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What's Yours is Mine: Trust in Collaborative Consumption

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INTRODUCTION

Shopping and interacting online using the Internet or some other electronic means such as an app on a smartphone has occurred for many years. However, the manner in which interactions are occurring and the exchange of products and services has changed. Collaborative consumption is altering the way consumers see and treat products and involves millions of users (Botsman and Rogers, 2010). Hamari et al. (2016, p. 2047) define collaborative consumption as “the peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services”. It appears that collaborative consumption is a subset of consumer-to-consumer electronic commerce (C2C e-commerce) where consumers are exchanging goods and services between each other albeit some may have an intermediary. It can be consumer’s coordinating resources for a fee (Belk, 2014), for example, Turo is a firm that coordinates one person renting another person’s car and the firm takes a fee in return. That is, relationships between consumers being built based on sharing rather than owning products (Keymolen, 2013; Leismann et al., 2013), and that sharing can be in the form of renting, trading, bartering, and so forth (Möhlmann, 2015). This can be as simple as sharing a vehicle or more complex like using Airbnb to rent spare rooms to travelers, staying free with locals using Couchsurfing, or using Uber or UberPool to order rides with passengers going the same way. People even seek loans from each other rather than turning to a bank (Keymolen, 2013). Consumers can interact online and collaborate in a way that resembles face-to-face contact in small communities (Keymolen, 2013). Consumers have been found to participate and share in collaborative consumption for the enjoyment of the activity, for economic gains, and for the sustainability of the marketplace for current and future generations (Hamari et al., 2016). But with recent issues such as Uber drivers being accused and even prosecuted for assault on passengers, consumers may be reluctant to trust in this environment. To share in collaborative consumption, trust must exist between the consumers.

This research develops and tests a trust model for collaborative consumption by looking at three main constructs that can affect a person’s trust in this environment: natural propensity to trust, others’ trust of buyer/seller, and objective trust (Huang et al., 2011). Collaborative consumption rests on the premise that the Internet is a technology that empowers people (Keymolen, 2013); however, that empowerment can only truly work if trust is present.

BACKGROUND AND RESEARCH MODEL

Collaborative consumption is based on the principle of critical mass, idling capacity, belief in the commons, and trust between strangers (Botsman and Rogers,
This study focuses on the trust component of that principle. Trust has been found to be an influence on a consumer’s willingness to purchase online (Gefen et al., 2003), and has been offered as an influencer of the overall transaction outcome (Mayer et al., 1995). Trust in collaborative consumption is based on the consumer using the right tools to establish a relationship and build a reputation. Trust is ultimately built by the users (Keymolen, 2013). Möhlmann (2015) studied collaborative consumption by assessing users of a B2C car sharing service called car2go and users of a C2C online community accommodation marketplace called Airbnb. They found trust to be paramount in both situations. Additionally, Tussyadiah (2015) studied collaborative consumption in the travel market by surveying 754 adult travelers from the U.S. She found lack of trust to deter use of collaborative consumption. Barnes and Mattsson (2016) also identify establishing trust as an inhibitor to collaborative consumption. Hence, influences on trust in collaborative consumption need to be examined. The most noted research involving trust in an electronic commerce (e-commerce) environment is McKnight et al. (2002). McKnight et al.’s research developed a trust model for e-commerce based on disposition to trust, institution-based trust, and trusting beliefs. Disposition to trust (i.e. natural propensity to trust) is one’s willingness to depend on others and is comprised of faith in humanity (well-meaning and dependable) and trusting stance (better outcomes occur when people are well-meaning and dependable). Institution-based trust (i.e. third party recognition) is one’s belief that structural conditions exist to increase the probability of success in the activity and is comprised of structural assurance (structures ensure regulations, promises, and so forth) and situational normality (a good environment in proper order will produce success). Finally, trusting beliefs is one’s confidence in the other party in the transaction and is composed of competence (skill to do what is needed), benevolence (motivation to do what is needed), and integrity (honesty). McKnight et al. (2002) expanded the e-commerce trust model to also include e-commerce specific variables such as perceived site quality (i.e. perceived quality of the website). Given McKnight et al.’s (2002) theory on e-commerce trust, this study bases its model development on that theory and expands it to include specific items from the Jones and Leonard (2008) consumer-to-consumer (C2C) e-commerce trust theory to form the final proposed model. C2C e-commerce allows buyers and sellers to connect via the Internet using online auctions, third party listings, web forums, and so forth. Collaborative consumption in many instances can fall under the umbrella of C2C e-commerce since the Internet is the method of transaction for the consumers. In the Jones and Leonard (2008) study, internal influences (natural propensity to trust and perception of web site quality) and external influences (others’ trust and third party recognition) were proposed as influences on C2C e-commerce trust. Given the McKnight et al. (2002) model and the Jones and Leonard (2008) model, the current study proposes that natural propensity to trust,
others’ trust of buyer/seller, and objective trust (including perceived quality of web site and third party recognition) influence trust in a collaborative consumption environment, which is illustrated in Figure 1. Each of these constructs is discussed below regarding previous findings that support this model being proposed.

