

How Social Integration Leverages Interpersonal and Brand Trust

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Abstract

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Practitioners believe that “creating or expanding business relationships is not about selling – it’s about establishing trust” (Myatt 2012, p. 1), yet practitioners have little guidance about whether sources of trust (brands and employees) are substitutable and when each is most effective for creating and expanding business relationships. Thus, this research investigates the simultaneous effects of interpersonal and brand trust and identifies factors that leverage the effectiveness of each. Across four studies that include longitudinal survey, experiment, and field study methods, the author demonstrates that interpersonal and brand trust can substitute. The marginal effectiveness of brand trust reduces as interpersonal trust increases, and vice versa. Given that they can substitute, it is critical to understand when each is most effective. Exploring factors that

moderate the effectiveness of interpersonal and brand trust, the author finds that socially integrative factors—age, interdependence, community values, and residential stability—enhance the effectiveness of interpersonal trust on performance while reducing the effectiveness of brand trust on performance. By exploring the effects of social integration on customer relationship performance, the author integrates theories from economics, sociology, and social psychology to understand the effects of demographic shifts that are fundamentally changing the customer base within the U.S. and thereby altering how firms can effectively develop customer relationships.

TABLE OF CONTENTS

	Page
List of Figures	iii
List of Tables	iv
Acknowledgments.....	v
Research Overview	1
Literature Review.....	11
Firm Trust and Customer Relationships	11
Interpersonal Trust.	13
Brand Trust.....	16
Interpersonal Trust, Brand Trust, and Customer Commitment.	19
Firm Performance Outcomes	20
Social Integration and the Market	21
Customer Age.....	22
Customer Interdependence.....	25
Customer Community Values.	28
Residential Stability and Customer Neighborhoods.	30
Conceptual Model and Hypotheses	33
Effects of Interpersonal and Brand Trust on Firm Performance.....	34
The Effect of Interpersonal and Brand Trust on Firm Performance.....	34
The Interaction Between Interpersonal and Brand Trust on Firm Performance.	35
Moderating Effects of Socially Integrative Factors	35
Moderating Effects of Customer Age.	36
Moderating Effects of Interdependence.	37
Moderating Effects of Community Values.....	38
Moderating Effects of Residential Stability.	39
Mediating Role of Commitment.	40
Overview of Studies	41
Study 1: Trust Substitution and Moderating Effect of Customer Age.....	43
Method.....	43
Procedure.	43
Key Dependent Variable.....	44
Primary Explanatory Variables.....	44
Control Variables.	45
Measurement Validity.	46
Model Development	47
Results and Discussion.....	48
Main Effects of Interpersonal and Brand Trust.	48
Substitution of Interpersonal and Brand Trust.	48
Moderating Effects of Customer Age.	49
Alternative Explanations.	50
Study 2: Moderating Effects of Self-Construal	52
Method.....	52

Procedure.	52
Measures.	52
Measurement Validity.	53
Results and Discussion.....	54
Moderating Effects of Interdependent Self-Construal.....	54
Substitution of Interpersonal and Brand Trust.	55
Correlations among Socially Integrative Factors.	56
Study 3: Moderating Effects of Community Values.....	58
Method.....	58
Procedure.	58
Pretest of Community Values Manipulation.	60
Results and Discussion.....	62
Manipulation and Attention Checks.....	62
Effects on Brand Performance.	63
Mediating Role of Commitment.	64
Alternative Explanations.	65
Study 4: Moderating Effects of Residential Stability.....	68
Data.....	68
Key Dependent Variables.	70
Primary Explanatory Variables.....	70
Control Variables.	71
Model Development.....	73
Results and Discussion.....	74
Main Effects.	74
Moderating Effects of Residential Stability.	74
General Discussion.....	78
Implications for Research.....	78
Substitution of Interpersonal and Brand Trust.	78
Moderating Effects of Social Integration.	79
Age, Self-Construal, and Community Values.	80
Implications for Practice.....	81
Trust Trade-Offs.....	81
Leveraging Trustworthy People and Brands.	81
Limitations and Future Research.....	83
References.....	85

LIST OF FIGURES

Figure Number	Page
1. Conceptual Framework: Moderating Effects of Social Integration on Interpersonal and Brand Trust	33
2. Study 1: Effects of Interpersonal and Brand Trust on Willingness to Pay for Older and Younger Customers	50
3. Study 2: Effects of Interpersonal and Brand Trust on Willingness to Pay for Customers with High and Low Interdependence	55
4. Study 3: Moderated Effects of Interpersonal and Brand Trust on Performance	64
5. Study 4: Residential Stability Across the Contiguous United States	70
6. Study 4: Effects of Interpersonal and Brand Trust on Performance When Residential Stability is High vs. Low	76

LIST OF TABLES

Table Number	Page
1. Representative Research on Interpersonal Trust.....	15
2. Representative Research on Brand Trust.....	18
3. Constructs, Definitions, and Representative References	34
4. Summary Statistics from Study 1	47
5. Study 1: Moderating Effects of Age	51
6. Summary Statistics from Study 2	54
7. Study 2: Moderating Effects of Interdependence	57
8. Study 3: Moderated Mediation	67
9. Summary Statistics from Study 4	73
10. Study 4: Moderating Effects of Residential Stability	77

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Research Overview

Academics and practitioners view customer trust in a selling firm as essential to customer relationships—trust encourages exchange and builds commitment, thereby reducing competitive threats and increasing performance (Chaudhuri and Holbrook 2001; Doney et al. 2007; Grayson et al. 2008; Palmatier et al. 2006; Sirdeshmukh et al. 2002). In fact, trust has been described as the “key determinate” of commitment, “cornerstone” of loyalty, and “essential element” of sustainable market share (Sirdeshmukh et al. 2002, p. 15). It is therefore no surprise trust has been labeled the “single most powerful” tool for marketers (Berry 1996, p. 42), and, consistent with this, building trust is a primary goal of marketing initiatives (Myatt 2012). Though many researchers identify myriad benefits of trust, few consider how the effectiveness of trust may depend on its source. Research has demonstrated that for any given selling firm, there are two primary sources of trust: brands and employees. Though brand trust correlates with employee (interpersonal) trust, customers distinguish between these two sources (Doney and Cannon 1997; Grayson et al. 2008; Yim et al. 2008; Yoon et al. 2006), and firms face tradeoffs in establishing and promoting source trustworthiness. For example, State Farm insurance steadfastly promotes its reliable agents, whereas Travelers insurance promotes its reliable brand and accompanying umbrella logo. Thus, whether interpersonal and brand trust are substitutes and when each is more effective are critical to successful customer relationship performance. Accordingly, the goal of this research is to *examine whether interpersonal and brand trust can substitute and identify market-based factors that enhance the effects of interpersonal and brand trust on customer relationship performance.*

Research has demonstrated in a business-to-customer (B2C) context, customer relationships are primarily formed with a firm (Yim et al. 2008), which contrasts with research in

business-to-business (B2B) contexts demonstrating customer relationships can be formed with a firm or a salesperson (Palmatier et al. 2007). It follows, then, that in B2C contexts brands are the ultimate driver of customer performance—employees are effective because they enhance the brand, and employees are ineffective when they do not (Wentzel 2009). However, many firms maintain a portfolio of brands and can sometimes improve customer retention by ‘killing off’ brands (Kumar 2003). Thus, an alternative perspective, adopted in this research, is that brands and employees are simultaneous sources of trust that ultimately enhance *exchange* performance. In other words, customers in B2C become committed to exchange with certain selling firms because they view the firms’ brands and employees as trustworthy. From this perspective, employees work alongside brands, and trust in one may obviate trust in the other. For example, a customer may commit to exchange with Apple because he views either the iPad brand as trustworthy or the store ‘specialist’ as trustworthy. From this perspective, both interpersonal and brand trust enhance exchange performance simultaneously, and whether each can substitute, as the example implies, is critical for marketing strategy.

Furthermore, identifying conditions that enhance the relative effectiveness of interpersonal and brand trust is important as investing in and promoting employees vs. brands represent key strategic tradeoffs. Researchers have heretofore not considered such moderating conditions. To understand when interpersonal and brand trust are more effective—when customers respond more favorably to employees or brands as the source of trust—I consider socially integrative factors that enhance the importance customers place on people around them, which then influences the value placed on people in the marketplace, thus creating a “person premium” effect that enhances the effectiveness of interpersonal trust and reduces the effectiveness of brand trust. Social integration refers to the importance individuals place on

others in their social environment (Baller and Richardson 2002), which, when low, results in self-reliance and sometimes detrimental seclusion (Durkheim [1897] 1951). Economic theories suggest social integration occurs in customers' personal lives but influences how customers interface with the market (Hirschman 1982). Current demographic shifts may be enhancing the importance of social integration in the U.S. Customers are becoming older, more interdependent, more invested in their communities, and more residentially stable (Census 2010b; Hofstede et al. 2010; Oishi et al. 2007), factors I expect will be socially integrative and thus influence the effectiveness of interpersonal and brand trust. To understand the effects of social integration, I examine each of the aforementioned factors, which I selected because (1) each is shifting and (2) each represents social integration at micro (e.g., individual), meso (e.g., group), or macro (e.g., community) socio-ecological levels (McPherson et al. 2001; Sampson et al. 2002).

I cover each factor in greater depth in the literature review, but first I introduce them here. Age, the first proposed socially integrative factor occurs at the individual or micro level and refers to the biological maturation of consumers, which, as a demographic variable, has a long history of use in market segmentation and targeting—age is associated with income, asset accumulation, amount of leisure time, physical appearance, health, and many other factors that can influence consumer needs (Economist 2002). As consumers age, they experience cognitive deficits stemming from neuronal changes; neurons become slower to emit signals and slower to respond to signals that other neurons emit (Denney Nw 1982; Onofrj M 2001; Verhaeghen et al. 1998). Exemplifying these changes in marketing, Yoon (1997) finds that older consumers tend to engage in schema or theme-based processing that reduces memory for incongruities (e.g., a news program that showcases poetry, magic shows, and award-winning recipes would be presenting highly incongruent content) during nonoptimal times of day when processing capacity is more

limited, but use detailed processing strategies during optimal times of day when cognitive capacity is less limited. Thus older consumers have less control, and reductions in control increase communal orientation, or the extent to which individuals “consider others while thinking or engaged in decision-making, irrespective of their intentions toward others (i.e., bad versus good)” (Rucker et al. 2012, p. 356) Therefore as consumers grow older, they are more prone to rely on others, even if they do not particularly favor others. I propose that this tendency to rely on others increases social integration and encourages customers to value interpersonal trust more than brand trust as they age.

The second socially integrative factor, interdependence, refers to a consumer’s construal of the self as a part of rather than separate from close others and in-groups (Markus and Kitayama 1991). Self-construal varies both across and within societies (Vandello and Cohen 1999). Within the United States, the number of citizens who are from more culturally interdependent (collectivist) societies such as those in Latin America and east Asian and is at an all-time high (Census 2010a), suggesting that while the United States is historically very independent (Hofstede et al. 2010), interdependence is playing an increasingly critical role within U.S. markets. I anticipate that as interdependence increases, consumers will value others more and, in turn, value interpersonal trust more than brand trust.

The third socially integrative factor, community values, refers to importance placed on developing and maintaining relational ties with one's local geographic community” (Burroughs and Rindfleisch 2002, p. 357). The notion of ‘neighborhood’, which is often synonymous with community, is an important conceptual feature of community values—those with high community values invest in the welfare of physically proximal others (Glynn 1986; Sampson 1988; Sampson et al. 1997). Ostensibly, community values may appear similar to interdependent

self-construal, since both involve thoughts related to others, but community values are self-transcendent instead of self-focused (Burroughs and Rindfleisch 2002). I expect those with greater concern for their community to be more value others more, and I therefore consider community values a third socially integrative factor.

The final socially integrative factor I consider, residential stability, refers to perceived stability of residents in a local geographic area, which enhances local friendship ties, community values, and social (civic) participation (Sampson 1988; Sampson et al. 2002). Research has demonstrated that residential stability can be socially integrative in two ways: it increases efforts to help others, and reduces the perceived and actual threat of others—enhancing feelings of safety (Sampson et al. 1997). Residential stability has been shown to influence customer purchase decisions. For example, using data collected by the Minnesota Driver and Vehicle Services, Oishi and colleagues (2007) found that consumers living in zip codes with greater residential stability were more likely to purchase critical habitat license plates that supported the ecological welfare of the state. Thus, just as the factors above enhance the value place on others, I expect residential stability to increase the value customers place on those in their social environment and the value placed on interpersonal vs. brand trust.

By examining the moderating effects of socially integrative factors, this research makes six primary contributions to marketing theory and practice. First, in Studies 1 and 2 I demonstrate the substitutive effects of interpersonal and brand trust. Previous research suggests interpersonal trust simply augments or contributes to brand trust (Doney and Cannon 1997; Yim et al. 2008). Departing from this perspective, I demonstrate that the main effects of interpersonal trust decrease when brand trust is high, and the converse. In Study 1, for example, I demonstrate that increases in brand trust do not have a significant effect on performance when interpersonal

trust reaches approximately 66%, suggesting that when interpersonal trust is slightly above neutral, brand trust no longer has a positive effect on performance. Alternatively, increases in interpersonal trust do not have a significant effect on performance when brand trust is approximately 78%, suggesting that brand trust must reach a higher threshold before interpersonal trust is no longer effective. This finding contributes to theories of how brand and interpersonal trust influence customer relationship performance by suggesting that a “pass-through” model stipulating that interpersonal trust only influences performance by merely “passing through” or increasing brand trust (Yim et al. 2008) ignores important main and interactive effects. Furthermore, this finding informs marketing strategy. While brand trust is a regularly evaluated brand metric (Harris-Poll 2010), interpersonal trust is not. If managers assume brand trust reflects interpersonal trust (in Study 1 brand and interpersonal trust across categories were only weakly correlated at $r=.18$, $p<.01$), they may be over or underinvesting in initiatives, such as communication or 3rd party reviews, to enhance brand trust. In other words, if brand trust is relatively low, but interpersonal trust is relatively high, measuring only brand trust but not interpersonal trust may falsely encourage attempts to increase brand trust.

As a second contribution, I demonstrate that customer age enhances the effectiveness of interpersonal trust but suppresses the effectiveness of brand trust. From a longitudinal sample of 615 actual customers, I observed a significant and positive moderating effect of age on the effect of interpersonal trust on performance, such that for older customers (those who are one standard deviation above the mean or 46 years old), increases in interpersonal trust have a positive and significant effect on performance ($b=1.42$, $p<.01$), whereas for younger customers (those who are one standard deviation below the mean or 25 years old), increases in interpersonal trust have no effect on performance ($b=.25$, NS). Furthermore, for older customers, increases in brand trust

had no effect on performance ($b=.11$, NS), but for younger customers, increases in brand trust had a significant positive effect on performance ($b=1.49$, $p<.01$). Thus, evidence supports theorizing that age increases the importance placed on proximal others, and the importance placed on specific others extends to importance placed on people more generally, enhancing the effects of interpersonal trust and reducing the effects of brand trust.

Third, in Study 2 I demonstrate that interdependence has similar moderating effects on the effectiveness of interpersonal and brand trust. Using a sample of online respondents considering a hypothetical iPad purchase, I find that higher levels of interdependence, which is uncorrelated with age, enhance the effect of interpersonal trust on performance and suppress the effect of brand trust. Specifically, the effects of interpersonal trust on performance are positive and significant ($b=5.76$, $p<.01$) for those with high interdependence, whereas the effects of interpersonal trust are negative and significant for those with low interdependence ($b=-2.21$, $p<.05$), suggesting that those with low interdependence are willing to pay significantly less as interpersonal trust increases. Alternatively, the effects of brand trust on willingness to pay are positive and significant for those with low interdependence ($b=6.79$, $p<.01$), whereas the effects of brand trust on performance are not significant for those with high interdependence ($b=.31$, NS). Thus, as consumers become increasingly interdependent, they are more responsive to interpersonal trust and less of brand trust, consistent with the notion that importance interdependent customers place on in-group members extends to increase the importance they place on people more generally.

Fourth, in Study 3 I demonstrate that community values enhance the effectiveness of interpersonal trust but suppresses the effectiveness of brand trust. Aside from demonstrating yet another socially integrative factor with effects similar to but separate from age and

interdependence, this study also demonstrated that merely replacing the word “brand” with “people” replicated the pattern of effects observed in studies 1 and 2 (where trust was measured rather than manipulated). Specifically, a false feedback manipulation was deployed. Respondents who believed they had higher community values were more loyal, willing to pay, and willing to engage in positive word of mouth when interpersonal trust was highlighted, whereas respondents who believed they had lower community values were more loyal, willing to pay, and willing to engage in positive word of mouth when brand trust was highlighted. These effects were separate from those of age and interdependence, suggesting social integration at a community level influenced the effectiveness of brand and interpersonal trust in a manner similar to but separate from the effects of lower level socially integrative factors.

