6	7
1. TP	3.448	0.666	0.788						
2. TS	3.322	0.712	0.545	0.801					
3. PI	3.823	0.737	0.573	0.385	0.871				
4. PEEIM	3.259	0.774	0.503	0.502	0.316	0.829			
5. PWQS	3.500	0.573	0.654	0.532	0.595	0.522	0.865		
6. Gender	NA	NA	-0.123	0.009	0.016	-0.159	-0.035	NA	
7. Income	NA	NA	0.106	0.142	-0.011	0.238	0.167	0.022	NA

Note: Square root of AVE is the shaded numbers in the diagonal row.

Table 3. Correlations (N=224)

5.2 Structural Model

Hierarchical regression analysis was used to test our structural model and the results are shown in Figure 2. The model explained 41.8% of the variance in trust in seller and 39.3% of the variance in purchase intention. The findings showed that the relationship between trust in platform and trust in seller was positive and significant ($\beta=0.268$, $p<0.001$). The relationship between trust in seller and purchase intention was also positive and significant ($\beta=0.141$, $p<0.05$). Hence, both H1 and H2 were supported. Meanwhile, we found no significant moderating effect of PEEIM on the relationship between trust in platform and trust in seller. As such, H3 was not supported. The results indicated that the positive moderating effect of PWQS on the relationship between trust in platform and trust in seller was significant ($\beta=0.160$, $p<0.05$), which supported H4. However, there was a significant moderating effect of PEEIM on the relationship between trust in seller and purchase intention ($\beta=0.150$, $p<0.05$), rejecting H5. Furthermore, the negative moderating effect of PWQS on the relationship between trust in seller and purchase intention was significant ($\beta=-0.132$, $p<0.05$), supporting H6. In addition, only one control variable (i.e., income) had a significant effect on purchase intention. Table 4 summarized the findings of hypothesis testing.

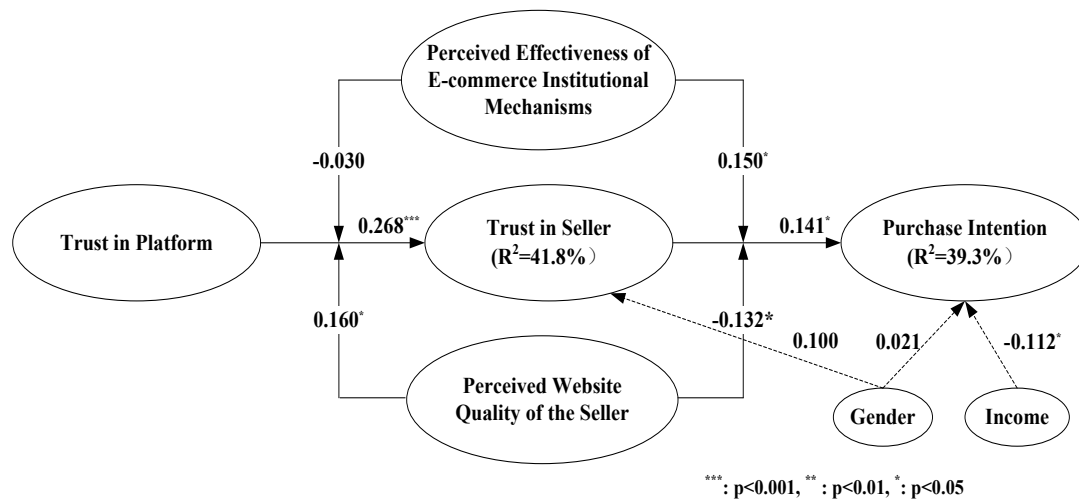


Figure 2. Research model results

H1: Buyers' trust in the platform is positively related to their trust in the seller.	Supported
H2: Buyers' trust in the seller is positively related to their purchase intention.	Supported
H3: PEEIM positively moderates the relationship between trust in the platform and trust in the seller.	Unsupported
H4: PWQS positively moderates the relationship between trust in the platform and trust in the seller.	Supported
H5: PEEIM negatively moderates the relationship between trust in an online seller and purchase intention.	Unsupported
H6: PWQS negatively moderates the relationship between trust in an online seller and purchase intention.	Supported

Table 4. Summary of hypothesis testing findings

6 DISCUSSION AND IMPLICATIONS

6.1 Discussion

The present study examines the relationship between trust transfer process and purchase intention. Besides, we also explore the moderating effects of PEEIM and PWQS on the relationships between trust in platform, trust in seller, and purchase intention by drawing upon the trust transfer theory and signal theory. Specifically, the results indicate that trust in platform positively influences trust in seller and trust in seller has a positive effect on purchase intention. In addition, we confirm that PWQS positively moderates the relationship between trust in platform and trust in seller. However, the present study does not support the positive effects of PEEIM on the relationship between trust in platform and trust in seller. A possible explanation is that once buyers access a specific online seller's website, they can judge whether the transaction environment of the seller is safe based on their direct experience with the seller's website, including their impressions of the seller's website quality. The influence of institutional mechanisms assurance will be attenuated by this experience with the seller's website (Bock et al. 2012; McKnight et al. 2004). Indeed, when direct experiences with the seller's website can be accrued by buyers, then the protections provided by institutional mechanisms actually do not play an important role (Bock et al. 2012). In other words, PWQS, other than PEEIM is a significant concern for buyers during their trust transfer from the platform to the seller.

In addition, the current research confirms that PWQS negatively moderates the relationship between trust in seller and purchase intention. Researchers have indicated that uncertainty can be conquered by buyers' experience, namely, the uncertainty of transaction environment is mitigated by high PWQS (Luhmann et al. 1979). As argued by Gefen et al. (2003a), the importance of trust decreases over time with experience, thus buyers rely less on trust to form their purchase intention.