**Figure 1: Research Model**

![Research Model Diagram]

**Natural Propensity to Trust**

Natural propensity to trust, or disposition to trust, is an individual’s general willingness to depend on others (McKnight et al., 1998; McKnight et al., 2002; Das and Teng, 2004; Koufaris and Hampton-Sosa, 2004). Consumers vary in their ability to trust others, which has been shown to affect consumer trust in online shopping (Lee and Turban, 2001). In trust theory, McKnight et al. (2002), as previously discussed, defined disposition to trust as being composed of faith in humanity and trusting stance. Therefore, natural propensity to trust could be affected by a consumer’s dependency on others and his/her previous experiences. Disposition to trust can affect how trust is established with individuals with a higher disposition to trust responding differently than individuals with a low disposition to trust to trust building strategies (McKnight et al., 2002).
Natural propensity to trust has been examined in various situations as an influence on trust. Jarvenpaa et al. (1998) studied trust in a global virtual team setting and found a team member’s trust propensity to have a significant effect on trust. Kim and Prabhakar (2004) studied an Internet banking setting. They found that one’s initial trust was influenced by natural propensity to trust. Murphy (2003) studied how entrepreneurial Internet ventures could attain trust from Web users and found an individual that had limited experience online to have trust propensity significantly impact perceived ability and benevolence (part of trusting beliefs in McKnight et al.’s (2002) study). Additionally, Gill, et al. (2005) surveyed undergraduate students using situational scenarios and found disposition to trust to be correlated with trust intention when information about trustworthiness of the co-worker was unclear. Natural propensity to trust has also been studied in the realm of social media. Claybaugh and Haseman (2013) studied trust in LinkedIn. They found a member’s disposition to trust to influence a member’s trusting beliefs of individuals with whom the member connects on LinkedIn. Nor, et al. (2013) studied trust in social networking sites by surveying Facebook users. They found natural propensity to trust to influence an individual’s trust in online purchasing using a social networking site.

With collaborative consumption, there will be some individuals that are naturally more prone to trust and thus more likely to be involved in said environment. This study proposes the following hypothesis:

**H₁**: A person’s natural propensity to trust will influence that person’s trust in a collaborative consumption environment.

**Others’ Trust of Buyer/Seller**

Reputation is the point to which one person believes in another person’s honesty. Reputation dates back to the days of “word-of-mouth,” when individuals would speak to one another about the best ways to buy and sell, and from whom (Dellarocas, 2003; Gruen et al., 2006). In the online environment, reputation systems permit bidirectional feedback, on a very large scale. Reputation is inherit in all that consumers do. For example, vacation destinations and resorts are secured based on feedback (i.e. others’ trust). Poor reviews can hinder gaining new customers. In collaborative consumption, others’ opinions are vital to establishing trust. C2C trust theory (Jones and Leonard, 2008) indicates that others’ trust should be considered.