Fifth, in Study 4 I anticipate that residential stability enhances the effectiveness of interpersonal trust but suppresses the effectiveness of brand trust, and I find evidence that brand trust is more and less effective when residential stability is low and high, but interpersonal trust is equally effective across levels of residential stability. Specifically, by combining data from several secondary sources, I match residential stability patterns at a county level with brand perception ratings at an individual level for consumer insurance brands. Furthermore, independent research assistants aggregated and rated promotional material for all brands for the data period and identified trust sources as primarily interpersonal or brand. I found that in areas with low residential stability, there was a negative effect of focusing on interpersonal rather than brand trust ($b = -.15, p < .01$), whereas there was no significant difference in areas with high residential stability ($b = -.02, NS$). Similarly, in areas with low residential stability, there was a significant negative effect of focusing on interpersonal than brand trust ($b = -.15, p < .01$), whereas there was no significant difference when residential stability was high ($b = .05, NS$). Therefore,

residential stability, similar to the other factors above, influences the effectiveness of source trust. In the case of residential stability, the effects appear to be primarily associated with brand trust, with brand trust being more effective in areas with less residential stability. However, these results suffer limitations—measures of interpersonal and brand trust may have been too general to capture interpersonal trust effects since coding was based on limited available national promotion media. Overall, however, these results suggest an important role of resident stability as a moderator of the relative effectiveness of brand trust.

Sixth, I find evidence that commitment mediates the moderating effects of social integration. Specifically, in Study 3 I find that exchange commitment mediates the moderating effects of community values on the effects of interpersonal and brand trust on firm performance. In other words, customers made to believe they had higher community values were more motivated to commit to an exchange with a firm when interpersonal trust was emphasized, whereas customers made to believe they had lower community values were more motivated to commit to an exchange when brand trust was emphasized. Commitment then resulted in higher performance (willingness to pay, word of mouth, and loyalty). This is consistent with my theorizing that social integration creates a “person premium” that then enhances the likelihood customers will value the exchange relationship (i.e., be committed).

Overall, then, this research contributes to marketing thought by demonstrating substitutive effects of interpersonal and brand trust, proposing social integration as a moderator of the effects of interpersonal and brand trust, identifying four factors—age, interdependence, community values, and residential stability—that are socially integrative and thus influence the effectiveness of interpersonal and brand trust, and demonstrating the moderated effects stem from a motivational process whereby customers with higher social integration are more

motivated to commit to exchanges founded on interpersonal trust and customers with lower social integration are more motivated to commit to exchanges founded on brand trust, and this commitment ultimately enhances firm performance.

Literature Review

Firm Trust and Customer Relationships

Trust is an assessment of reliability and integrity (Fang et al. 2008) based on either previous experience, reputation, or necessity, as is the case when experience and reputation are absent (Darke et al. 2008), that customers use in a compensatory manner when complete information is unavailable (Guseva and Rona-Tas 2001). For example, a pedestrian with no cell service may trust a stranger on the street for directions because there is no other choice. While elaborate typologies of trust have been proposed (Castaldo 2007), in marketing, the effects of trust have been examined from three primary theoretical perspectives: trust as information-processing, trust as governance, and trust as a foundation for customer relationships.

From the information processing perspective, trust is simply information (Maheswaran et al. 1992) that is constructed (i.e., trust is formed), especially in conditions of high uncertainty (Kollock 1994), to help quantify aleatory (irreducible) uncertainty (e.g., an unknowable outcome such as the likelihood a product will fail), and support claims that reduce epistemic uncertainty (e.g., a knowable outcome such as whether a new product is compatible with a current device; Hora 1996). From this perspective, trust creates certainty through two related direct and supportive cognitive processes. The direct process, as Chaiken (1980), elegantly demonstrated, occurs when individuals expend minimal cognitive resources under conditions of low involvement, and trust is used as a simple cue that triggers feelings of certainty stemming from favorable thoughts related to the trusted source. In other words, when trust is present and individuals are producing few thoughts, the thoughts that are produced tend to be favorable and source-focused (e.g., AT&T is a good brand) rather than capability focused (e.g., AT&T has reduced transmission interference; Maheswaran et al. 1992). The supportive process,

alternatively, occurs when individuals expend elaborate cognitive resources under conditions of high involvement and trust then becomes information that can reinforce claims made by trusted source, especially when claims are ambiguous (Chaiken and Maheswaran 1994). Therefore, if thinking elaborately, a customer who trusts AT&T would believe ambiguous network quality claims and thus feel certain about a purchase, whereas a customer who is not thinking elaborately and who trusts AT&T would simply retrieve favorable attitudes about the brand and thus feel certain about a purchase, since favorable attitudes create generalized certainty that have an insulating effect on evaluations, even in light of unfavorable information (Pullig et al. 2006).

These two processes by which trust facilitates decision making are additionally supported in neurological research, which demonstrates there are costly, more evaluative neural correlates of trust that exist in more recently evolved regions of the brain and relate to ongoing assessments of intentions and abilities (e.g., the resources provided by brands versus relationships), and less costly, less evaluative, more basic or global correlates of trust that exist in older, more emotionally-based brain regions (Krueger et al. 2007). Thus trust plays a role in facilitating both slow and fast thinking related to evaluation and quick inference, which may co-occur (Meyers-Levy and Maheswaran 2004).

Alternatively, a separate, much broader view of trust comes from research on governance rooted in functional theories. From this perspective, trust is a social mechanism that allows systems of exchange to function (Fallding 1963). In other words, trust is one of several governance mechanisms that regulates the behavior of market participants, who, absent controls such as trust, would engage in opportunistic behavior (Grewal et al. 2010). This view of trust is at the level of the market, and it assumes trust is one of many available tools, an alternative example of which is monitoring or contracts. Thus, whereas the information processing

perspective is concerned with trust as it is cognitively processed, the governance perspective is concerned with trust as it exists in and shapes markets (Guseva and Rona-Tas 2001). Between these two perspectives exists a third perspective that focuses squarely on exchange.

The third theoretical perspective, which I adopt in this research, is that of trust as the foundation of relational exchange (i.e., customer relationships). Customers prefer to exchange with and become committed to trusted firms (Dwyer et al. 1987; Morgan and Hunt 1994; Palmatier et al. 2006). This is because as exchanges with trusted partners repeat over time, integrative bonds such as emotional attachment form, even when exchanges are novel as in an experimental paradigm (Molm et al. 2012). Ample research demonstrates customers distinguish between a firm's brands and its employees (Grayson et al. 2008; Palmatier et al. 2007; Wentzel 2009; Yim et al. 2008), and below I consider interpersonal and brand trust as primary sources of firm trust.

Interpersonal Trust. Interpersonal trust has been integral to exchange in markets for goods and services since trade first began (Palmatier 2008). Table 1 summarizes representative research on interpersonal trust in the customer relationship domain. While some view interpersonal trust as an impediment to free market dynamics due to its potential constraints on self-interest, as the individual becomes reliant on specific others (Håkansson and Snehota 2002), research demonstrates that interpersonal trust generally facilitates information transfer and cooperation and is thus a customer resource, even in open-market bazaars (Geertz 1978). Interpersonal trust, like many relational processes, develops in stages (Dwyer et al. 1987), at varying rates of change (Palmatier et al. 2013), and influences multiple exchange outcomes (Beck and Palmatier 2012). While there is some evidence interpersonal trust can make customers uncomfortable or avoidant (Blocker et al. 2012; Mende et al. 2013), firms invest in building

interpersonal trust in line with decades of research demonstrating positive effects on performance (Palmatier et al. 2006).

Although researchers have demonstrated differences between interpersonal and brand trust (Palmatier et al. 2007; Wentzel 2009; Yim et al. 2008), the two are often conflated. For example, Grayson, Johnson, and Chen (2008) recognize there may be differences between trust of an individual and trust of a selling company (presumably their brand), but high correlations between their measures of trust prohibited separate analyses. This may be because trust suffers halo effects, which may occur more frequently for some firms (Leuthesser et al. 1995). However, since customers do make perceptual distinctions between brands and people (Yoon et al. 2006), and since firms make tradeoffs in which they emphasize (trustworthy brand or trustworthy people behind it), understanding how interpersonal trust differs from brand trust is paramount.

TABLE 1
REPRESENTATIVE RESEARCH ON INTERPERSONAL TRUST

<i>Authors</i>	<i>Year</i>	<i>Primary Constructs Examined</i>	<i>Target</i>	<i>Context</i>	<i>Method</i>	<i>Key Findings</i>
Kollock	1994	<i>Trust, commitment, uncertainty, reputation</i>	Individual	Fictitious exchange	Experiment	For most trusted partners, <i>trust</i> and <i>commitment</i> were both higher in situations of high quality uncertainty. For least trusted partners, buyers were considered least <i>trustworthy</i> when quality was uncertain, whereas sellers were considered most <i>trustworthy</i> when quality was uncertain. Thus sellers, even least trusted sellers, are <i>trusted</i> more when uncertainty is high.
Morgan and Hunt	1994	Trust, commitment, communication, benefits, <i>cooperation, uncertainty</i>	Selling company	B2B: Tire retailers	Survey	Trust and commitment serve as to mediate effect of relational antecedents on performance outcomes (e.g., <i>cooperation</i>). Trust has a direct effect on outcomes and an indirect effect through commitment.
Doney and Cannon	1997	Supplier trust, salesperson trust, <i>choice, future anticipated interaction</i>	Individual and selling company	B2B: Industrial manufacturers	Survey	Trust of an individual was significantly associated with trust of a selling company, and vice versa. After controlling for experience, trust had no remaining effect on <i>anticipated future interaction</i> , though selected sellers were trusted much more than unselected sellers.
Garbarino and Johnson	1999	Trust, commitment, satisfaction, <i>future intentions</i>	Selling company	B2C: Theater company	Survey	For occasional customers, satisfaction is a mediator of effect of attitudes on future intentions, whereas for consistent customers, trust and commitment mediate.
De Wulf, Odekerken-Schroder, and Iacobucci	2001	Trust, commitment, relationship investments, <i>loyalty</i>	Selling company	B2C: Food, apparel, retail	Survey	Perceptions of relationship investments increase relationship quality (trust, commitment, and satisfaction), which enhances <i>behavioral loyalty</i> . Interpersonal communication has the strongest association with perceived relationship investment.
Sirdeshmukh, Singh, and Sabol	2002	Competence, benevolence, trust, value, <i>loyalty</i>	Individuals and selling company	B2C: Retail apparel and airlines	Survey	In a retail context, value mediates effect of trust on <i>loyalty</i> , whereas in an airline context, value partially mediated the effect of trust in management policies and practices on <i>loyalty</i> .
Narayandas and Rangan	2004	Trust, commitment, <i>performance, power asymmetry</i>	Selling company	B2B: Across several industries	Qualitative field study	Trust (distrust) at the dyadic level spreads to (lack of) commitment between firms, which works over time to balance (deteriorate) initial contract terms and subsequent performance and improve (worsen) initial <i>power asymmetries</i> and <i>performance</i> .
Palmatier, Dant, Grewal, and Evans	2006	Trust, expertise, <i>cooperation, expectations of continuity</i>	Individual or organization	111 academic studies	Meta-analysis	Expertise and communication are most effective at building customer trust. Objective financial performance is driven most by relationship quality (composite measure of relationship strength). Trust has largest effect on expectations of continuity and cooperation.
Fang, Palmatier, Scheer, and Li	2008	Agency, intraentity trust, and interorganizational trust, <i>coordination, responsiveness</i>	Individual and selling company	B2B: International joint ventures	Survey	Collaborating firms interorganizational trust enhances coentity investment. Interorganizational trust enhances the positive effect of intraentity trust on <i>coordination</i> and its negative effect on <i>responsiveness</i> .
Grayson, Johnson, and Chen	2008	System, generalized, and narrow-scope trust, satisfaction, <i>performance</i>	Selling company	B2C: Financial services	Survey	Effect of overall trust of an industry (system trust) on satisfaction and performance is mediated by trust in individual sellers (narrow-scope trust), suggesting that system helps build trust at a local-level, which ultimately drives performance outcomes.

Note: outcome variables emphasized in *italics*.

Brand Trust. Brands have been emblematic of selling organizations since as early as the thirteenth century when Venetian merchants began applying watermarks to their products (Colapinto 2011). In fact, many dominant US brands began as family names to reflect the people behind the product (e.g., Singer began as a family-owned business; Colapinto 2011). The transition from family name to managed product brand became a primary focus in the early 1900s as companies like Proctor & Gamble began developing targeted brand strategies (Berthon et al. 1999). Thus brands began as representations of firms but have transitioned to have multiple associations (John et al. 2006), which marketing researchers have sought to understand for the better part of a century (Aggarwal and McGill 2012; Erdem and Swait 2004; Erdem et al. 2006; Fournier 1998; McDermott 1936; Nixon 1936). Table 2 lists representative research on brand trust.

The strong emphasis on brand relationships in recent years has led to research that does not distinguish brands from employees. For instance, Aggarwal (2004) examines ‘brand norms’ by evaluating participants’ responses to hypothetical service scenarios that involve different experiences interacting with people at a fictitious company. Here, it is not clear if the norms associated with the exchange are brand-based (i.e., object-based) or person based (i.e., related to the hypothetical people with whom participants imagined interacting). It is possible that associating the brand with quid-pro-quo self-interest (exchange norms) rather than concern for others’ needs (communal norms) is different than such associations applied to the people executing the exchange, given that impressions of individuals are often more integrative and succinct than impressions of groups of individuals (McConnell et al. 1997) or objects. It is also possible that a brand merely sets customer expectations for how employees will behave, but experiences of actual behavior should quickly replace those expectations. For Aggarwal’s

research, participants may have perceived parity between the brand and its service staff, since no other information was available, but indeed differences in brand impressions and employee impressions may influence overall attitude toward the purchase (Wentzel 2009).

However, brand trust is a specific source of trust that can help build customer relationships. This is because as a brand is continually associated with met expectations, customer grow to prefer a trusted brand and become committed to it (Chaudhuri and Holbrook 2001). Thus, just as interpersonal trust, brand trust is an important ingredient to exchange commitment.

TABLE 2
REPRESENTATIVE RESEARCH ON BRAND TRUST

<i>Authors</i>	<i>Year</i>	<i>Primary Constructs Examined</i>	<i>Target</i>	<i>Context</i>	<i>Method</i>	<i>Key Findings</i>
Maheswaran, Mackie, and Chaiken	1992	Brand valence (trust), involvement, <i>product evaluations</i>	Company brand	B2C: Tele-communications	Experiment	Under conditions of low importance, brand trust results in positive brand attitudes that led to favorable product evaluations. Under high importance, brand trust only influenced product evaluations when brand attributes were relevant.
Leuthesser, Kohli, and Harich	1995	Brand attributes, global brand assessment, halo effect	Product brand	B2C: Home cleansers	Survey	Overall brand impression biases ratings of independent brand characteristics, making the assessment of such characteristics difficult. This halo effect bias may be indicative of individual-level brand equity.
Chaudhury and Holbrook	2001	Brand trust, brand affect, <i>brand loyalty, market share, willingness to pay</i>	Product brand	B2C: multiple categories	Survey	Brand trust and brand affect influence behavioral and attitudinal loyalty. Behavioral loyalty results in increased market share, whereas attitudinal loyalty enhances willingness to pay.
Dillon, Madden, Kirmani, and Mukherjee	2001	Brand-specific associations, general brand impressions, brand equity	Product brand	B2C: multiple categories	Survey	Brand associations can be decoupled into ratings of global brand characteristics and specific attribute performance. Global ratings account for more variance in responses from low experience customers. Product extensions and brand equity depend on customer's abilities to make attribute-level assessments.
Erdem, Swait, and Valenzuela	2006	Price, credibility, quality, information costs, risk, <i>purchase intentions</i>	Product brand	B2C: Electronics, food	Survey	Brands serve to signal quality, reduce risk, increase price expectations, and reduce information search costs, all of which, except price, increase <i>purchase intentions</i> . These relationships are enhanced when customers are uncertainty avoidant.
Roehm and Brady	2007	Brand equity, service failure, evaluation delay, distraction	Company brand	B2C: Food service	Experiment	Service failures differentially impact subsequent evaluations of firms with high (vs. low) brand equity (familiarity). Severe failures result in reduced delayed (vs. immediate) ratings for high equity (vs. low equity) brands. Distraction works to reduce negative evaluations.
Fischer, Völckner, and Sattler	2010	Brand relevance in category (BRiC), risk reduction, symbolism	Company and product brands	B2C: multiple categories	Survey	Risk reduction and social signaling are positively associated with the relevance of a brand within its category. Overall brand equity and ad spend are positively correlated with relevance within category.
Park, MacInnis, Priester, Eisingerich, and Iacobucci	2010	Brand attachment, attitude strength, <i>purchase, share of wallet</i>	Company and product brands	B2C: Retail	Experiment; survey	Individual brand attachment (self connection and prominence) motivates purchases, even when purchases are difficult, and increases purchase share. This is separate from the positive effects of brand attitude.
Yannopoulou, Koronis, and Elliott	2011	Brand crisis, media amplification, <i>brand trust</i>	Product brand	B2C: Packaged food	Qualitative	Negative effects of product recall on brand trust were amplified by media dissemination of recall information; negative effects were more severe for those who did not use rather than those who used the affected product.
Herbst, Finkel, Allan, and Fitzsimons	2012	Trust, disclaimer speed, <i>purchase intention</i>	Product brand	B2C: Electronics	Experiment	Trust reduces the negative impact of message cues (disclaimer speed) such that for untrusted and unknown brands, speedy disclaimers reduce purchase intentions, whereas for trusted brands, speedy disclaimer have no adverse effect on purchase intention.