Contrary to our expectations, the study finds that PEEIM positively moderates the relationship between trust in seller and purchase intention. A possible explanation is that when the platform provides high guarantees to buyers, buyers will not worry about the transaction process with the seller, even if the problems occur after the transactions have been completed. This means the guarantees from the platform make the transaction between buyers and seller more convenient and effective. In other words, buyers will not hesitate to purchase under such stable situations. An ineffective transaction environment may reduce buyers' reliance on trust in a seller to complete a transaction.

6.2 Limitations and Future Research

Some limitations should be addressed in future research. First, although we controlled some sample characteristics as potential confounding variables, some other variables, such as satisfaction and product characteristics, should also be taken into consideration. Future research can test whether these variables could serve as control variables.

Second, a convenience sample was used in this study. Although this sample could represent the majority of buyers on TaoBao, the student sample may cause bias. Moreover, young adults' shopping behavior was different from that of older adults. Therefore, researchers should be cautious when generalizing the results to different populations. Future research should also use multi-source samples so as to verify our results.

Finally, we collected data in the context of TaoBao in China. It is worthwhile to investigate online buyers' perceptions of contextual conditions on TaoBao due to its particular success among C2C online marketplaces in China. However, online buyers' behavior may be different across cultures. Future research should make cross-cultural comparisons between TaoBao and other C2C online marketplaces in other countries and cultures. As such, a more holistic explanation could be provided for online buyers' behavior.

6.3 Theoretical Implications

Our study has several important implications for theory. First, we contribute to the trust transfer theory by considering the boundary conditions under which trust is transferred. Prior studies assumed a direct relationship between the trust transfer process and behavioral intention, ignoring the contextual conditions (e.g., Hong and Cho 2011), despite Mayer et al. (1995) arguing that considering the context in which trust operates provides a better understanding of trust in a trustee than ignoring the context. Assuming an unconditional effect of trust represents an oversimplification of the contextual conditions in which trust operates (Gefen et al. 2008). To the best of our knowledge, this study is the first to address the call for exploring the moderating effects between trust transfer and behavioral intention in the C2C online shopping context.

Second, exploring the PEEIM and PWQS as moderators can help us achieve a better understanding of the effect of the trust transfer process on purchase intention. Buyers are served by two parties – a platform and sellers – for transactions in the e-commerce context (Hong and Cho 2011). This implies that an investigation into buyers' transaction intentions should consider how both the platform and sellers make efforts to enhance buyers' purchase intention by building a trust transfer process. Unfortunately, related studies have tended only to focus on one perspective, either the platform (e.g., Gefen et al. 2008) or sellers (e.g., Luo et al. 2012). Furthermore, prior research has not paid attention to the influence of trust transfer process on purchase intention. Our study sheds new light on the role of trust transfer process in purchase intention by considering both the platform's and sellers' characteristics as moderators. As such, we call for future research on trust transfer process to consider different potential contextual conditions from the lens of signal theory.

Third, our research findings reveal interesting effects of PEEIM and PWQS on the relationship between trust in platform, trust in seller and purchase intention. This study finds PWQS to be a positive moderator of the effect of trust in platform on trust in seller. Effective PWQS can ease the trust transfer process from the platform to the seller. Furthermore, prior studies indicate that trust in seller can facilitate online transactions (e.g., Pavlou and Gefen 2004). Our study proposes that this relationship is only tenable when PWQS is not effective. In addition, different from prior research showing that PEEIM plays a negative moderating roles in online repurchase context (e.g., Fang et al. 2014), our study finds that PEEIM strengthens the importance of trust in purchase intention situations.

6.4 Practical Implications

Our study may provide some valuable guidelines in terms of practical implications for managers. First, PEEIM is not found to have an effect on the relationship between trust in platform and trust in seller, but it positively moderates the relationship between trust in seller and purchase intention. Hence, based on the level of PEEIM, platform managers should strategically build buyers' trust. Managers should focus on how to design an appropriate platform to attract buyers and then build their trust in the platform as a first step. For example, whenever the buyers need help, the platform should provide good service for buyers to solve their problems during online shopping process. When buyers perceive that the e-commerce institutional mechanism is effective, managers should urge sellers to build buyers' trust in the sellers. For example, the sellers should fully guarantee the quality of their products. In this way, buyers will continue to transact with a seller.

Second, our study shows PWQS exerts an interesting yet paradoxical effect on the relationship between trust in platform, trust in seller and purchase intention. When the level of a seller's website quality is high, the impact of trust in platform on trust in seller increases, while the impact of trust in seller on purchase intention decreases. Accordingly, when facilitating buyers' purchase intentions, sellers need to focus on the level of PWQS. They could test buyers' PWQS through an online survey. When buyers perceive the quality of website to be relatively low, more resources should be committed to buyers to build their trust with a seller. Otherwise, sellers do not need to pay to build trust with those buyers who perceive the quality of website to be relatively high, because the effects of the platform on buyers are more obvious under such a situation.

7 CONCLUSION

This study investigates the effect of PEEIM and PWQS on the relationship between trust transfer process and purchase intention. The relationships between trust in platform, trust in seller and purchase intention have also been studied. The results address a range of issues for managers of C2C platforms and sellers to build effective e-commerce institutional mechanisms and website quality in order to enhance buyers' purchase intentions. We find that PEEIM has no effect on the relationship between trust in platform and trust in seller yet positively moderates the relationship between trust in seller and purchase intention. Moreover, PWQS positively moderates the relationship between trust in platform and trust in seller yet negatively moderates the relationship between trust in seller and purchase intention. Collectively, our study offers guidance for future research and practice to further explore the influences of effectiveness of e-commerce institutional mechanisms and website quality of the seller in C2C marketplaces.

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