Many studies have examined how others’ trust can influence trust and consumer behavior. Einwiller (2003) found reputation of a vendor to enhance trust when the consumer has little experience with the vendor. Reputation of the seller has been found to influence a consumer’s trust in an online company (Jarvenpaa et
al., 2000; Strader and Ramaswami, 2002; Einwiller, 2003; Koufaris and Hampton-Sosa, 2004), with higher ratings leading to higher levels of trust (Ba and Pavlou, 2002), and to be a determinant of where to buy online (Strader and Shaw, 1999; Liang and Lai, 2000) and to the success of online auctions (Huang et al., 2011). McKnight et al. (2002) pointed out that reputation can help to classify a person as being trustworthy. Therefore, without any prior knowledge of a person, a good reputation could deem someone as trustworthy because one’s own trusting beliefs are enhanced. Melnik and Alm (2002) studied an online auction. They found seller reputation to influence the probability of making a sale and the final sale price. Kim and Prabhakar (2004) also found word-of-mouth referrals to influence initial trust in Internet banking.

Feedback mechanisms can also be more informal, such as online chat rooms, discussion boards, and emails. A friend’s recommendation or a group’s trust can impact an individual’s overall trust. Garbarino and Strahilevitz (2004) found a reduction in perceived risk and an increase in willingness to purchase online when a friend recommended a website. Smith et al. (2005) found peer recommendations to also influence the decisions consumers made when shopping online. An individual’s online reputation will impact collaborative consumption. A person with a greater reputation would be trusted more than a person with a lower reputation. Therefore, this study proposes the following hypothesis:

**H2:** Others’ trust of a buyer/seller (i.e. reputation) will influence a person’s trust in a collaborative consumption environment.

**Objective Trust**

McKnight et al. (1998) suggest that one’s perceptions of the environment will affect his/her safety and risk assessment. A consumer with an initial positive transaction with another person may still hold concerns that could prevent future transactions (Long et al., 1999). Objective trust can be defined as those social signals which are widely accepted as bearing trust. An example of objective trust is an individual’s trust of a police officer based on the fact that he/she wears a badge and uniform (Tan and Thoen, 2002). Two signals which can invoke (or waive) objective trust are perceived quality of a web site and third party recognition. These two constructs are discussed below.

**Perceived Quality of Web Site.** Perceptions of consumers can greatly impact online sales (Schlosser et al., 2006). In order for online buyers and sellers to successfully interact, they need to transform the perceptions of other buyers and sellers for which they transact. One way to do this is through the appearance of the web site. The quality of the web site can be explained in terms of a person’s perception of
aesthetics, functionality, and navigability (McKnight et al., 2002). The theory on trust in e-commerce (McKnight et al., 2002) indicates the need to include perceived website quality as an influence on trust. Website quality does affect purchase intentions (Bai et al., 2008) and trust (Nilashi et al., 2016) in e-commerce. Just as the appearance of a physical store front can attract or deter visitors, a website is the first impression of the product or service to the consumer. In collaborative consumption, the websites and systems being used to create the connections between the consumers can greatly impact one’s trust. If consumers feel that the website is of high quality, then they will naturally hold more trust in the individual they are transacting with (McKnight et al., 2002).

Everard and Galletta (2006) studied consumer perceived quality of an online store as to its influence on consumer trust of the store. The results of the study showed that the participants’ perception of the web site quality affected their trust of the online store. Yousafzai, et al. (2005) examined online banking using an experimental test and found web site quality to be one of the strongest indicators of a customer’s trusting beliefs. Schlosser et al. (2006) completed an experimental study of two websites of varying quality, which they termed high and low investment sites. The higher quality site had a sophisticated design whereas the low quality site used very minimal features. Both websites had the same content. They found that the investment (i.e. quality) made in the website affected a consumer’s purchase intention. Hampton-Sosa and Koufaris (2005) examined the relationship between a consumer’s initial trust of a vendor and the web site quality. They found the web site appearance to influence a consumer’s initial trust which then influenced the consumer’s buying intention from the vendor. Jones and Leonard (2008) studied the influencers of C2C e-commerce and found perception of web site quality to influence trust, which was replicated by Yoon and Occeña (2015) with the same results. Jones and Leonard (2014) specifically addressed buyer’s trust in C2C e-commerce and found the perceived web site quality to influence buyer’s trust. Jing et al. (2015) examined website quality’s influence on the attitudes of young generation (Y-Gen) online shoppers. They found website quality to positively affect Y-Gen attitudes toward online shopping. Keymolen (2013) suggests that trust in collaborative consumption is not just interpersonal but also depends on the system. The quality or appearance of the system/web site can influence a consumer’s trust. Therefore, this study proposes the following hypothesis:

**H3a:** A person’s perceived quality of a web site will influence a person’s trust in a collaborative consumption environment.