Note: outcome variables emphasized in *italics*.

Interpersonal Trust, Brand Trust, and Customer Commitment. Research has demonstrated that interpersonal and brand trust are correlated, and this correlation is presumed to reflect a sort of “transference” where interpersonal trust transfers to the brand, and vice versa (Doney and Cannon 1997; Grayson et al. 2008; Yim et al. 2008), though these effects may also stem from a halo process, whereby positive affect associated with one object transfers to a related object, here employees and brands (Holbrook 1983; Leuthesser et al. 1995). However, from a customer relationship perspective, the interrelationship between brand and interpersonal trust may be more complex than simple correlations suggest.

Most research examining both brand and interpersonal trust in the customer domain ultimately finds that the customer relationship with the firm ultimately mediates performance outcomes. For example, Yim, Tse, and Chan (2008) explicitly measure loyalty to staff and loyalty to a selling firm, and authors find that though loyalty to staff has a significant effect on loyalty to a selling firm, loyalty to staff has no effect on share of purchase intentions. Instead, authors find that firm loyalty intentions significantly predict share of purchase intentions, suggesting that the relationship with the firm (not staff) ultimately drives performance outcomes. This is in contrast to research in the business-to-business domain suggesting the customer relationship with an employee exerts direct and significant effects on performance outcomes, even after accounting for the effects of loyalty to a selling firm (Palmatier et al. 2007). Thus, it is likely that in the B2C domain, interpersonal relationships do not directly influence firm outcomes, but instead interpersonal relationships enhance firm relationships that in turn influence firm outcomes. With this in mind, brand trust and interpersonal trust are each contributing to the same customer-firm relationship. If this view is valid, then brand and interpersonal trust may

ultimately substitute for the trust needed to support a customer-firm relationship, which is a prediction I will elaborate upon in the proceeding conceptual model.

Firm Performance Outcomes

Ultimately, brand trust and interpersonal trust should positively enhance exchange commitment and drive performance. In particular, I focus on three performance outcomes that result from customer relationships: willingness to pay, word of mouth, and loyalty (Palmatier et al. 2006). I refer to all outcomes as ‘firm performance’, since most research makes comparable predictions about each. Willingness to pay represents the amount of money a customer will exchange for value provided (Miller et al. 2011; Rucker and Galinsky 2008), and since customers that feel a strong sense of commitment that builds over time (Homburg et al. 2005). Next, I consider word of mouth. Word of mouth refers to the likelihood of customers to recommend and speak favorably about a seller (Berger J 2011). Word of mouth is an outcome of strong customer relationships as customers have strong and accessible attitudes that favor sellers with whom they feel they have a relationship (Palmatier et al. 2006). Lastly, I consider loyalty. Loyalty refers to the “favorable correspondence between attitudes and behaviors” stemming from an underlying motivation to maintain a relationship with one entity over another (Dick and Basu 1994, p. 102). Customers with a strong relationship with sellers, who are highly committed, express greater loyalty to that seller stemming from norms of reciprocity and mutuality that govern the exchange (Oliver 1999). Overall, willingness to pay, word of mouth, and loyalty are three performance outcomes that are specifically influenced by customer relationships. Overall, I expect interpersonal and brand trust to enhance customer relationships (commitment) and enhance performance outcomes. Extant research has previously established these causal links, but in the next section I consider factors that influence the relative effectiveness of interpersonal

and brand trust, which is moderation that has received very little attention to date.

Social Integration and the Market

To understand when interpersonal and brand trust is more effective, I examine various factors related to the level of customer social integration. Social integration is a concept developed primarily in sociology; it refers to the importance individuals place on others in their social environment (Baller and Richardson 2002), which, when low, results in self-reliance and can increase self-destructive behaviors (Durkheim [1897] 1951). Thus, social integration has both positive and negative implications for the self and society. In the United States, social integration is a complicated concept. If defined based solely on level of autonomy, the U.S. would appear to have very low social integration, as it is much more individualistic than other cultures (Hofstede et al. 2010). Alternatively, if defined by civic engagement or number of social ties, the level of social integration in the U.S. is unclear, as research documents decreases and increases in civic engagement (Hoover 2014; Putnam 1995), as well as unclear changes in number of social ties (McPherson et al. 2006; Paik and Sanchagrin 2013). Here, I define social integration as the importance placed on others in one's immediate social environment. I expect that factors will increase this importance or relative value and thus be socially integrative. Then, I anticipate that because interpersonal trust involves relying on an individual, and brand trust involves relying on a transferable object, levels of social integration will influence the effectiveness of interpersonal and brand trust as individuals who are more or less socially integrated will be motivated to form or avoid relationships with people vs. brands.

In what follows I describe four factors I expect will influence social integration. I identify factors by considering various levels of customers' social experiences. Specifically, from a socio-ecological perspective (McPherson et al. 2001; Sampson et al. 2002), I examine factors at

the individual (micro), group (meso), and community (Macrosson) levels and consider how factors at each level are socially integrative. I specifically consider age, group interdependence, community values, and residential stability as four factors that represent each level of a customer's social environment.

Customer Age. Age is proposed as the first socially integrative factor, which occurs at the individual level, as research suggests age increases the tendency of individuals to rely on others, even if older individuals are not particularly fond of those they rely on. Age refers to the biological maturation of customers, which, as a demographic variable, has a long history of use in market segmentation and targeting—age is associated with income, asset accumulation, amount of leisure time, physical appearance, health, and many other factors that can influence customer needs (Economist 2002). However, although age is frequently correlated with customer needs, it remains a weak indicator. For example, though many marketers assume customer identities are formed early in life and thus believe older customers tend to buy products consistent with long-held self-perceptions, researchers have recently demonstrated that identities can change or be ‘renewed’ throughout adulthood (Schau et al. 2009). Thus, age only weakly corresponds to customer desires, but research suggests age is significantly associated with the tendency to rely on others, which stems from reductions in the ability to be self-reliant.

Researchers have found several psychological processes related to physiological changes in the brain that occur as age progresses that place constraints on individuals' abilities to be self-reliant and separate from others. These processes are cognitive and motivational. Cognitive changes stem from reductions in abilities to perceive, recall, process, and solve problems, even those that are routine, which occur both from disuse as individuals attempt fewer complex problem solving tasks as they age and from decline as neurons become slower to emit signals

and slower to respond to signals that other neurons emit (Denney Nw 1982; Onofrj M 2001; Verhaeghen et al. 1998). These cognitive deficits impair the performance of complex information search and retrieval tasks. For example, Cazja and colleagues (2001) found in a longitudinal complex computer search task that older participants were significantly slower at correctly navigating tasks relative to younger participants, even accounting for computer experience.

In the domain of customer behavior, age-related cognitive deficits have been found to influence how customers process firms' claims. For example, relative to younger customers, older customers are much likelier to process pragmatic implications as direct assertions, even when an advertisement is in front of them (Gaeth and Heath 1987). In other words, an advertisement may include a direct assertion such as, "Tread on Michelin tires lasts all winter," or a pragmatic implication such as, "Have a safe winter with Michelin tires." The former message involves a specific, verifiable claim, whereas the latter involves a general claim that may be incorrectly interpreted as a verifiable claim—in the first message, tires are claimed to last all winter, in the second message, tires are not claimed to last all winter. Older customers are more likely to view these messages as equivalent due to a more limited processing capacity. In a similar vein, Cole and Gaeth (1990) demonstrated that older customers are less capable of incorporating even objective information (nutritional information) into purchase decisions. The authors found that though decision aids could enhance recall generally, they were no more effective for older than younger customers (experiment 2). Taken together, these findings suggest cognitive deficits limit ability to process information, which is critical to any behavior and especially critical to consumption.

The experience of cognitive deficits changes motivations for older customers. To

overcome cognitive deficits, customers are motivated to adopt strategies to compensate. One such strategy is the use of schema rather than detailed processing of information. Demonstrating this, Yoon (1997) finds that older customers tend to engage in schema or theme-based processing that reduces memory for incongruities (e.g., a news program that showcases poetry, magic shows, and award-winning recipes would be presenting highly incongruent content) during nonoptimal times of day when processing capacity is more limited, but use detailed processing strategies during optimal times of day when cognitive capacity is less limited. Younger customers were more likely to use detailed processing regardless of time of day. Thus, older customers may vary processing strategy as a means of overcoming cognitive deficits.

In addition to processing strategies, older customers can also choose to outsource cognitive control. One means of achieving this is to fixate longer on environmental cues rather than form mental representations in a decision task, which is more likely among older than younger individuals (Spieler Dh 2006). Another method of cognitive outsourcing involves relying on others for support. For example, older customers with greater access to social support are able to more successfully perform health-relevant tasks, which contributes to reduced mortality (Penninx et al. 1997). More generally, simply feeling less in control of one's cognitive processing may influence the extent to which individuals seek support from others. Supporting this, Rucker, Galinsky, and Dubois (2012, p. 356) posit that reductions in power increase communal orientation, or the extent to which individuals "consider others while thinking or engaged in decision-making, irrespective of their intentions toward others (i.e., bad versus good)." Therefore as customers grow older, they are more prone to rely on others, even if they do not particularly favor others.

Thus, I propose age is an important socially integrative factor insofar as it reduces power

and autonomy by increasing cognitive deficits, thereby increasing the tendency of individuals to rely on and value others. As a byproduct of this tendency, it is possible that being forced into conditions of greater social integration causes individuals to reduce dissonance by focusing attention only on positive rather than negative features of their relationship (Luong 2011). In other words, because age forces individuals into greater conditions of social integration, individuals may learn to ignore the negative features of relationships with others as a means to cope with that integration.

Customer Interdependence. Whereas age socially integrates out of necessity, the next factor, interdependence, socially integrates based on the desire to incorporate others in one's self-concept and is thus more volitional. Interdependence refers to a customer's construal of the self as a part of rather than separate from close others and in-groups (Markus and Kitayama 1991). Self-construal varies both across and within societies (Vandello and Cohen 1999). Within the United States, the number of citizens who are from more culturally interdependent (collectivist) societies such as those in Latin America and east Asian and is at an all-time high (Census 2010a), suggesting that while the United States is historically very independent (Hofstede et al. 2010), interdependence is playing an increasingly critical role within U.S. markets.

Interdependence reflects the collective self both within small and large groups, with interdependence associated with smaller groups emphasizing allocentric or relational belongingness and interdependence associated with larger groups emphasizing belongingness in social categories such as athlete (Brewer and Gardner 1996). In general, interdependence has been found to have effects on both customer perception and motivation. In terms of perception, for example, researchers have found a higher perceptual fit between ads promoting togetherness

among those with high interdependence because those with high interdependence are already focused on togetherness, whereas ads promoting separateness have a higher perceptual fit among those with low interdependence who are more focused on differentiation and uniqueness, and these rival perceptual congruencies ultimately enhanced ad appeal differently for those with high vs. low interdependence (Wang et al. 2000). Furthermore, the fit of such messages depends on the level of commitment to a firm. For example, customers with high firm commitment experience a greater fit when the message is consistent with the chronically accessible construal of self, whereas those with low commitment experience a greater fit when the message is consistent with the temporarily activated (latent) construal of self (Agrawal and Maheswaran 2005). This research highlights the fact that interdependence varies both across individuals (chronically) and within individuals at various points in time (i.e., when latent interdependence is activated).

Aside from influencing perceptions, interdependence also influences motivations. For example, while firm commitment may moderate the perceptual fit of advertisement messages for those with high versus low chronic interdependence, interdependence may also influence whether customers form commitment to firms. Researchers have demonstrated that advertisements consistent with a customers' in-group enhance self-brand connections for all customers, but advertisements consistent with an outgroup reduce self-brand connections especially for those with low interdependence (high independence), since those with high independence have higher self-differentiation goals (Escalas and Bettman 2005). In other words, the strong focus on togetherness that is characteristic of those with high interdependence increases the commitment or connection between the self and a brand but limits dissociations from even out-groups. It is worth noting that from this experimental paradigm, the brand is

emblematic of group membership and is not the relational partner, per se.

Furthermore, the emphasis on togetherness of those with high interdependence can influence the relative effectiveness of loyalty programs that are either inclusive or exclusive. Specifically, for customers primed to feel more interdependent, attitudes and behavioral intentions associated with an inclusive loyalty program were much higher than those toward an exclusive loyalty program, reflecting the motivations of those with higher interdependence to maintain harmony with and include rather than exclude others (Barone and Roy 2010). Thus the simple tendency to view the self as part of a group influences responses to marketing tactics, which may be even coincidental to the group (in the aforementioned study, they were hypothetical), suggesting interdependence has a powerful effect on customer motives.

The effects of interdependence on customer motives can even extend beyond social situations. For example, Mandel (2003) demonstrated that those primed with interdependence are more likely to take financial risks such as playing the lottery, but less likely to take social risks such as choosing the wrong attire for a social occasion. Additionally, consistent with the behavioral restraint required for functional group membership, those with high interdependence are motivated to suppress impulsive tendencies, whereas those with higher interdependence are not. Illustrating this, Zhang and Shrum (2009) demonstrated that when peer pressure is present, those with higher interdependence (vs. independence) reported lower attitudes toward immediate beer drinking, which was attenuated when interdependent customers were depleted of cognitive resources (via a thought suppression task; experiment 3). Thus, interdependent self-construal fundamentally shifts the motivations related to group membership, consistent with the self-view that one is a part of rather than separate from social groups.

Overall, I identify interdependent self-construal as a second socially integrative factor

because it enhances the value and importance placed on close others. The tendency for interdependence to enhance the importance placed on others differs from the effects of age, since age increases the importance placed on other due to necessity, whereas interdependence increases the importance placed on others due to cultural influences and norms. Indeed, older customers may have very independent views of the self but remain very dependent on others and thus see value in them. Whereas age influences social integration at the individual level, interdependence is a group-level construct since groups are required for an interdependent self-view to arise. The next socially integrative factor, community values, reflects social integration at a level higher than groups and close others.

Customer Community Values. Community refers to a dense structure of interrelationships that form within a social network (Girvan and Newman 2002), and community values are the importance “placed on developing and maintaining relational ties with one's local geographic community” (Burroughs and Rindfleisch 2002, p. 357). The notion of ‘neighborhood’, which is often synonymous with community, is an important conceptual feature of community values—those with high community values invest in the welfare of physically proximal others (Glynn 1986; Sampson 1988; Sampson et al. 1997), whereas those with low community values base relational ties on interest rather than location (Glynn 1986), a practice reflected in participation in ‘brand communities’, which are not confined to any specific geographic location (Algesheimer et al. 2005; Muniz Jr and O'Guinn 2001; Thomas et al. 2013). Illustrating this distinction, Oishi and colleagues (2007) demonstrate that those with high community values will support local athletic teams regardless of whether they are winning, whereas those with low community values support local teams only when they are winning—that is, only when they garner attention from a broader set of sports enthusiasts. Thus, community

values shape motivations to rely on, support, and be concerned with others in one's geographic vicinity.

Ostensibly, community values may appear similar to interdependent self-construal, since both involve thoughts related to others, but community values are self-transcendent instead of self-focused (Burroughs and Rindfleisch 2002). In other words, those with high community values focus on the welfare of others without concerns for the welfare of the self. This is in line with research examining agency and communion as general dimensions of traits valued in self and others (Abele and Wojciszke 2007). According to this research, when taking the perspective of the self, individuals favor agency traits that enable the pursuit of personal goals. Alternatively, when transcending the self and taking the perspective of others, individuals favor communion traits that enable consideration and mutual well-being. However, when the other-perspective is that of a close rather than general other, individuals again favor agency traits. This is because personal goals can be constrained or limited by the abilities of close others who may aid or impede goal pursuit. Thus, a person with high interdependence remains more self-focused and is thus not necessarily a person with high community values, and someone with high community values "transcends" the self by behaving in ways that are desired in ideal others, not in ways that are merely self-interested.

Consistent with the view that community values are separate from interdependent self-construal, research has found that areas across the United States with higher community values (e.g., greater civic engagement) actually tend to be more individualistic, not more interdependent (Allik and Realo 2004). This is because as individuals become more autonomous and less constrained by the abilities of close others, they become more reliant on the norms of trust and fairness common to members of society. Indeed, community size and market integration

correlate with fairness (Henrich et al. 2010). Thus, though community values are separate from interdependence, those with high community values tend to promote the welfare of others.

The chronic tendency to promote the welfare of others, which is endemic to those with high community values, should enhance the extent to which individuals are socially integrated. As mentioned, social integration involves valuing interrelationships with others, and to the extent that individuals care about others' welfare (i.e., have high community values), others should be seen as more valuable or important. Consistent with this idea, Oishi and colleagues (2007) found that individuals in a minimal group paradigm who spent more time with the same small group rather than different groups, and thus developed a sense of identity with the "local" community, were more likely to help a confederate in that community, an effect that was only partially mediated by identification with the community. Thus, those with greater concern for their community were more helpful to individuals in that community, even at a personal cost to the self. I therefore consider community values a third socially integrative factor.

Residential Stability and Customer Neighborhoods. The fourth and final socially integrative factor considered here is residential stability. Unlike the first three factors, which research suggests are independent, residential stability and community values are interrelated. Residential stability refers to the perceived stability of residents in a local geographic area, which enhances local friendship ties, community values, and social (civic) participation (Sampson 1988; Sampson et al. 2002). Whereas community values are from the perspective of the individual (he or she values his or her community), residential stability involves both the individual (he or she is residentially stable) and those nearby (who are also residentially stable). As a result, residential stability is either examined at the community level to predict community outcomes (Yancey and Ericksen 1979), or at the community level to predict individual outcomes

(Chaix et al. 2007). Here I examine the effects of residential stability on the individual's tendency to value others.

Research has demonstrated that residential stability can be socially integrative in two ways: it increases efforts to help others, and reduces perceived and actual violence—enhancing feelings of safety. Residential stability increases the motivations of individuals to help others or engage in procommunity action by increasing the collective efficacy of residents in a community (Sampson et al. 1997). In other words, those who live in an area with high residential stability believe they and others in their community have the ability to achieve collective outcomes and thus apply effort toward achieving those outcomes. This results in such things as higher purchase rates of products that support the community. For example, using data collected by the Minnesota Driver and Vehicle Services, Oishi and colleagues (2007) found that customers living in zip codes with greater residential stability were more likely to purchase critical habitat license plates that supported the ecological welfare of the state. This effect held even when controlling for such factors as income and political affiliation. In a later study, authors found that even temporary communities consisting of stable (vs. unstable) workgroups resulted in greater helping behavior among group members, an effect that was partially mediated by identification with the temporarily constructed community. Thus, the greater the stability, the more likely individuals are to help each other, stemming from the belief that help should be provided and that it can be (via collective efficacy). The helpfulness and concern for others that is created by high levels of residential stability even reduces suicide rates (Baller and Richardson 2002), suggesting a far-reaching effect of stability.

Residential stability also reduces perceived and actual violence, thus increasing the perception of safety in a community (Sampson et al. 1997). This is an important feature of social

integration, since it enhances the value of others by making them less threatening. In other words, it reduces perceptions that would otherwise make others seemingly less valuable (e.g., violent others are to be avoided, not valued). Just as the effects of residential stability on intention to help others is mediated by community affiliation (Oishi et al. 2007), the effects of residential stability on reduced violence are mediated by collective efficacy (Sampson et al. 1997), suggesting community is the primary mechanism by which residential stability exerts effects.

In marketing research, residential stability has received little attention. Although social psychologists find that residential stability is associated with such things as ethical product consumption and sporting game attendance patterns (Oishi et al. 2007), residential stability does not appear in any of the major marketing journals. In fact, in general neighborhood effects tend to be limited to research on product diffusion (Goldenberg et al. 2009). Here I consider residential stability as a fourth socially integrative factor that may have important implications for customer behavior. This is because, as residential stability increases, individuals, by way of community identity and collective efficacy, tend to place more value on others. They come to see those in their immediate social environment as worth helping and as less threatening.

Overall, I expect these four socially integrative factors: age, interdependence, community values, and residential stability, to influence the way customers respond to interpersonal versus brand trust, as I outline in the next section.

Conceptual Model and Hypotheses

The following section provides the theoretical arguments for my conceptual model (see Figure 1). Table 3 lists all constructs, definitions, and sample items. I begin by offering predictions for the main effects of interpersonal and brand trust on firm performance. Because these predictions are supported by previous findings (i.e., they are replications), I do not offer formal hypotheses. Then, I present a formal hypothesis for the interaction of interpersonal and brand trust on performance (H1). This is the first new prediction offered. Following this, I offer theoretical arguments for why I anticipate each socially integrative factor will moderate the effectiveness of interpersonal and brand trust, and I summarize these predictions in eight hypotheses. Overall, I expect a similar pattern of results for each socially integrative factor, but I expect these effects will occur for different reasons. Then, finally, I offer two predictions for mediation that are consistent with the overall premise that socially integrative factors shift motivations to build commitment with either people or brands.

Figure 1
CONCEPTUAL FRAMEWORK: MODERATING EFFECTS OF SOCIAL INTEGRATION ON INTERPERSONAL AND BRAND TRUST

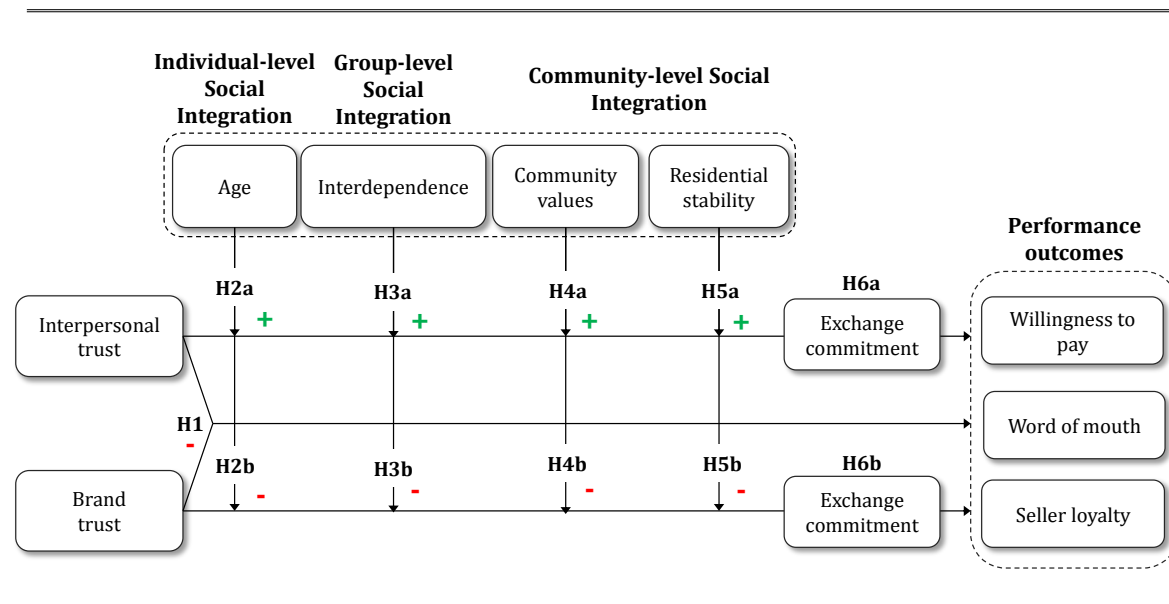


TABLE 3
CONSTRUCTS, DEFINITIONS, AND REFERENCES

<i>Construct</i>	<i>Study</i>	<i>Definition</i>	<i>Sample measure</i>	<i>Reference</i>
Interpersonal trust	1, 2, 3, 4	An assessment of reliability and integrity in a firm's employee, agent, or other representative.	"This person is very trustworthy."	Fang et al. 2008; Yim et al. 2008
Brand trust	1, 2, 3, 4	An assessment of reliability and integrity in a firm's brand or brands.	"This brand is very trustworthy."	Chaudhuri and Holbrook 2001; Yim et al. 2008
Commitment	3	Desire to maintain a valued relationship.	"I am committed to this seller."	Palmatier et al. 2006
Age	1	The biological maturation of consumers.	Age in years.	Cazja et al. 2001; Schau et al. 2009
Interdependence	2	Construal of the self as a part of rather than separate from close others and in-groups.	"It is important for me to maintain harmony within my group."	Markus and Kitayama 1991; Singelis 1994; Vandello and Cohen 1999
Community values	3	Importance "placed on developing and maintaining relational ties with one's local geographic community."	"I am very concerned about the welfare of my community."	Burroughs and Rindfleisch 2002, p. 357
Residential stability	4	Perceived stability of residents in a local geographic area.	Proportion of residents who do not move year-over-year.	Oishi et al. 2007; Sampson 1988; Sampson et al. 2002
Willingness to pay	1, 2, 3	Maximum amount of money a customer will exchange for value provided.	"How much (%) more or less are you willing to pay for a product from this firm?"	Palmatier et al. 2006; Rucker and Galinsky 2008
Word of mouth	3, 4	Likelihood of consumers to recommend and speak favorably about a seller.	"I am likely to recommend this firm."	Berger and Schwartz 2011
Loyalty	3, 4	the "favorable correspondence between attitudes and behaviors" stemming from an underlying motivation to maintain a relationship with one entity over another.	"I would consider this firm before any competing firm."	Dick and Basu 1994, p. 102

Effects of Interpersonal and Brand Trust on Firm Performance

The Effect of Interpersonal and Brand Trust on Firm Performance. Interpersonal and brand trust are expected to have positive effects on firm performance. This is because customers are more likely to be committed to firms who have trustworthy agents and/or trustworthy brands (Doney and Cannon 1997; Grayson et al. 2008; Holbrook 1983; Leuthesser et al. 1995; Yim et al. 2008). This occurs because interpersonal and brand trust both increase the value of a

customer-firm relationship, which should ultimately increase customer commitment and result in greater firm performance. Thus, while I do not offer any formal hypothesis, I expect, as has been shown in prior research, that interpersonal and brand trust will positively impact firm performance.

The Interaction Between Interpersonal and Brand Trust on Firm Performance.

Furthermore, because customers maintain relationships at the firm level in a business-to-customer context, as prior research suggests (Yim et al. 2008), I anticipate interpersonal and brand trust will substitute (negatively interact) on performance. In other words, I expect the marginal effectiveness of interpersonal (brand) trust on performance to reduce as levels of brand (interpersonal) trust increase.

This prediction is supported by theories related to how trust is relied upon in exchange. Namely, previous research has demonstrated that as trust or certainty from one source increases to a sufficient level, trust from other sources no longer has an effect on purchase decisions (Jacoby et al. 1994). In other words, customers seek a level of sufficient confidence that may be achieved by trust (Maheswaran et al. 1992). Thus, as interpersonal or brand trust increases, trust from the alternative source should be less relevant. Therefore,

H₁: *Brand and interpersonal trust will have substitutive effects (negatively interact) on firm performance.*

Moderating Effects of Socially Integrative Factors

Aside from the main and interactive effects of interpersonal and brand trust, it is important to know when trust from each source is more effective. This is because if trust can substitute, it is critical to know to which source customers are more responsive so managers may calibrate investments accordingly. To understand when each is more effective, I consider the

moderating effects of socially integrative factors discussed in the literature review. I expect that as these factors increase the social integration of customers, they will enhance the effects of interpersonal trust and suppress the effects of brand trust. Said differently, I expect that conditions of reduced social integration will enhance the effectiveness of brand trust, as customers are conditioned to rely on instruments that recuse the self from direct reliance on others. Brands are one such instrument, since customers may rely on brands in many different locations and contexts (Erdem et al. 2004), whereas reliance on specific others is location and context dependent.

Moderating Effects of Customer Age. First, I consider the effects of customer age. As described, customer age refers to the maturation of customers and is specifically associated with cognitive deficits that occur as complex problem solving becomes less frequent (disuse) and as neurons become less communicative (decay), thus reducing older customers' abilities to process complex information and complete complex tasks (Denney Nw 1982; Onofrij M 2001; Verhaeghen et al. 1998). As older customers lose control of their cognitive functioning, they are more likely to outsource cognitive control as a coping mechanism. One means of outsourcing is simply to reference environmental cues more frequently as memory reminders (Spieler Dh 2006). An alternative strategy for of outsourcing involves increasing reliance on other people to help with complex tasks, which appears to be an increasingly attractive strategy as old age progresses, even if customers are not fond of others or do not generally enjoy relying on them (Penninx et al. 1997; Rucker et al. 2012). Thus, I expect that as customers age, they will place more importance on others, even if they retain autonomous self-views. I expect the importance placed on others in customers' personal lives to transfer to importance placed on individuals in a commercial setting. In other words, valuing people generally should result in valuing

interpersonal trust specifically. Alternatively, since relying on a brand does not necessarily involve relying on another person—indeed, brands are objects—as customers grow older, they should value brand trust less. Thus,

H₂: *As customer age increases, (a) interpersonal trust will have a stronger effect and (b) brand trust will have a weaker effect on firm performance.*

Moderating Effects of Interdependence. The second moderating factor I assess is interdependence. Customer interdependence integrates customers by influencing customers' self-view. As customers increase perceptions they are part of a group, they come to rely on and value group members more. I anticipate these effects, which occur in the context of customers' close social relationships, will have subsequent effects on market-based exchange. This expectation parallels research demonstrating that customers' level of interdependence can incidentally influence their responsiveness to certain advertisements that promote togetherness or separateness (Wang et al. 2000). Similarly, those with high interdependence prefer loyalty programs that are associated with inclusion rather than exclusion (Barone and Roy 2010). Thus, individuals with high levels of interdependence, who are focused on togetherness and inclusion, seem to place greater importance on others, relative to customers with low interdependence who are focused on autonomy.

In exchange, brand trust and interpersonal trust vary with regard to the level of person involvement. Interpersonal trust requires customers to rely on specific others, which necessitates placing importance or value on other people. Alternatively, brand trust does not necessarily involve other people. In a sense, brand trust is 'person free', which is one reason brands are so instrumental to companies with operations that span large geographies (Erdem et al. 2004). Thus, overall, I expect that as customer interdependence increases, interpersonal trust will be more

valued by customers and will thus have a stronger effect on firm performance. Alternatively, as interdependence decreases, I expect customers will place less value on others and more value on transferable objects that obviate the need of others—brands. Thus brand trust should have a stronger effect on performance for those with low levels of interdependence. Therefore, I anticipate,

H₃: *As customer interdependent increases, (a) interpersonal trust will have a stronger effect, and (b) brand trust will have a weaker effect on firm performance.*

Moderating Effects of Community Values. The third moderating factor I assess is community values. Community values are socially integrative insofar as they enhance the concern customers have for specific others in their local geography. As mentioned in the theoretical background, community values are distinct from interdependence in that they are self-transcendent rather than self-focused (Burroughs and Rindfleisch 2002). A person considering his level of interdependence is making self-evaluations, whereas a person considering his level of community values is making an evaluation that is outside the self. Indeed, in the United States, interdependence is very low, but community values are historically fairly high (Hofstede et al. 2010; Putnam 2000).

I anticipate that the chronic tendency of those with high community values to promote the welfare of those in their community will influence the extent to which they value people in exchange. In other words, placing value on specific others in the community should increase the extent to which customers place value on others in exchange. I expect this will enhance the effects of interpersonal trust. This expectation is similar to those provided above, but for different reasons. Whereas age may enhance the effect of interpersonal trust on performance because individuals are forced to rely on others as they get older and thus see value in them, and

interdependence may increase the effects of interpersonal trust because individuals see themselves as part of small, personal groups, I expect community values will increase the effects of interpersonal trust on performance because individuals are in a sense trained to value people in their community, regardless of their age or group affiliations. Alternatively, I expect those with low community values to place importance on exchange sources that are independent of their community, as is the case of brands. Thus I expect that as community values decrease, the effect of brand trust on performance outcomes will increase. Thus, I anticipate,

H₄: *As customer community values increase, (a) interpersonal trust will have a stronger effect, and (b) brand trust will have a weaker effect on firm performance.*

Moderating Effects of Residential Stability. The fourth moderating factor I assess is residential stability. Residential stability is proposed as a socially integrative factor because as individuals remain in a neighborhood, and as neighbors remain, customers increase their number of local friendship ties, collective efficacy, and social (civic) participation (Sampson 1988; Sampson et al. 2002). In addition, customers living in areas with higher residential stability are less likely to perceive their neighborhood as violent and threatening, which is mediated by perceptions that neighbors have the ability to combat violence (Sampson 1991). Therefore, those in areas with high residential stability have both greater involvement with those in their community, and view others as less threatening, both of which I expect will influence the extent to which customers place value on others. In other words, as customers are concerned with the welfare of others and perceive others to be less threatening, they should feel other people are more important.

As residential stability increases, I anticipate customers will value interpersonal trust more than brand trust, in line with predictions above regarding other socially integrative factors.

In other words, those in areas with higher residential stability should place more value on interpersonal trust, whereas those in areas with lower residential stability should place more value on brand trust. This is because residential stability increases the value placed on others in general, which I expect will specifically translate into the value placed on others in exchange, such that,

H₅: *As residential stability increases, (a) interpersonal trust will have a stronger effect, and (b) brand trust will have a weaker effect on firm performance.*

Mediating Role of Commitment. Finally, I consider commitment as a mediator of the moderated effects of social integration on the effect of interpersonal and brand trust on performance outcomes. As I have argued until this point, I expect customers with higher social integration to be more motivated to form relationships with people rather than brands, and I expect customers with lower social integration to be more motivated to form relationships with brands rather than people. Commitment, which refers to the desire to maintain a valued relationship (Morgan and Hunt 1994; Palmatier et al. 2006), should reflect such a motivation. Thus, although I anticipate that overall trust will be sufficient to enhance firm performance outcomes, I expect trust associated with a person or brand to influence exchange commitment differently depending on customers' levels of social integration. For those with high social integration, I expect interpersonal trust to enhance commitment, which will in turn influence performance outcomes. For those with low levels of social integration, I expect brand trust will enhance exchange commitment, which will in turn influence performance outcomes. Thus, although customers primarily form exchange commitments with firms overall (Yim et al. 2008), the trust on which that commitment is based should be more effective when it matches the level of importance customers place on people versus brands. I therefore expect,

H₆: *Exchange commitment will mediate the moderated effects of brand and interpersonal trust on firm performance.*

Overview of Studies

The primary goals of this research is to demonstrate brand and interpersonal trust are distinct, test whether they are substitutes (negatively interact), test moderating factors that influence the efficacy of each, and test whether commitment mediates these moderating effects. A secondary goal is to demonstrate these effects hold across multiple purchasing contexts and generalize across multiple methodological approaches. Furthermore, theory suggests socially integrative factors are distinct, so I designed my research approach specifically to assess correlations between these factors. I therefore examine the effects of brand and interpersonal trust and the moderating role of socially integrative factors as follows.