*Third Party Recognition.* Third party recognition is an institution providing the consumer with some reassurance that the transaction will occur as indicated. This
can encompass principles such as privacy, security, and reliability. Third party institutions can help to reduce the risk associated with an online transaction and ultimately increase overall trust as indicated in the e-commerce trust theory (McKnight et al., 2002). This is often referred to as institution-based trust (McKnight et al., 2002). This trust can reduce a consumer’s uncertainties when dealing with others whom they have not met in person, which is inherit in collaborative consumption. Institution-based trust allows a consumer to know that if something goes wrong in the transaction, something will be done to preserve the trust instilled by the institution (Salam et al., 2003).

Many consumers do not know exactly what goes into getting a particular third party recognition such as a seal of approval (Moores, 2005). However, just the appearance of a relationship with the third party institution can increase the trust of the consumer (Cheung and Lee, 2006). Stewart (2003) used links from one organization’s web site to another in his study. The mere appearance of a business relationship between the two organizations influenced the consumer’s trust of the linked site. This could be because the consumer assumed the site’s owner had met a third party institution’s standards which makes the site more credible. Cheung and Lee (2006) surveyed undergraduate MIS students as potential online shoppers and found third party recognition to influence trust. Zhang (2005) conducted an experiment to determine if seals would increase a consumer’s willingness to transact online. He found seals to influence purchase intention especially among inexperienced online consumers. Studying the effects of third party credibility, Wakefield and Whitten (2007) looked at business-to-consumer (B2C) e-commerce and the credibility effects on purchase risk and assurance structures. They found the credibility of the third party institution was positively related to consumer’s feelings toward assurance structures and negatively related to the perception of purchase risk. Third party credibility was also found to be strongly associated with a consumer’s trust on the online company. Third party recognition has been found to influence C2C e-commerce trust (Jones and Leonard, 2008; Yoon and Occeña, 2015) and buyer’s trust in C2C e-commerce (Jones and Leonard, 2014). In collaborative consumption, having a third party endorsement would also impact the trust one presumes of another. Therefore, this study proposes the following hypothesis:

**H3b:** A third party’s recognition of the buyer/seller will influence a person’s trust in a collaborative consumption environment.
METHOD AND SAMPLE

An anonymous online survey was conducted among university students. Students consisted of both undergraduate and graduate students. Drennan, et al. (2006) state that university students make up the dominant cohort of online users. Therefore, they are experienced and frequent users of the Internet and are a good representative sample to be used in this study.

Participants were given modified versions of instruments created for the constructs: natural propensity to trust (NPT) adapted from McKnight et al. (2002); perceived quality of the website (PWSQ) adapted from Everard and Galletta (2006); third party recognition (TPR) adapted from Lee and Turban (2001); and trust (CCTRU) adapted from Lee and Turban (2001). The statements used for others’ trust of buyer/seller (OTBS), to capture differing levels of relationships among the respondent and the “other” person whose trust was being relied, were developed by the authors. All statements can be seen in Tables 1–5.

A few months prior to the survey being conducted, a pilot test was conducted on the instrument to ensure content validity. No changes were made to the instrument itself following the pilot test. However, additional types of collaborative consumption examples were added to the description so participants could more easily identify this type of consumption. Participants were told that the survey was voluntary and anonymous. Their responses would only be reported in the aggregate. They were asked to indicate on a seven-point Likert scale the degree to which they agreed with the various statements presented. These statements referred to their experiences with collaborative consumption, which was defined at the top of the survey instrument. Participants were also asked to provide some demographic information.