First, in Study 1, I survey actual customers about a purchase they are considering and test whether age moderates the effects of interpersonal and brand trust on willingness to pay. Furthermore, I examine whether interpersonal and brand trust substitute (negatively interact). The benefit of this approach is I am able to test whether these effects occur beyond the effects of any specific product category. In addition, I measure willingness to pay one week after independent variables are collected in order to reduce common method variance concerns (Avolio et al. 1991).

Then, in Study 2, I examine the moderating effects of interdependence on interpersonal and brand trust within one purchase context. Specifically, I survey respondents about their willingness to pay for a product from a single manufacturer. In addition, I again test whether interpersonal and brand trust are substitutes (negatively interact). Also, I measure age, community values, and residential stability to assess correlations among socially integrative

factors to assess discriminant validity of proposed constructs.

In Study 3 I take a different approach and assess the effects of community values using an experiment. Because no manipulation for community values exists, I developed a manipulation using a false feedback technique (Ross et al. 1975). While this approach does not allow me to test whether brand and interpersonal trust are substitutes, it does allow me to rule out variables that systematically covary across individuals via randomization. Furthermore, in this study I examine the mediating role of commitment. Testing mediation using an experimental approach provides a firmer base for causal inference.

Then, in Study 4, I use secondary data to examine whether residential stability moderates the effectiveness of positioning strategies that emphasize interpersonal trust vs. brand trust using several matched secondary datasets. Ultimately, then, I test the effects of proposed socially integrative factors on interpersonal and brand trust that is measured (Studies 1 and 2), manipulated (Study 3), and differentially emphasized in marketing strategies (Study 4). Furthermore, I examine multiple purchase categories across studies as well as multiple performance outcomes, which include: willingness to pay (Studies 1, 2, and 3), word of mouth (study 3 and 4), and loyalty (studies 3 and 4).

Study 1: Trust Substitution and Moderating Effect of Customer Age

The goal of Study 1 was to assess whether interpersonal and brand trust are substitutes and to test whether age moderates the effects of interpersonal and brand trust on performance. To accomplish this, I surveyed actual customers about a purchase they will make in the near future, with the stipulation that the purchase includes both a brand and an employee. I then measured brand and interpersonal trust and several other purchase characteristics as controls. Then I examine how interpersonal and brand trust interact and how age moderates the effectiveness of each on willingness to pay, which was measured one week after the initial measures of interpersonal and brand trust, as well as controls.

Method

Procedure. Three-thousand and ninety three university alumni were contacted as part of a larger marketing survey and asked to participate in a “customer experience questionnaire” that would involve a one-week follow-up. Twelve-hundred and thirty-three respondents opened the initial survey (39% of those contacted), 1,123 completed the first survey (T_1 ; 36% of those contacted), and 615 completed the second survey (T_2 ; 52% of those who completed the first). Thus, overall complete response rate was approximately 20%. The final sample (66% male; $M_{age}=36$) represents well-educated adult customers. Respondents were asked to consider a brand-related purchase they are likely to make in the near future that would involve an interaction with a sales associate, agent, service representative, or other employee. Then, after completing initial measures outlined below, respondents submitted the survey and were contacted one-week later (T_2) with a brief follow-up survey. As an incentive, respondents were entered into a drawing to win a \$500 tablet device. Because the dependent variable (willingness-to-pay) was lagged by one period to control for common method bias and enhance causal inference, I lost some data. In

addition, missing values forced me to exclude some data from analyses using pairwise deletion.

I assess possible nonresponse bias with two approaches. First, I conducted tests to compare early and late respondents for two periods, according to demographic information and measured constructs. The results from univariate and multivariate analyses indicated that these respondents constituted the same population ($p > .05$). Furthermore, I compared those who completed surveys on only the first period to those who completed the first and second periods. Again, results from univariate and multivariate analyses indicated these respondents constituted the same population ($p > .05$). The relatively high rate of response, along with these test results, suggested that nonresponse bias was not an issue.

Key Dependent Variable. The primary outcome of interest was willingness-to-pay, which I measured at T_2 with a price-independent percent-based item, which is applicable across categories (Rucker and Galinsky 2008), that involved a 100-point sliding scale with the instructions “If 0 represents the average price of this product or service, how much (%) more or less are you willing to pay for a product or service from this firm? (-50% to +50%).” All other measures occurred at T_1 .

Primary Explanatory Variables. Respondents rated interpersonal trust (Palmatier et al. 2009) by rating focusing on the employee associated with their purchase and rating agreement (1 = strongly disagree, 9 = strongly agree) with three items ($\alpha = .95$) that included, “This person is very trustworthy,” “I have a high degree of confidence in this person,” and “This person has higher than average integrity.” Then, respondents completed the same three-item ($\alpha = .95$) measure for brand trust with the exception that the word “person” was replaced by the word “brand.” Age, the moderator of interest, was measured using a single fill-in item: “Please indicate your age.”

Control Variables. Control variables were included at the individual, offering, and relationship levels. To account for the possibility that generalized trust, which refers to the dispositional expectations one has about others in general (Zucker 1986), is correlated with age and thus influences the extent to which interpersonal trust may be credible and therefore valued, which I believe to be an unlikely possibility, generalized trust was measured as in prior research using a single item (1 = not very trusting, 9 = very trusting) adapted from prior research (Grayson et al. 2008) that involved answering the question, “In general, how trusting are you of others?” To account for specific offering-related characteristics that may make people vs. brands more important and thus influence the relevance of trust in each, I measured visibility, complexity, and service level. Visibility was measured using three items ($\alpha=.90$) that involved rating agreement (1 = strongly disagree, 9 = strongly agree) with statements that included, “Use of this product/service is very public,” “Many people would be able to see me with this product/service,” and “This product/service is very visible to others.” Complexity (Swaminathan 2003) was measured using three items ($\alpha=.80$) that involved rating agreement (1 = strongly disagree, 9 = strongly agree) with statements that included, “This product/service is extremely complex,” “This product/service is very complicated,” “There are many features associated with this product/service.” Furthermore, service level was measured using a single item based on previous service research (Fang 2008) that involved a bipolar scale (1 = mostly a product, 9 = mostly a service) rated in response to the question, “Is what you are buying more of a product (e.g., stereo, camping gear) or more of a service (e.g., education, medical procedure)?” Then, two exchange-level measures were collected. First, because interpersonal trust may require more interpersonal interaction than brand trust, which older customers may have had more time to establish, duration was measured using a single item (1 = a very short time, 9 = a very long time)

that involved responding to the question, “How long have you known the company associated with this purchase?” Then, because the brand of a product can differ from the brand of the firm offering it, which may have resulted in situations where interpersonal trust reflected a firm’s brand and brand trust reflected the trustworthiness of an upstream channel partner, brand configuration was measured using a single item (yes/no) in response to the question, “Is the brand of the product or service the same as the brand of the company selling it?” Descriptive statistics for all measured variables are available in Table 3.

Measurement Validity. To assess measurement validity, I conducted a confirmatory factor analysis using the R package “lavaan” (Rosseel 2012). Consistent with expectations, all standardized loadings were high (average loading was .88) and significant ($p < .01$). Furthermore, comparative fit index (CFI) was .96, Tucker-Lewis index (TLI) was .94, root mean square error of approximation (RMSEA) was .07, and standardized root mean square residual (RMSR) was .07, all within acceptable ranges. Furthermore, items discriminated. Table 3 shows average variance extracted (AVE) for all measured items, which were larger than corresponding shared variances (intercorrelations²) for all possible pairs of constructs. Table 4 lists summary statistics.

Table 4
Summary Statistics from Study 1

Construct	M	SD	AVE	1	2	3	4	5	6	7	8	9	10
1. Generalized trust	5.58	1.86	—	—									
2. Product visibility	6.29	2.56	.93	.02	.90								
3. Product complexity	5.82	2.07	.86	.05	.27	.80							
4. Service level	4.11	3.48	—	.07	-.52	-.02	—						
5. Relationship duration	6.44	2.71	—	.07	.25	.03	-.30	—					
6. Brand configuration	1.46	.50	—	-.01	-.08	.02	.00	-.20	—				
7. Interpersonal trust	5.78	2.07	.92	.17	-.24	-.01	.33	-.10	.05	.95			
8. Brand trust	6.85	1.65	.87	.09	.24	.02	-.19	.34	-.20	.18	.95		
9. Consumer age	35.74	10.60	—	.01	-.06	.04	.04	.13	.01	.04	.03	—	
10. Willingness to pay	4.16	11.63	—	.05	-.07	.00	.09	.07	-.04	.18	.16	.05	—

Note: Chronbach's alpha presented in diagonal; off-diagonal indicates Pearson correlation coefficients. Bolded coefficients are significant at $p < .05$.

Model Development

All variables were mean-centered for ease of interpretation. I model the effect of interpersonal and brand trust on willingness to pay at the individual level and examine the moderating effect of individual i 's age. Because individuals are nested within purchase category, I used a hierarchical model that includes a random effect for category (assigned a priori based on purchase similarities) to capture extraneous variation between categories (Gelman 2007). Each observation, y_{ij} , represents the willingness to pay for each respondent i in category j . In matrix notation, our model takes the form,

$$\mathbf{y}_i = \mathbf{X}_i\boldsymbol{\beta} + \mathbf{Z}_i\mathbf{b}_i + \boldsymbol{\varepsilon}_i$$

$$\mathbf{b}_i \sim N_q(\mathbf{0}, \boldsymbol{\Psi})$$

$$\boldsymbol{\varepsilon}_i \sim Nn_i(\mathbf{0}, \sigma^2\boldsymbol{\Lambda}_i)$$

where \mathbf{y}_i is the $n_i \times 1$ vector of observations for the i -th respondent, \mathbf{X}_i is the $n_i \times p$ matrix for the fixed effects for observations of respondent i , $\boldsymbol{\beta}$ is the $p \times 1$ vector of fixed-effect coefficients, i.e. *interpersonal trust, brand trust, age, generalized trust, visibility, complexity,*

service level, duration, and brand configuration, \mathbf{Z}_i is the $n_i \times q$ matrix for the random effects for observations in group i , \mathbf{b}_i is the $q \times 1$ vector of random-effect coefficients for group i , i.e. category, $\boldsymbol{\varepsilon}_i$ is the $n_i \times 1$ vector of errors for observations in group i , $\boldsymbol{\Psi}$ is the $q \times q$ covariance matrix for the random effects, and $\sigma^2 \boldsymbol{\Lambda}_i$ is the $n_i \times n_i$ covariance matrix for the errors in group i . I estimate the model using restricted maximum likelihood.

Results and Discussion

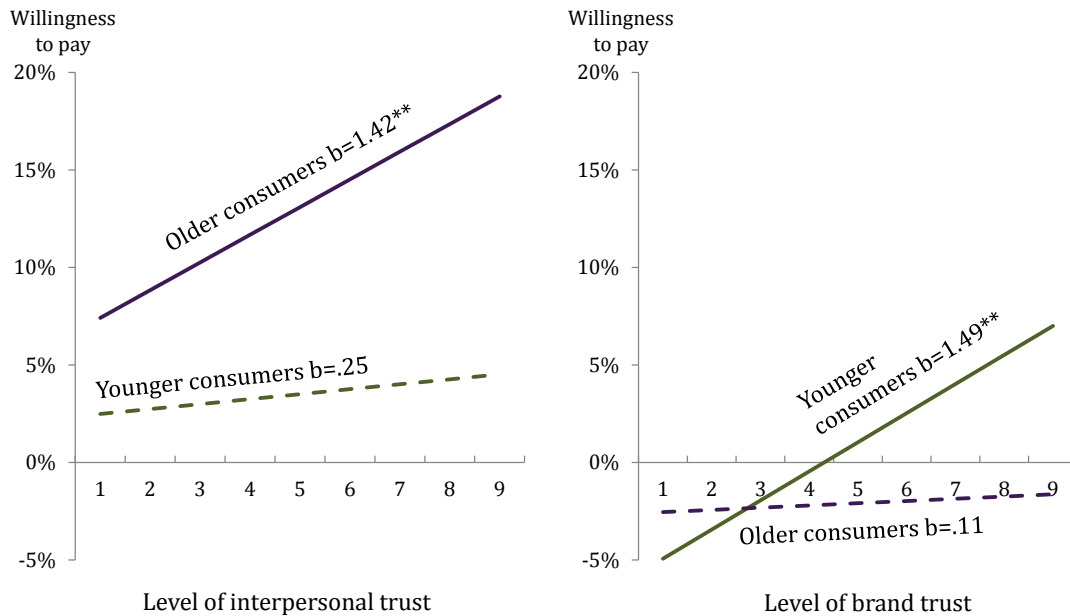
Main Effects of Interpersonal and Brand Trust. Table 5 displays estimation results. Results indicate interpersonal and brand trust each have positive effects on willingness to pay, even accounting for the simultaneous effects of each other. Specifically, the effect of interpersonal trust is positive and significant ($b=.84, p<.01$), as is the effect of brand trust ($b=.82, p<.05$). The estimates are comparable, suggesting the effect size of interpersonal and brand trust is equivalent. Although these effects are comparable, correlation results suggest interpersonal and brand trust are fairly independent ($r=.18, p<.05$). This is in contrast to prior research that finds interpersonal and brand trust are highly correlated (Grayson et al. 2008), suggesting that though interpersonal and brand trust may be highly correlated within a purchase category, they are weakly correlated across purchase categories, highlighting the necessity of capturing cross-category heterogeneity. Next, I consider the substitution effects of interpersonal and brand trust.

Substitution of Interpersonal and Brand Trust. Results indicate interpersonal and brand trust indeed substitute, offering evidence in support of H1. Specifically, the negative interaction term ($b=-.31, p<.05$) suggests that as interpersonal trust increases, the effects of brand trust decline, and vice versa. These effects thus suggest that once sufficient trust is reached, trust from additional sources does not contribute to performance. To better understand these effects, I conducted a spotlight analysis (Spiller et al. 2013). Results reveal that increases in brand trust do

not have a significant effect on willingness to pay when interpersonal trust is rated 6 out of 9 ($p > .05$). Alternatively, increases in interpersonal trust do not have a significant effect on willingness to pay when brand trust is rated 7 out of 9 ($p > .05$). Thus there is a slight asymmetry between interpersonal and brand trust, such that interpersonal trust obviates brand trust at lower levels.

Moderating Effects of Customer Age. To assess whether age moderates the effectiveness of interpersonal and brand trust, I included an interaction term between interpersonal trust and age and brand trust and age. Results reveal significant effects in the opposite direction. Specifically, the positive effects of interpersonal trust are enhanced as age increases ($b = .05$, $p < .05$), whereas the positive effects of brand trust are reduced as age increases ($b = -.06$, $p < .05$). This evidence supports hypotheses H2a and H2b, which suggest that as age increases customers are more socially integrated, which enhances their valuation of interpersonal and brand trust. To assess the effects of interpersonal and brand trust for older and younger customers, I again conducted a spotlight analysis (see Figure 2). Results reveal that for older customers (those who are one standard deviation above the mean or 46 years old), increases in interpersonal trust have a positive and significant effect on willingness to pay ($b = 1.42$, $p < .01$), whereas for younger customers (those who are one standard deviation below the mean or 25 years old), increases in interpersonal trust have no effect on willingness to pay ($b = .25$, NS). Furthermore, for older customers, increases in brand trust have no effect on willingness to pay ($b = .11$, NS), but for younger customers, increases in brand trust have a significant positive effect on willingness to pay ($b = 1.49$, $p < .01$). Therefore, the effects of interpersonal trust on willingness to pay are significant and positive for older customers, whereas the effects of brand trust on willingness to pay are significant and positive for younger customers.

Figure 2
STUDY 1: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON WILLINGNESS TO PAY FOR OLDER AND YOUNGER CONSUMERS



Notes: $**p<.01$; effects calculated at mean of all other variables from Study 1 model 2. For example, the effects of interpersonal trust on willingness-to-pay are at mean brand trust. "Older" (46.33 years) refers to one standard deviation (10.60) above the mean (35.73), whereas "younger" (25.13) refers to one standard deviation below the mean.

Alternative Explanations. I did not observe any significant main effects of any control variables (generalized trust, visibility, complexity, service level, and brand configuration), nor was the significance of the interaction terms contingent upon the inclusion of these controls. Thus, the observed effects were independent of control variables and robust to their inclusion, suggesting effects were not due to differences in perceived visibility, complexity, service level, duration, or brand configuration, which may have been correlated with customer age.