Based on the pilot test, the survey was administered to the sample. A total of 219 responses were received. A majority (67%) of the participants had participated in collaborative consumption. Of those who have participated, 87% had their most recent transaction within the last six months. The majority of the participants (77%) have never been the seller/provider of a service in collaborative consumption transaction. While Uber was the most used method of collaborative consumption, many respondents had used multiple methods (i.e., Airbnb, Couchsurfing, etc.). The respondents’ ages ranged from 18 to 34. The genders of the respondents were close to being equal (53% males; 47% females).
Table 1: NPT Construct Factor Analysis.

Natural Propensity to Trust

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOADINGS</th>
<th>LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, people really do care about the well-being of others.</td>
<td>0.78</td>
<td>0.18</td>
</tr>
<tr>
<td>The typical person is sincerely concerned about the problems of others.</td>
<td>0.79</td>
<td>0.07</td>
</tr>
<tr>
<td>Most of the time, people care enough to try to be helpful, rather than just looking out for themselves.</td>
<td>0.78</td>
<td>0.16</td>
</tr>
<tr>
<td>In general, most folks keep their promises.</td>
<td>0.72</td>
<td>0.19</td>
</tr>
<tr>
<td>I think people generally try to back up their words with their actions.</td>
<td>0.69</td>
<td>0.24</td>
</tr>
<tr>
<td>Most people are honest in their dealings with others.</td>
<td>0.7</td>
<td>0.12</td>
</tr>
<tr>
<td>I usually trust people until they give me a reason not to trust them.</td>
<td>0.13</td>
<td>0.89</td>
</tr>
<tr>
<td>I generally give people the benefit of the doubt when I first meet them.</td>
<td>0.16</td>
<td>0.89</td>
</tr>
<tr>
<td>My typical approach is to trust new acquaintances until they prove I should not trust them.</td>
<td>0.26</td>
<td>0.83</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>0.85</td>
<td>0.87</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>4.21</td>
<td>1.65</td>
</tr>
<tr>
<td>Variance Explained</td>
<td>46.8%</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

Table 2: OTBS Construct Factor Analysis

Others’ Trust in the Buyer/Seller

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A friend recommending a seller/buyer in CC affects my decision to interact with the seller/buyer.</td>
<td>0.61</td>
</tr>
<tr>
<td>A friend recommending a seller/buyer in CC reduces my risk in the transaction.</td>
<td>0.74</td>
</tr>
<tr>
<td>A person from my online community (i.e., groups with whom I interact online) recommending a seller/buyer in CC affects my decision to interact with the seller/buyer.</td>
<td>0.83</td>
</tr>
<tr>
<td>A person from my online community (i.e., groups with whom I interact online) recommending a seller/buyer in CC reduces my risk in the transaction.</td>
<td>0.81</td>
</tr>
<tr>
<td>An online acquaintance (i.e., one with whom I regularly chat online) recommending a seller/buyer in CC affects my decision to interact with the seller/buyer.</td>
<td>0.84</td>
</tr>
<tr>
<td>An online acquaintance (i.e., one with whom I regularly chat online) recommending a seller/buyer in CC reduces my risk in the transaction.</td>
<td>0.82</td>
</tr>
<tr>
<td>Cronbach’s alpha</td>
<td>0.87</td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>3.64</td>
</tr>
<tr>
<td>Variance Explained</td>
<td>60.72%</td>
</tr>
</tbody>
</table>
### Table 3: PWSQ Construct Factor Analysis

**Perceived Web Site Quality**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CC site I use is of high quality.</td>
<td>0.89</td>
</tr>
<tr>
<td>The likely quality of the CC site I use is extremely high.</td>
<td>0.92</td>
</tr>
<tr>
<td>The CC site I use must be of very good quality.</td>
<td>0.84</td>
</tr>
<tr>
<td><strong>Cronbach's alpha</strong></td>
<td><strong>0.86</strong></td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td><strong>2.35</strong></td>
</tr>
<tr>
<td><strong>Variance Explained</strong></td>
<td><strong>78.42%</strong></td>
</tr>
</tbody>
</table>