Thus, I find evidence supporting the moderating role of customer age on the effects of interpersonal and brand trust. In Study 2, I examine whether age correlates with other socially integrative factors to assess its independence from these factors. Also, I examine the moderating role of interdependent self-construal.

TABLE 5
STUDY 1: MODERATING EFFECTS OF AGE

	Performance outcome: Willingness to pay			
	β	(S.E.)	95% HPDI	
			Lower	Upper
Fixed effects				
Intercept	4.33 **	(.54)	2.95	5.77
<i>Controls</i>				
Generalized trust	.27	(.30)	-.29	.88
Visibility	-.29	(.26)	-.81	.24
Complexity	.02	(.27)	-.53	.54
Service level	.16	(.19)	-.24	.54
Duration	.26	(.22)	-.17	.71
Brand configuration	-.28	(1.10)	-2.54	1.84
<i>Primary predictors</i>				
Interpersonal trust	.83 **	(.30)	.23	1.43
Brand trust	.82 *	(.36)	.09	1.54
Age	.04	(.05)	-.06	.13
Age x interpersonal trust	.05 *	(.02)	.00	.10
Age x brand trust	-.06 *	(.03)	-.12	-.01
Interpersonal x brand trust	-.31 *	(.16)	-.63	-.01
Random effects				
Offering category	.39	(.00)		
Model Characteristics				
-2 Log Likelihood	1,755			
AIC	3,541			
BIC	3,602			
REML deviance	3,511			

Notes: * $p \leq .05$; ** $p < .01$; sample includes 455 consumers across 8 categories; willingness to pay measured one-week after all predictors.

Study 2: Moderating Effects of Self-Construal

The goals of Study 2 were threefold. First, Study 2 primarily tests the moderating role of self-construal on the effects of interpersonal and brand trust on willingness to pay. Additionally, Study 2 seeks further support for the substitutive effect of brand and interpersonal trust by testing whether these two sources of trust can substitute even within in a context where a brand is dominant (e.g., for the customer technology company Apple). Additionally, in Study 2 I examine the relative independence of socially integrative factors by examining their correlation. This study involves a survey of customers about a hypothetical product purchase.

Method

Procedure. Three-hundred U.S. participants (56% male, $M_{\text{age}} = 33$) who were recruited using Amazon's Mechanical Turk participated in the survey online for compensation (\$.25). Respondents were shown an Apple iPad advertisement (see Appendix A) and asked how much they would be willing to pay of the iPad. Then, respondents completed measures of interpersonal and brand trust, measures of interdependence, and several other measures used as controls. Following this, respondents were thanked.

Measures. The primary dependent variable of interest was willingness to pay, as in Study 1. Willingness to pay was measured via response to the question, "If 0 represents the average price for a tablet computer, how much (%) more or less are you willing to pay for an Apple iPad?" Following this, respondents completed the same three measures used in Study 1 to assess interpersonal trust ($\alpha=.95$) and brand trust ($\alpha=.96$). Then respondents completed a 12-item ($\alpha=.80$) measure of interdependence (Singelis 1994) that included items such as, "It is important for me to maintain harmony within my group." Then respondents completed a 15-item materialism scale (Richins 2004) divided into three sub-dimensions, based on prior scale

development, that included a 5-item ($\alpha=.85$) measure of materialistic success that included items such as, “The things I own say a lot about how well I'm doing in life,” a 5-item ($\alpha=.73$) measure of materialistic centrality that included items such as, “The things I own aren't all that important to me,” and a 5-item ($\alpha=.81$) measure of materialistic happiness that included items such as, “I'd be happier if I could afford to buy more things.” Then respondents completed a 9-item ($\alpha=.91$) community values measure (Burroughs and Rindfleisch 2002) that included items such as, “I am very concerned about the welfare of my community.” Then respondents indicated how long they have lived in their current home, since residential stability is believed to be a predictor of sense of community (Glynn 1986). Following this, respondents indicated gender, age, income, and were thanked.

Measurement Validity. To assess measurement validity, I conducted a confirmatory factor analysis using the R package “lavaan” (Rosseel 2012). Consistent with expectations, all standardized loadings were high (average loading was .72) and significant ($p<.01$). Furthermore, comparative fit index (CFI) was .93, Tucker-Lewis index (TLI) was .92, root mean square error of approximation (RMSEA) was .05, and standardized root mean square residual (RMSR) was .06 all within acceptable ranges. Furthermore, items discriminated. Table 3 shows average variance extracted (AVE) for all measured items, which were larger than corresponding shared variances (intercorrelations²) for all possible pairs of constructs, with the exception of materialism measures, which are subcomponents of the same higher-order latent construct (Richins 2004), suggesting discriminant validity may not be expected. Table 6 lists descriptive statistics.

Table 6
Summary Statistics from Study 2

Construct	M	SD	AVE	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	32.92	10.87	—	—											
2. Gender	1.44	.50	—	.13	—										
3. Income	4.96	2.87	—	.15	.05	—									
4. Residential stability	2.72	3.22	—	.08	.14	-.06	—								
5. Material success	3.37	1.30	.68	-.25	-.04	.01	-.04	.85							
6. Material centrality	3.76	1.11	.44	-.20	.06	.07	.03	.69	.73						
7. Material happiness	4.19	1.20	.58	-.28	.02	-.10	-.03	.60	.58	.81					
8. Community values	4.25	1.13	.52	.15	.19	.02	-.00	-.11	-.19	-.20	.91				
9. Interdependence	4.63	.80	.61	.02	.08	-.03	-.04	.02	-.09	-.05	.36	.80			
10. Interpersonal trust	5.81	1.81	.72	.09	.17	.10	.00	.20	.12	.08	.18	.26	.95		
11. Brand trust	5.96	2.20	.80	.13	.20	.05	.11	.26	.17	.13	.13	.21	.81	.96	
12. Willingness to pay	1.65	22.32	—	.07	.14	.03	.03	.27	.20	.14	.13	.19	.55	.58	—

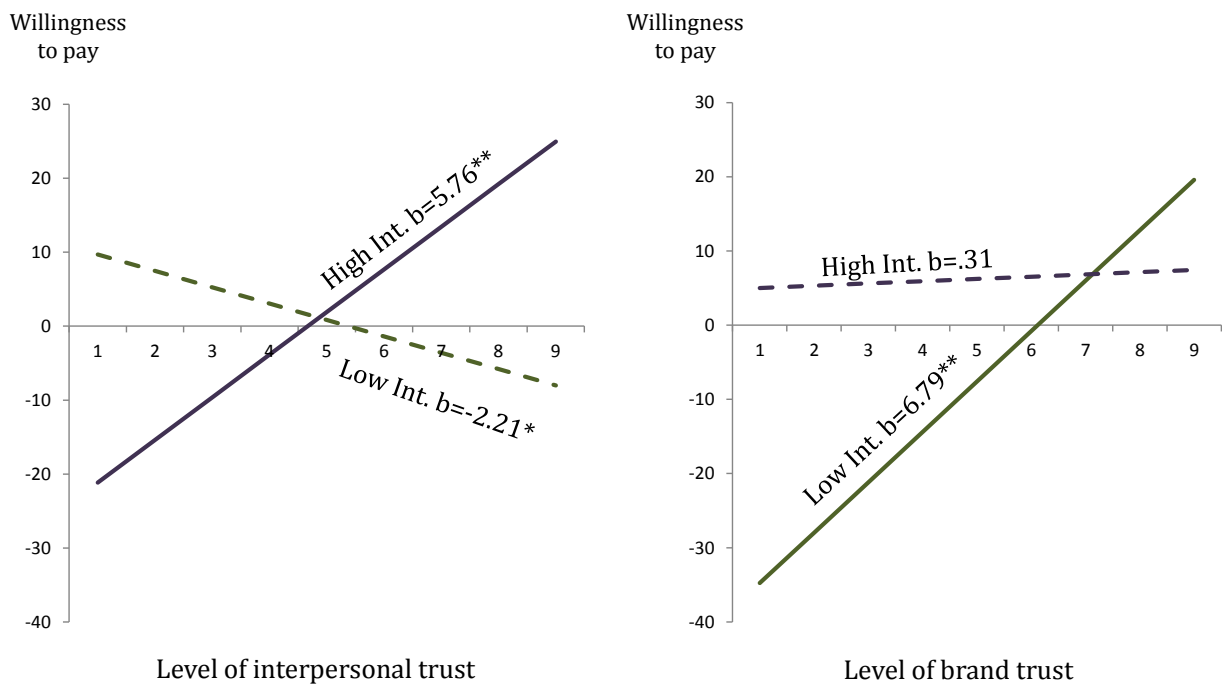
Note: Chronbach's alpha presented in diagonal; off-diagonal indicates Pearson correlation coefficients. Bolded coefficients are significant at $p < .05$.

Results and Discussion

Moderating Effects of Interdependent Self-Construal. Table 7 lists estimation results from an ordinary least-squares regression. Consistent with H3a and H3b, the effects of interpersonal and brand trust are significantly moderated in opposite directions by interdependence. Specifically, the interpersonal trust has a stronger effect on willingness to pay as interdependence increases ($b=4.92, p < .01$), whereas brand trust has a weaker effect on willingness to pay as interdependence increases ($b=-3.93, p < .01$). To examine these effects, I conducted a spotlight analysis (Spiller et al. 2013) at one standard deviation (.80) above and below the mean level of interdependence ($M=4.63$). Figure 3 illustrates results. The effects of interpersonal trust are positive and significant ($b=5.76, p < .01$) for those with high interdependence, whereas the effects of interpersonal trust are negative and significant for those with low interdependence ($b=-2.21, p < .05$), suggesting that those with low interdependent self-construal are willing to pay significantly less as interpersonal trust increases. Alternatively, the effects of brand trust on willingness to pay are positive and significant for those with low interdependent self-construal ($b=6.79, p < .01$), whereas the effects of brand trust on willingness

to pay are not significant for those with high interdependent self-construal ($b=.31$, NS). Thus, there exists an asymmetry between interpersonal and brand trust, such that interpersonal trust can actually have negative effects on willingness to pay for customers who desire greater autonomy from others.

Figure 3
STUDY 2: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON WILLINGNESS TO PAY FOR CONSUMERS WITH HIGH AND LOW INTERDEPENDENCE



Notes: ** $p < .01$; effects calculated at mean of all other variables from Study 2. For example, the effects of interpersonal trust on willingness-to-pay are at mean brand trust. "High Int." ($M=5.43$) refers to one standard deviation (0.80) above the mean (4.63) level of interdependence, whereas "Low Int." ($M=3.83$) refers to one standard deviation below the mean.

Substitution of Interpersonal and Brand Trust. Next, I examine whether interpersonal and brand trust can substitute, as Study 1 demonstrated. Results indicate that, as in Study 1, interpersonal and brand trust negatively interact ($b=-.58$, $p < .05$). Thus, just as before, evidence suggests that as interpersonal (brand) trust increases, the marginal effects of brand (interpersonal) trust decline.

Correlations among Socially Integrative Factors. Next I consider the relative independence of socially integrative factors. As I have argued thus far, socially integrative factors are likely to have comparable effects on the importance customers place on others in their personal lives, which I have proposed extends to increase the value customers place on people in exchange vs. brands. Study 2 was specifically designed to test the relative independence of these factors. Correlations between factors are in Table 6. Age is not correlated with interdependence ($r=.02$, NS), weakly correlated with community values ($r=.15$, $p<.05$), and not correlated with residential stability ($r=.08$, NS). Interdependence is weakly correlated with community values ($r=.36$, $p<.05$) and not correlated with residential stability ($r=-0.00$, NS), which is surprising given research suggesting that residential stability enhances community identity (Oishi et al. 2007). It is possible that this sample was not large enough to identify correlations. Thus, overall, evidence suggests socially integrative factors exhibit discriminant validity. Next, in Study 3, I adopt an experimental approach to enhance causal inference about the moderating role of community values.

TABLE 7
STUDY 2: MODERATING EFFECTS OF
INTERDEPENDENCE

	Performance outcome:			
	Willingness to pay			
			<i>95% CI</i>	
Fixed effects	β	(S.E.)	<i>Lower</i>	<i>Upper</i>
Intercept	-41.64 *	(20.44)	-81.88	-1.40
<i>Controls</i>				
Age	.06	(.11)	-.15	.26
Gender	.18	(2.20)	-4.16	4.52
Income	.00 *	(.00)	.00	.00
Residential stability	-.03	(.33)	-.68	.61
Material success	2.22 †	(1.23)	-.19	4.63
Material centrality	1.65	(1.38)	-1.07	4.37
Material happiness	-.86	(1.20)	-3.21	1.49
Community values	.69	(1.02)	-1.32	2.70
<i>Primary predictors</i>				
Interdependence	-4.99	(4.38)	-13.60	3.63
Interpersonal trust	-17.44 *	(7.86)	-32.91	-1.97
Brand trust	25.29 **	(6.67)	12.15	38.43
Interdependence x int. trust	4.92 **	(1.65)	1.67	8.17
Interdependence x brand trust	-3.93 **	(1.44)	-6.77	-1.10
Interpersonal x brand trust	-.58 *	(.24)	-1.06	-.10
Model Characteristic				
	R ²	.38**		

Notes: †p<.10, *p<.05, **p<.01; sample includes 300 consumers considering an Apple iPad.

Study 3: Moderating Effects of Community Values

The primary goals of Study 3 are to test the moderating effects of community values on brand and interpersonal trust and to test the mediating role of exchange commitment, thereby providing evidence in support of H4a, H4b, H6a, and H6. The secondary goals of Study 3 are to demonstrate the moderating effects of social integration (here: community values) on additional performance outcomes (word of mouth and loyalty). Additionally, Study 3 adopts an experimental approach to enhance causal inference. Lastly, whereas in Studies 1 and 2 customers rated the level of brand and interpersonal trust, in Study 3 I manipulate the salience of the trust source (brand vs. person). Thus, in Study 3 rather than examine differences in trust source and level, I instead examine differences solely in trust source.

Method

Procedure. One-hundred and forty-one U.S. participants (46% male, $M_{\text{age}} = 35$) who were recruited using Amazon's Mechanical Turk participated in the experiment online for compensation (\$.25). Respondents were randomly assigned to one of four conditions in an experiment with a 2 (community values: high vs. low) x 2 (trust: interpersonal vs. brand) between-subjects design. First, respondents completed the community values manipulation described below. Then, those in the interpersonal (brand) trust condition were asked to consider one of two Ford automotive advertisements with the copy "people (a brand) you can trust." Then, participants indicated willingness-to-pay using a general measure (Rucker and Galinsky 2008) that involved a 100-point sliding scale with the instructions "If 0 represents the average price of a vehicle, how much (%) more or less are you willing to pay for a vehicle from Ford? (-50% to +50%)." Then, participants rated loyalty (Palmatier et al. 2007) to Ford using three items

($\alpha=.93$) that involved rating agreement (1 = strongly disagree, 9 = strongly agree) with such statements as, “I would consider Ford before any competing manufacturer.” Then respondents rated word-of-mouth using three items ($\alpha=.96$) that involved rating agreement (1 = strongly disagree, 9 = strongly agree) with such statements as, “I would recommend Ford to someone seeking my advice.” Then respondents rated brand commitment using three items ($\alpha=.97$) that involved rating agreement (1 = strongly disagree, 9 = strongly agree) with such statements as, “I would commit myself to Ford.” Then, as a manipulation check, respondents completed Burroughs and Rindfleisch’s (2002) nine-item community values scale ($\alpha=.92$), which involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as, “I am very concerned about the welfare of my community.” Then, to rule out the possibility that emphasizing interpersonal trust somehow gave the inanimate brand human-like qualities, thus anthropomorphizing it, respondents completed a three-item ($\alpha=.92$) measure of brand anthropomorphism (Pankaj Aggarwal and Ann L. McGill 2007) that involved rating agreement (1 = strongly disagree, 11 = strongly agree) with statements such as, “It feels like the brand can do things on its own.” Then, to rule out the possibility that those with higher community values are more attentive and thus involved when people rather than brands are highlighted, consistent with a perceptual rather than motivational explanation, involvement and fluency were measured. Specifically, respondents completed a three-item measure ($\alpha=.93$) of involvement (Wang and Calder 2006) that included three bipolar items (1 = not at all involved /skimmed it quickly/paid little attention; 7 = very involved/ read it carefully/paid a lot of attention). Then participants completed a seven-item ($\alpha=.84$) measure of fluency (Kidwell et al. 2013) that involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as, “The ad was easy to relate to.” Then respondents completed an interpersonal vs. brand trust attention check by

responding to the question, “Which was emphasized in the ad you saw?” using a bipolar scale that ranged from “brand trust” to “employee trust.” Then respondents indicated involvement using a 3-item scale ($\alpha=.93$) with bipolar items with anchors that included “not involved—very involved.” Finally, respondents reported their age and gender, and were thanked.

Pretest of Community Values Manipulation. Study 3 involved a task I developed to influence community values. I conducted a pretest to confirm the effectiveness of this task. Fifty U.S. participants (47% male, $M_{\text{age}} = 35$) who were recruited using Amazon’s Mechanical Turk participated in the experiment online for compensation (\$.25). Respondents were randomly assigned to one of two (high vs. low community values) conditions. First, all respondents were presented with a list of fifteen randomly presented items they may value (local community, family and loved ones, national economic prosperity, personal safety, personal success, individual liberty, health and well-being, the environment, peace between countries, art and expression, energy security, education, social mobility, possessions, business and innovation) and asked to rank items from most important (1) to least important (15). Then, following a 5-second “recording delay,” those in the high (low) community values condition were given the feedback, “Results indicate that you ranked local community much higher (lower) than the average person taking this survey. Please explain why local community is more (not as) important to you than (as) other things such as [item ranked 15] ([item ranked 1]).” Thus false feedback was used to influence self-perceived values just as it has been used previously to influence self-perception more generally (Ross et al. 1975). Despite its merits, this design made confusion possible. For example, although local community had a mean ranking of 9 out of 15, someone ranking local community highest could receive information that he ranked it lower than average, or the reverse, which is not possible. However, this only occurred once in the low

community values condition and twice in the high community values condition, and excluding these respondents did not influence results.

Following the manipulation, respondents completed several measures to check whether the manipulation influenced community values and rule out confounds. Specifically, respondents completed Burroughs and Rindfleisch's (2002) nine-item community values scale ($\alpha=.94$), which involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as, "I am very concerned about the welfare of my community." Then participants rated materialism. Community values may suppress materialism as the two in conjunction create psychological tension (Burroughs and Rindfleisch 2002). Furthermore, materialism may influence customers' responses to brands by making brands seem more or less desirable (Thompson and Arsel 2004). Thus materialism was measured using Richins's (2004) 15-item scale, which included three 5-item sub-dimensions: success ($\alpha=.91$), centrality, and ($\alpha=.87$), and happiness ($\alpha=.84$), each of which involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as "the things I own say a lot about how well I'm doing in life." To rule out any changes in self-construal that may have resulted from individuals focusing on others in their community, self-construal was measured ($\alpha=.76$) using a 24-item scale (Singelis 1994) that involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as, "It is important for me to maintain harmony within my group." Then, because community values are self-transcendent, I ruled out effects on other self-transcendent values by measuring family values ($\alpha=.87$) using an 8-item scale (Burroughs and Rindfleisch 2002) that involved rating agreement (1 = strongly disagree, 7 = strongly agree) with items such as, "I can't imagine having a fully satisfying life without my family." Then respondents rated positive ($\alpha=.90$) and negative ($\alpha=.95$) affect using the 20-item PANAS measure (Watson et al. 1988) to ensure (dis)favoring one's community did

not influence mood. Then respondents were asked to recall their original rank (1 = highest, 15 = lowest) of local community, which I subtracted from their actual ranking to assess whether the manipulation biased recalled importance of community values. Then respondents indicated how accurate (1 = very inaccurate, 9 = very accurate) the feedback was. Then respondents indicated task involvement (1 = not involved at all, 7 = very involved), indicated gender and age, and were thanked.

Results from a multivariate ANOVA confirmed my expectations. The community values manipulation had a significant effect on the community values measure ($M_{high}=5.48$, $M_{low}=3.78$; $F(1,47) = 22.84$, $p < .01$) and a significant effect on the difference between actual and recalled value rank ($M_{high}=2.39$, $M_{low}=-.81$; $F(1,47) = 12.34$, $p < .01$), suggesting those made to believe they ranked community values higher (lower) than average inaccurately recalled their ranking of community values as higher (lower) than it actually was. There were no significant effects on materialism success ($F(1,47) < 1$), centrality ($F(1,47) < 1$), or happiness ($F(1,47) < 1$), self-construal ($F(1,47) < 1$), family values ($F(1,47) < 1$), positive affect ($F(1,47) = 1.47$, $p > .23$), negative affect ($F(1,47) = 1.23$, $p > .27$), feedback accuracy ($F(1,47) < 1$), or involvement ($F(1,47) = 1.15$, $p = .29$).

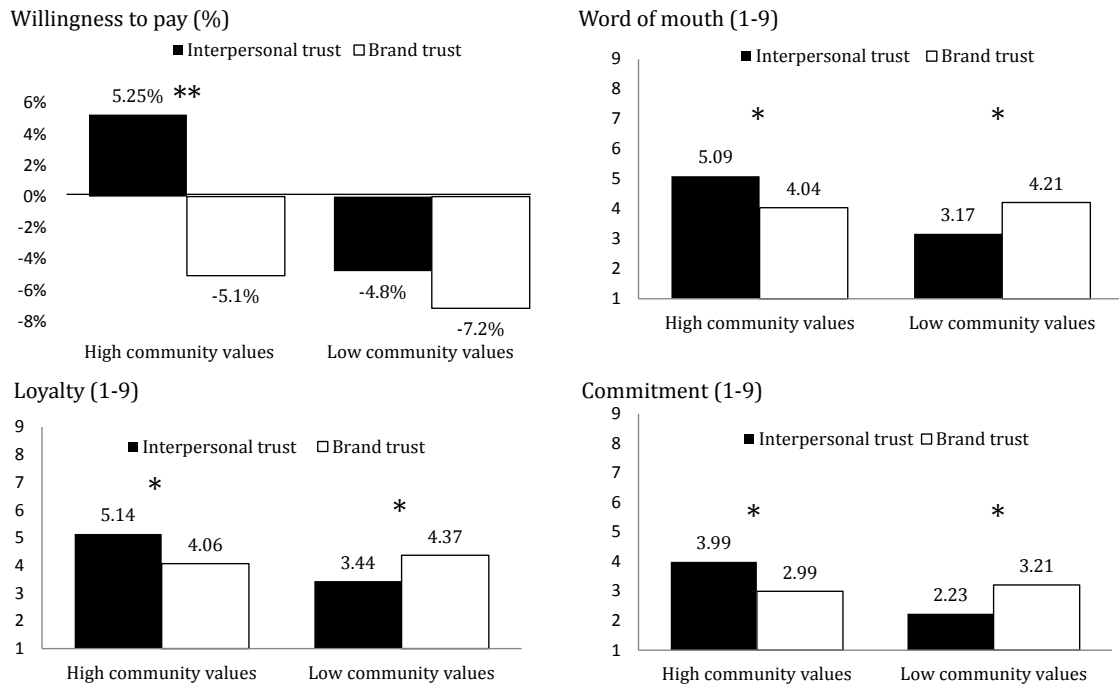
Results and Discussion

Manipulation and Attention Checks. An ANOVA revealed a significant effect of the community values manipulation on the community values measure ($M_{high}=4.96$, $M_{low}=4.14$; $F(1,137) = 20.75$, $p < .01$). There was not a significant effect of trust source on community values ($F(1,137) = 1.42$, $p > .24$) or interactive effect of trust source x community values condition ($F(1,137) < 1$). Furthermore, there was a significant effect of trust source on the source attention check, with higher values indicating greater emphasis on interpersonal vs. brand trust

($M_{interpersonal}=4.56$, $M_{brand}=2.06$; $F(1,137) = 24.55$, $p<.01$). There was not a significant effect of community values condition on source attention ($F(1,137) <1$) or interactive effect of community values condition x trust source ($F(1,137) <1$).

Effects on Brand Performance. Results are in Table 4. While I did not offer any main effect predictions, ANOVA analyses revealed a main effect of community values on willingness-to-pay ($M_{high}=.09\%$, $M_{low}=-5.97\%$; $F(1,131) = 5.45$, $p<.05$), word-of-mouth ($M_{high}=4.57$, $M_{low}=3.69$; $F(1,137) = 6.71$, $p<.05$), and loyalty ($M_{high}=4.60$, $M_{low}=3.90$; $F(1,137) = 4.84$, $p<.05$), suggesting those with higher community values are more supportive of companies in general. However, these main effects were qualified by significant interactions with trust source for willingness-to-pay ($F(1,131) = 5.99$, $p<.05$), word-of-mouth ($F(1,137) = 9.58$, $p<.01$), and loyalty ($F(1,137) = 9.94$, $p<.01$). Planned comparisons reveal that for those with high community values are willing to pay more for interpersonal than brand trust ($M_{interpersonal}=5.25\%$, $M_{brand}=-5.07\%$; $F(1,131) = 7.30$, $p<.01$), engage in more WOM based on interpersonal than brand trust ($M_{interpersonal}=5.09$, $M_{brand}=4.04$; $F(1,137) = 4.36$, $p<.05$), and report higher loyalty based on interpersonal than brand trust ($M_{interpersonal}=5.14$, $M_{brand}=4.07$; $F(1,137) = 5.14$, $p<.05$), whereas those with low community values are willing to pay directionally less for interpersonal than brand trust ($M_{interpersonal}=-7.16\%$, $M_{brand}=-4.78\%$; $F(1,131) <1$), engage in less WOM based on interpersonal than brand trust ($M_{interpersonal}=3.17$, $M_{brand}=4.21$; $F(1,137) = 5.32$, $p<.05$), and report lower loyalty based on interpersonal than brand trust ($M_{interpersonal}=3.44$, $M_{brand}=4.37$; $F(1,137) = 4.82$, $p<.05$).

Figure 4
STUDY 3: MODERATED EFFECTS OF BRAND AND INTERPERSONAL TRUST ON PERFORMANCE



Notes: First symbols (*/**) indicate significantly different within high and low community values conditions at ($p < .05/p < .01$).

Mediating Role of Commitment. Just as above, there was a main effect of community values on commitment ($M_{high} = 3.49$, $M_{low} = 2.72$; $F(1,137) = 6.58$, $p < .05$) that was qualified by an interaction with trust source ($F(1,137) = 10.78$, $p < .01$). Comparisons reveal that those with high community values express greater commitment based on interpersonal than brand trust ($M_{interpersonal} = 3.99$, $M_{brand} = 2.99$; $F(1,137) = 5.00$, $p < .05$), whereas those with low community values express less commitment based on interpersonal than brand trust ($M_{interpersonal} = 2.23$, $M_{brand} = 3.21$; $F(1,137) = 5.88$, $p < .05$).

Next, I examine the indirect effects of community values x trust source on performance outcomes by conducting a mediation analysis using the macro by Hayes (2013; model 8; 10,000 bootstrapped samples). For willingness-to-pay, the highest order interaction was significant (effect = 8.53; 95% CI: 3.28, 15.23). Furthermore, the indirect effect of trust source

(interpersonal vs. brand) on willingness to pay was significant and negative at low community values (effect = -4.34; 95% CI: -8.34,-1.32) but significant and positive at high community values (effect =4.19; 95% CI: .53, 9.20). For WOM, a similar pattern emerged. The highest order interaction was significant (effect = 1.80; 95% CI: .73, 2.89). Furthermore, the indirect effect of trust source on WOM was significant and negative at low community values (effect = -.89; 95% CI: -1.58, -.23) but significant and positive at high community values (effect =.91; 95% CI: .05, 1.76). Additionally, for loyalty, a similar pattern emerged. The highest order interaction was significant (effect = 1.64; 95% CI: .64, 2.76). Furthermore, the indirect effect of trust source on WOM was significant and negative at low community values (effect = -.81; 95% CI: -1.48, -.20) but significant and positive at high community values (effect =.83; 95% CI: .05, 1.65).

Alternative Explanations. Next, I tested several alternative explanations. First, I tested a perceptual account of my findings by examining involvement and fluency. There were no significant main or interactive effects on involvement ($F_s(1,137) < 1.06, p_s > .31$). There was a marginal main effect of community values on fluency ($M_{high}=5.16, M_{low}=4.89; F(1,137) = 2.89, p < .09$), but there was no significant interaction with trust source ($F(1,137) < 1$). There were no main effects on brand anthropomorphism ($F_s(1,137) < 1$), but there was a marginally significant community values x trust source interaction ($F(1,137) = 3.11, p < .08$). Comparisons suggested those with low community values viewed the brand as marginally more human in the brand trust condition ($M_{brand}=6.04, M_{interpersonal}=5.04; F(1,137) = 3.09, p < .09$), whereas this comparison was not significant in the high community values condition ($F(1,137) < 1$). Though these effects may lead to interesting questions for future exploration, they did not mediate any of the observed effects on brand performance (95% confidence intervals for all bootstrapped mediation tests included zero; see Table 8), and thus are not viable alternative explanations.

Overall, Study 3 demonstrates that community values exert significant moderating effects on the effectiveness of sources of trust and that exchange commitment mediates these moderated effects. These results enhance support of community values as an important socially integrative factor, as well as enhance support overall for the causal effects of social integration on customers responses to sources of marketing trust. In Study 4, I take a broader-perspective to examine the effects of residential stability on the effectiveness of messaging strategies focused on interpersonal vs. brand trust.

Table 8
STUDY 3: MODERATED MEDIATION

Performance outcomes	Indirect effect	Standard error	95% Confidence intervals	
			Lower	Upper
Willingness to pay				
High community values				
Commitment	3.08	1.69	.46	7.31
Involvement	1.06	.81	-.04	3.42
Fluency	-.25	.76	-2.11	1.06
Anthropomorphism	.48	.77	-.47	2.83
Low community values				
Commitment	-3.19	1.46	-6.88	-.99
Involvement	.14	.94	-1.93	1.92
Fluency	-.73	.78	-2.77	.44
Anthropomorphism	-.91	.78	-3.28	.05
Word of mouth				
High community values				
Commitment	.84	.40	.06	1.64
Involvement	.05	.05	-.01	.21
Fluency	-.03	.08	-.25	.09
Anthropomorphism	.02	.04	-.03	.19
Low community values				
Commitment	-.82	.32	-1.48	-.23
Involvement	-.01	.05	-.14	.07
Fluency	-.05	.08	-.25	.08
Anthropomorphism	-.03	.05	-.20	.04
Loyalty				
High community values				
Commitment	.80	.40	.04	1.60
Involvement	.04	.06	-.02	.24
Fluency	-.01	.04	-.15	.03
Anthropomorphism	.02	.05	-.03	.20
Low community values				
Commitment	-.78	.31	-1.40	-.17
Involvement	-.01	.05	-.14	.07
Fluency	-.02	.04	-.17	.03
Anthropomorphism	-.03	.06	-.22	.04

Notes: Indirect effects computed using Hayes (2013) macro; 10,000 bootstrapped samples; interpersonal trust coded as 1, brand trust coded as 0.

Study 4: Moderating Effects of Residential Stability

The primary goal of Study 4 is to test the effects of residential stability on the effectiveness of interpersonal and brand trust. To accomplish this, I examine the effectiveness of national advertisement campaigns that emphasize brands or employees within the context of the customer insurance industry. Furthermore, I test whether residential stability in customers' immediate social environments influences the efficacy of interpersonal vs. brand strategies. To assess effects on performance, I examine customer loyalty to insurance carriers.

Data

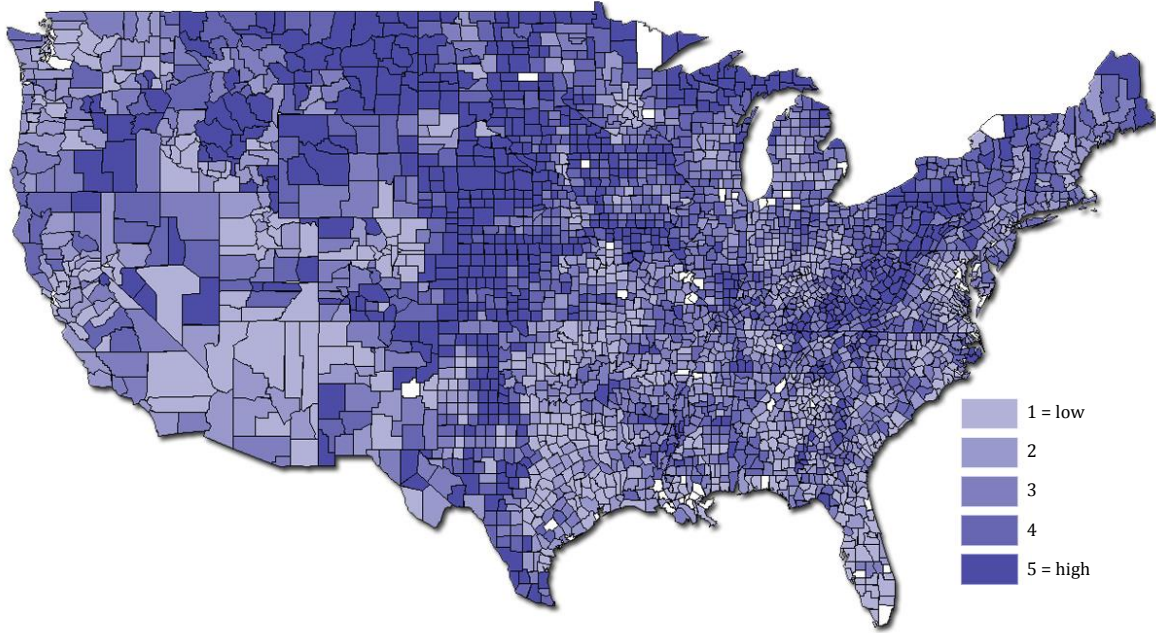
Data were compiled using four sources. I retrieved county-level residential stability variables from data furnished by the United States Internal Revenue Service (IRS) that was recorded by the Statistics of Income Division of the IRS for years 2009-2010 and processed by the Census Bureau (IRS 2010). These data include migration information for U.S. tax filers and their dependents. The Census identifies a filer and his or her dependents as migrants if the county code associated with the address reported in a taxpayer's filing in 2009 differs from the county code in 2010. If the county codes are identical, the filer and dependents are marked as non-migrants. The IRS then publicly reports county-to-county migration and county-specific non-migration for all counties with at least ten tax returns filed. Although these data compose the largest U.S. migration database available, they are limited. As the IRS (2010) describes, these data do not include migration for those who do not file, so they may underrepresent the poor and elderly. Also, they do not include anyone who files after late September, which may include very wealthy individuals with complicated tax returns. Despite limitations, these data are the largest sample of U.S. migration available publicly and thus should adequately reflect objective residential stability across the U.S. at a county level. County-level controls were extracted from

the decennial U.S. Census (2010b).