### Table 4: TPR Construct Factor Analysis

**Third Party Recognition**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are many reputable third-party certification bodies (e.g., eBay, Verisign, etc.) for assuring the trustworthiness of CC sellers/buyers.</td>
<td>0.89</td>
</tr>
<tr>
<td>I think third-party recognition bodies (e.g., eBay, Verisign, etc.) of CC are doing a good job.</td>
<td>0.91</td>
</tr>
<tr>
<td>Existing third-party recognition bodies (e.g., eBay, Verisign, etc.) of CC are adequate for the protection of CC buyers'/sellers’ interests.</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>Cronbach's alpha</strong></td>
<td><strong>0.87</strong></td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td><strong>2.4</strong></td>
</tr>
<tr>
<td><strong>Variance Explained</strong></td>
<td><strong>79.82%</strong></td>
</tr>
</tbody>
</table>

### Table 5: CCTRU Construct Factor Analysis

**Collaborative Consumption Trust**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>LOADINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC is unreliable.</td>
<td>0.91</td>
</tr>
<tr>
<td>CC cannot be trusted, there are just too many uncertainties.</td>
<td>0.94</td>
</tr>
<tr>
<td>In general, I cannot rely on CC buyers/sellers to keep the promises that they make.</td>
<td>0.94</td>
</tr>
<tr>
<td>Anyone trusting CC is asking for trouble.</td>
<td>0.93</td>
</tr>
<tr>
<td><strong>Cronbach's alpha</strong></td>
<td><strong>0.95</strong></td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td><strong>3.45</strong></td>
</tr>
<tr>
<td><strong>Variance Explained</strong></td>
<td><strong>86.14%</strong></td>
</tr>
</tbody>
</table>
DATA ANALYSIS AND RESULTS

Harman’s single-factor test was utilized in order to check for any common method variance since several variables were collected. In order to do this, all variables are entered together. This test assumes that if all variables ultimately load on one factor accounting for all the variance or one factor accounts for the majority of the variance, there is a high level of common method variance present. Exploratory factor analysis was utilized and six factors resulted with an Eigenvalue greater than 1.0. The variance explained ranged from 5% to 25% of the total. This provided evidence that common method variance was not a concern.

Spearman’s formula was used to determine discriminant validity:

\[ r_{pq} = \frac{r_{p'q'}}{\sqrt{r_{p'p'} r_{q'q'}}} \]

where \( r_{p'q'} \) is the average of the correlations concerning each sequence of values attained for p with each sequence attained from q, \( r_{p'p'} \) the mean correlations concerning one and another of these numerous independently attained sequence of values for p and \( r_{q'q'} \) is the same as regards q and \( r_{pq} \) is the mandatory real correlation between the true objective values of p and q (Spearman, 1904). All constructs were found to be valid using a .085 cutoff point. Therefore, discriminant validity did exist among the constructs.

Multi-item constructs were tested for construct validity and reliability. Factors were extracted using principal components analysis (PCA). Any factors with Eigenvalues exceeding 1.0 were kept. Varimax rotation was conducted using a 0.50 threshold to indicate a high item correlation. There were two factors that were found in the NPT construct. The first construct was made up of the first six items found in Table 1. These items seemed to represent a person’s general natural propensity to trust. The second factor was made up of the last three items found in Table 1 which represented a person’s trust of new instances. Cronbach’s alpha for the first component was 0.85. Variation explained by this component was 46.8%. The Cronbach’s alpha of the second component was 0.87. And the variation explained was 18.3%. A variable was calculated for each subject as the average of the general items to be used as the genNPT variable. A variable was also calculated for each subject as the average of the new items to be used as the newNPT variable. Table 1 shows the results of the factor analysis.

Each of the items for the OTBS construct loaded on one factor. The Cronbach’s alpha was 0.87. Variation explained by this component was 60.7%. Table 2 shows the results of the factor analysis. A variable was calculated for each subject as the average of the items to be used as the OTBS variable.
Each of the items for the PWSQ construct loaded on one factor. The Cronbach’s alpha was 0.86. Variation explained by this component was 78.4%. Table 3 shows the PWSQ construct results of the factor analysis. A variable was calculated for each subject as the average of the items to be used as the PWSQ variable.

Each of the items for the TPR construct loaded on one factor. The Cronbach’s alpha was 0.87. Variation explained by this component was 79.8%. Table 4 shows the results of the factor analysis. A variable was calculated for each subject as the average of the items to be used as the TPR variable.

The multi-item construct for the trust in collaborative consumption (CCTRU), was also tested. The CCTRU items had to be reverse coded. The Cronbach’s alpha score was 0.95. Variation explained by this component was 86.1%. Table 5 shows the results of the factor analysis for CCTRU. A variable was calculated for each subject as the average of the items to be used as the CCTRU variable. The lowest Cronbach’s alpha score of the items in the model was 0.85. This is well above the threshold of 0.50 (Nunnally, 1967).

**Model Testing.** Regression analysis was used to test the relationship between the independent variables in the model and trust in collaborative consumption. The residual plots were reviewed for any non-random scatter about the zero line. No heteroscedasticity was found in the data. In addition, the variance inflation factors (VIF) were reviewed for each of the independent variables. All VIF were below three, which suggests to the authors that there is no concern of multicollinearity in the data. Regression results can be found in Table 6. Support was found for H1 and partial support for H2.

### Table 6: Regression on CCTRU

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Parameter estimate</th>
<th>S.E.</th>
<th>t</th>
<th>p</th>
<th>VIF</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>genNPT</td>
<td>0.155</td>
<td>0.120</td>
<td>1.932</td>
<td>0.055*</td>
<td>1.241</td>
<td>H1 supported</td>
</tr>
<tr>
<td>newNPT</td>
<td>0.195</td>
<td>0.084</td>
<td>2.394</td>
<td>0.018**</td>
<td>1.278</td>
<td>H1 supported</td>
</tr>
<tr>
<td>OTBS</td>
<td>-0.166</td>
<td>0.117</td>
<td>-1.975</td>
<td>0.049**</td>
<td>1.371</td>
<td>H2 partial support***</td>
</tr>
<tr>
<td>PWSQ</td>
<td>-0.007</td>
<td>0.102</td>
<td>-0.087</td>
<td>0.931</td>
<td>1.423</td>
<td>H3a not supported</td>
</tr>
<tr>
<td>TPR</td>
<td>-0.104</td>
<td>0.110</td>
<td>-1.185</td>
<td>0.238</td>
<td>1.502</td>
<td>H3b not supported</td>
</tr>
</tbody>
</table>

Overall model fit: p=.002***; R²=.102; *p < .10; **p < .05; ***p < .01; ****This has an opposite direction than expected
DISCUSSION

Findings indicate that while collaborative consumption may seem similar or a part of C2C e-commerce, trust in a collaborative consumption environment is quite different. Jones and Leonard (2008) found trust in C2C e-commerce to be influenced by perceived website quality and third party recognition; whereas this study found trust in collaborative consumption to be influenced by natural propensity to trust and others’ trust of buyer/seller, and not perceived website quality and third party recognition, which we termed objective trust. Even more interesting, is the relationship between others’ trust of buyer/seller and trust in collaborative consumption was found to be a negative relationship.

These findings are significant in discerning that trust in online environments cannot all be treated the same. A collaborative consumption environment has its own set of influences and therefore requires much more research to understand this phenomenon. In this study, natural propensity to trust, both the general and new instances, was found to influence collaborative consumption trust. Individuals depend on their own experiences and their faith in humanity when deciding to trust (McKnight et al., 2002). This finding is supported by previous research in banking (Kim and Prabhakar, 2004), social media (Claybaugh and Haseman, 2013; Nor et al., 2013), and so forth. Natural propensity to trust cannot be easily influenced if one has a strong trusting stance. However, if the individual is relying on past experiences to shape natural propensity to trust, then it is possible to influence how someone might naturally trust. Obviously, positive experiences in collaborative consumption would lead to more trust in that environment.

We hypothesized that others’ trust in the buyer/seller would influence a person’s trust in a collaborative consumption environment. This relationship was indeed found to be significant suggesting that the influence was present. However, it was, surprisingly, a negative relationship. This finding is in direct conflict with findings in the reputation/feedback literature regarding online sales (Jarvenpaa et al., 2000; Strader and Ramaswami, 2002; Einwiller, 2003; Koufaris and Hampton-Sosa, 2004) and online auctions (Huang et al., 2011). All of these studies suggest that there would be a positive influence found. There appears to be some confounding variable that exists here which we did not account for when conducting the study. Additional research should be done to determine what this variable may be. Mohlmann (2015) and Barnes and Mattsson (2016) both studied determinants and inhibitors to collaborative consumption. Some of those factors, such as cost savings, community belonging, and service quality, or other social or political factors, could be considered. Future researchers should attempt to reproduce the study to determine if controlling for the confounding variable allows for full support of the hypothesis.
Objective trust (i.e. perceived website quality and third party recognition) was not found to influence collaborative consumption trust. Perceived website quality has been found to greatly impact online sales; however, collaborative consumption is different than a sale because individuals are essentially renting a space or hiring a service in collaborative consumption. Therefore, the website may no longer be an essential component of trust in this environment. Third party recognition was also not found to be an influence. While third party recognition can be important for a sale, it may be less important for renting. There is no long-term commitment to the product/service. Hence, third party recognition becomes less important in collaborative consumption.

As with any study, there are limitations in this research. First, student subjects were utilized. While students are viable subjects in a collaborative consumption environment, a comparison of older consumers to student consumers would prove valuable. Therefore, future studies should seek to expand the demographic of this study’s sample to assess older consumers. The participants were also only from particular regions of the United States. It is possible that culture could play a role in trust in collaborative consumption. Gathering data from participants from around the United States as well as from other countries would provide a better understanding of the model. Additionally, collaborative consumption was studied in general. More specific assessments of types of collaborative consumption (i.e. just studying Uber) could produce varying results. Future studies should study specific types of collaborative consumption to see if trust varies by type. Additionally, future studies should seek to expand the trust model for collaborative consumption. Since this study found that trust in collaborative consumption is different than trust in online environments such as C2C e-commerce, the trust model should be expanded to consider other trust components.

**IMPLICATIONS FOR PRACTICE**

Natural propensity to trust was found to influence a person’s trust in the collaborative consumption environment. Therefore, consumers should be aware of this aspect when attempting to transact in this space. Natural propensity to trust is one that will be impacted over time and multiple experiences. The provider of a good/service will want to ensure to provide good experiences for new consumers. In addition, the provider will want to make sure to correct any mistakes that could affect the satisfaction of the consumer in order to impress a feeling of trust among that consumer. With repeated positive experiences, perhaps the consumer’s NPT in this environment will be impacted. This would be an area for future research.
Additionally, others’ trust of buyer/seller was found to have a negative influence. This brings concerns regarding confounding variables that could be impacting opinions in this peer-to-peer environment. Since collaborative consumption is found to be different than traditional C2C ecommerce, future research must develop a new trust model for collaborative consumption to account for these variables. Particular focus should be on factors that could be unique to collaborative consumption. For example, community belonging (Mohlmann, 2015) is a factor that could have a large influence on trust in collaborative consumption and is a factor that could be influenced by others. An understanding of these other potentially confounding variables will help to provide guidance to consumers transacting in this environment.

CONCLUSION

This study developed and tested a trust model for collaborative consumption based on previous research in e-commerce. The model proposed that natural propensity to trust, others’ trust of buyer/seller, and objective trust (composed of perceived website quality and third party recognition) influence trust in collaborative consumption. The study found that natural propensity to trust, both general and new, and others’ trust in buyer/seller did influence trust in collaborative consumption, but objective trust did not. However, others’ trust in buyer/seller was negatively correlated to trust in collaborative consumption. These findings are different than what was found in other similar environments and therefore warrant further investigation. This study shows that while collaborative consumption is a subset of C2C e-commerce, it appears that perhaps it is in need of its own research models. The differences between renting and buying may be enough to change behaviors in consumers. Researchers will need to continue to develop new models that fit the behaviors in this environment.

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