I retrieved customer brand measures from data collected by Harris Interactive's EquiTrend (2010) survey, an annual poll of nationally representative US customers age 15 and older. For 2010, Harris Interactive provided responses from 19,707 customers (53% male, mean age of 47.24 years) across over 1,000 brands. For the purposes of this study, I examined the subset of the dataset that included all available customer insurance providers, which totaled twelve. Customer insurance was selected as the industry because trust is especially important in financial services markets (Grayson et al. 2008; Guseva and Rona-Tas 2001), and thus insurance companies are expected to all emphasize trustworthiness. Furthermore, all brands are national brands. Lastly, because insurance agents and underwriters are integral to the insurance purchasing process, all companies have the opportunity to emphasize either interpersonal or brand trust.

I matched the information provided in the Harris Interactive dataset to the IRS migration and Census data by linking customer zip codes from the Harris Interactive data to county codes from the IRS data using zip-to-county linkages made available by the Missouri Census Data Center (Blodgett 2012). This provides a final dataset of brand attachment and loyalty with corresponding measurements of population migration patterns for each customer's county of residence. The final fully matched sample included 5,950 customers across 1,217 U.S. counties. Migration patterns are visible in Figure 5.

Figure 5
STUDY 4: RESIDENTIAL STABILITY ACROSS THE CONTIGUOUS UNITED STATES



Notes: Data are quintiled population stability scores computed as number of non-migrants divided by sum of inward and outward migrants for each county based on IRS (2010) data. Darker shades indicate greater stability. White indicates data are missing.

Key Dependent Variables. Performance outcomes included loyalty and word of mouth.

Loyalty, which was operationalized as purchase intention, was measured by Harris Interactive using the following item: “If price were not a consideration, how likely are you to purchase products or services of [this insurer] in the future?” (1 = never, 4 = absolutely). Word of mouth, which was operationalized as positive word of mouth minus negative word of mouth, was measured using two items: “How often do you tell others, through any means of communication, how good [this insurer is]?” (1 = never, 5 = very often); and “How often do you tell others, through any means of communication, how bad [this insurer is]?” (1 = never, 5 = very often). This measure of word of mouth conforms to previous “net” word of mouth measures (Reichheld 2003).

Primary Explanatory Variables. Primary explanatory variables included trust positioning

(interpersonal vs. brand) and residential stability. Trust positioning was determined based on independent coding of insurers' advertisements. Specifically, a research assistant blind to the study design collected five print and multimedia advertisements for each insurer for 2010, and then two additional research assistants independently reviewed all advertisements and provided an overall rating based on whether advertisements predominantly emphasized employees or brands (92% agreement, differences discussed). To accomplish this, coders were given instructions to indicate whether ads "primarily emphasized the insurance company's employees and/or agents and secondarily emphasized or did not emphasize the company's brand name and/or logo" (1), or "primarily emphasized the insurance company's brand name and/or logo and secondarily emphasized or did not emphasize the company's employees and/or agents" (0). By chance, six companies were coded as emphasizing interpersonal trust (Allstate, New York Life, State Farm, Humana Health, AIG, and Nationwide), and six were coded as brand trust (Travelers, Blue Cross/Blue Shield, Geico, Metlife, and Consec).

Residential stability was calculated as the ratio of nonmigrants (i.e., tax filers and their dependents who reported the same residential county code year-over-year) to inward and outward migrants (i.e., tax filers reporting different residential county codes year-over-year) for each county. This variable can be interpreted as the ratio of stayers to movers, where movers reflect those who both enter and depart a county year-over-year. For robustness, I also included a residential stability measure from the U.S. Census. The Census estimates residential stability for each county based on responses to the American Community Survey of 1,017,799 representative households across the U.S. (Census 2010b). Previous research has used this measure to reflect residential stability (Oishi et al. 2012).

Control Variables. Results did not depend on inclusion of controls with the exception of

product usage, which is expected since state-dependence or habit is a significant driver of future purchase (Henderson et al. 2011; Roy et al. 1996), but I included several controls at the individual, company, and county levels for robustness. Individual controls included age and product usage, which Harris Interactive measured as year of birth and via response to the question, “How often do you use [this insurer]?” (1 = never, 5 = very often). For each company, familiarity was measured via response to the question, “Please rate your familiarity with each of the following brands” (1 = never heard of, 5 = extremely familiar). Because respondents rated a random assortment of companies, it was possible they rated more than one insurer, which could have inadvertently resulted in comparisons between insurers. Although the modal number of companies rated was one, and the max number rated was five, I included number of companies rated as an additional control to account for any effects that may arise due to comparisons among companies. Individuals in large, dense, or retail-saturated locations may vary in their response to branding, and since wealth may influence brand promotion strategies, at the county level, I included population size, population density, per capita income, and per capital retail sales. Table 9 lists descriptive statistics.

Table 9
Summary Statistics from Study 4

Construct	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Total population (000's)	695.54	1,223.48												
2. Population density (000's)	1.89	.01	.15											
3. Per capita income (000's)	26.41	7.02	.07	.29										
4. Per capita retail (000's)	13.03	3.97	.05	.03	.52									
5. Number of households (000's)	336.89	561.53	.99	.20	.09	.06								
6. Age	46.18	16.54	-.07	-.06	-.03	.01	-.07							
7. Familiarity	2.72	1.18	-.00	.02	.01	.02	.00	.14						
8. Current usage	1.94	1.39	-.02	.01	.00	.00	.00	-.03	.44					
9. Number of companies rated	1.58	.75	-.02	-.01	.00	.01	-.02	.02	.01	.00				
10. Population stability	14.21	6.30	.01	-.17	-.22	-.15	.00	.03	-.02	.03	.01			
11. Word of mouth	.15	1.40	.02	.00	.00	.00	.01	-.05	.21	.47	.00	.02		
12. Loyalty	4.29	1.73	-.00	.02	.00	.00	.00	.00	.34	.55	.02	.00	.54	
13. Trust source	1.50	.50	-.02	-.01	.00	.00	-.02	.00	.00	-.08	.01	.00	-.06	.01

Note: Off-diagonal indicates Pearson correlation coefficients. Bolded coefficients are significant at $p < .05$.

Model Development

I model the effect of trust positioning on loyalty and word of mouth at the individual level and examine the moderating effect of residential stability in individual i 's immediate social environment by examining the effect of stable residents in i 's county. Because individuals are nested within county, we used a hierarchical model that includes a random effect for county to capture extraneous variation between counties (Gelman 2007). Each observation, y_{ij} , represents the average amount of loyalty or word of mouth expressed by respondent i in county j . In matrix notation, our model takes the form,

$$\mathbf{y}_i = \mathbf{X}_i\boldsymbol{\beta} + \mathbf{Z}_i\mathbf{b}_i + \boldsymbol{\varepsilon}_i$$

$$\mathbf{b}_i \sim N_q(\mathbf{0}, \boldsymbol{\Psi})$$

$$\boldsymbol{\varepsilon}_i \sim N_{n_i}(\mathbf{0}, \sigma^2\boldsymbol{\Lambda}_i)$$

where \mathbf{y}_i is the $n_i \times 1$ vector of observations for the i -th respondent, \mathbf{X}_i is the $n_i \times p$ matrix for the fixed effects for observations of respondent i , $\boldsymbol{\beta}$ is the $p \times 1$ vector of fixed-effect

coefficients, i.e. *trust positioning, residential stability, familiarity, usage, age, population size, population density, per capital retail, per capita income, and number of brands rated*, \mathbf{Z}_i is the $n_i \times q$ matrix for the random effects for observations in group i , \mathbf{b}_i is the $q \times 1$ vector of random-effect coefficients for group i , i.e. *county*, $\boldsymbol{\varepsilon}_i$ is the $n_i \times 1$ vector of errors for observations in group i , $\boldsymbol{\Psi}$ is the $q \times q$ covariance matrix for the random effects, and $\sigma^2 \boldsymbol{\Lambda}_i$ is the $n_i \times n_i$ covariance matrix for the errors in group i . I estimate the model using restricted maximum likelihood.

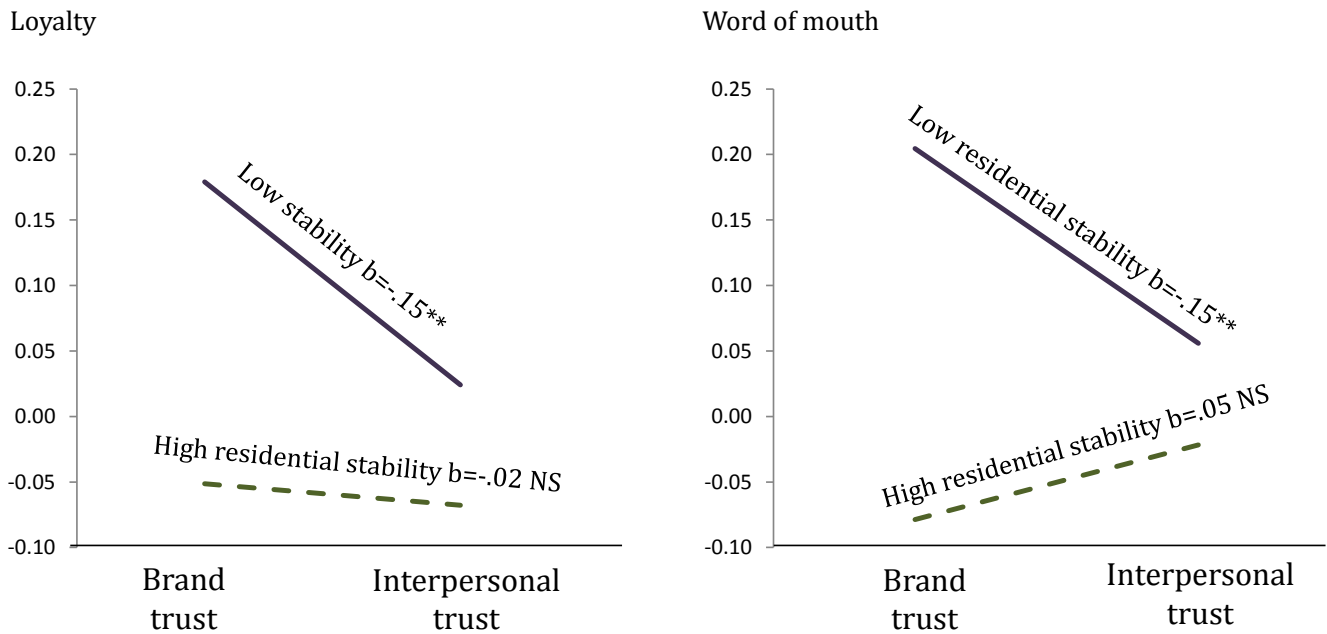
Results and Discussion

Main Effects. Estimation results are in Table 10. Overall, there were no significant effects of county-level controls on loyalty or word-of-mouth, suggesting many county characteristics have no direct effect on these outcomes. For customer-level controls, results show a significant negative effect of age on loyalty ($b = -.06, p < .01$) and word-of-mouth ($b = -.03, p < .05$), which is surprising. Familiarity had a significant positive effect on loyalty ($b = .07, p < .01$) but not word-of-mouth ($b = .01, NS$). Current usage had a positive effect on loyalty ($b = .58, p < .01$) and word-of-mouth ($b = .46, p < .01$), which is expected given the persistent effects of state dependence (Henderson et al. 2011). There was no effect for number of companies rated on loyalty ($b = .00, NS$) or word of mouth ($b = .00, NS$). There was a significant negative effect of population stability on loyalty ($b = -.06, p < .01$) and word-of-mouth ($b = -.07, p < .05$), which may reflect the reduced tendency of individuals in more stable to form commercial relationships more generally. There was also a negative main effect of trust source on loyalty ($b = -.07, p < .01$) and word-of-mouth ($b = -.05, p < .01$). This main effect was qualified, however, by residential stability.

Moderating Effects of Residential Stability. Figure 6 illustrates results. Consistent with H5a and H5b, the effects of trust source (employee vs. brand) on loyalty and word of mouth were

moderated by residential stability. Specifically, residential stability enhanced the effect of interpersonal trust relative to the effects of brand trust on loyalty ($b=.04, p<.05$) and word-of-mouth ($b=.05, p<.05$), suggesting that as residential stability increases, the interpersonal trust becomes more effective. To understand these effects further, I conducted a spotlight analysis (Spiller et al. 2013) at low and high residential stability. Specifically, I examined the differential effects of brand and interpersonal trust at low and high residential stability. In areas with low residential stability, there was a negative effect of focusing on interpersonal rather than brand trust ($b=-.15, p<.01$), whereas there was no significant difference in areas with high residential stability ($b=-.02, NS$). Similarly, in areas with low residential stability, there was a significant negative effect of focusing on interpersonal than brand trust ($b=-.15, p<.01$), whereas there was no significant difference when residential stability was high ($b=.05, NS$). Thus, evidence supports H5b but not H5a. Brand trust is significantly more effective in areas with lower residential stability, whereas interpersonal trust is equally effective in areas with high and low residential stability.

Figure 6
 STUDY 4: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON PERFORMANCE WHEN
 RESIDENTIAL STABILITY IS HIGH VS. LOW



Notes: ** $p < .01$; all variables z-scored; low is 2 standard deviations below mean residential stability; high is 2 standard deviations above mean.

TABLE 10
STUDY 4: MODERATING EFFECTS OF RESIDENTIAL STABILITY

	Model 1: Loyalty				Model 2: Word of mouth			
	β	(S.E.)	95% HPDI		β	(S.E.)	95% HPDI	
			Lower	Upper			Lower	Upper
Fixed effects								
Intercept	.05	(.04)	-.02	.12	.06	(.04)	-.01	.15
<i>County-level controls</i>								
Total population	.38 †	(.21)	.03	.68	.30	(.25)	-.06	.68
Population density	.03 †	(.02)	.00	.05	.01	(.02)	-.02	.04
Per capita income	.01	(.01)	-.01	.04	-.02	(.02)	-.04	.02
Per capita retail	-.02	(.01)	-.05	.00	.00	(.02)	-.03	.02
Number of households	-.37 †	(.21)	-.66	-.01	-.27	(.25)	-.65	.09
<i>Consumer-level controls</i>								
Age	-.06 **	(.01)	-.08	-.04	-.03 *	(.01)	-.06	-.01
Familiarity	.07 **	(.02)	.04	.11	.01	(.02)	-.03	.05
Current usage	.58 **	(.01)	.55	.60	.46 **	(.01)	.43	.48
Number of companies rated	.00	(.01)	-.02	.02	.00	(.01)	-.02	.03
<i>Primary predictors</i>								
Population stability	-.06 *	(.03)	-.13	-.01	-.07 *	(.04)	-.14	-.01
Trust source (interpersonal=1; brand=0)	-.07 **	(.02)	-.11	-.03	-.05 *	(.02)	-.09	.00
Stability x trust	.04 *	(.02)	.01	.09	.05 *	(.02)	.01	.10
Random effects								
County	.02	(.11)			.02	(.11)		
Model Characteristics								
-2 Log Likelihood	7,105				7,750			
AIC	14,240				15,529			
BIC	14,340				15,630			
REML deviance	14,210				15,499			

Notes: Sample includes 5,950 consumers across 1,217 counties; all continuous variables were converted to z-scores prior to estimation; † $p < .10$; * $p < .05$; ** $p < .01$, two-tailed; HPDI refers to highest probability density intervals; stability x trust interaction remains significant with only current usage as control on loyalty ($\beta = .04$, $p < .05$) and word-of-mouth ($\beta = .05$, $p < .05$).

General Discussion

Practitioners believe that “creating or expanding business relationships is not about selling – it’s about establishing trust” (Myatt 2012, p. 1), yet practitioners have little guidance about where they should establish that trust. Prior research suggests trust can be established on either a firm’s brands or its representatives (Doney and Cannon 1997; Grayson et al. 2008; Yim et al. 2008), and the present research extends these previous findings by explicating the substitutive effects of interpersonal and brand trust and by demonstrating conditions that leverage the effectiveness of interpersonal and brand trust on performance. Thus, establishing and promoting interpersonal or brand trust at its surface is arbitrary, since each can substitute for the other, however, at least four socially integrative factors inform this decision—interpersonal trust is more effective for older customers, more interdependent customers, customers who value their community more, and customers who reside in more residentially stable locations. Below I discuss the implications of these findings for research and practice.

Implications for Research

Substitution of Interpersonal and Brand Trust. The current model for understanding the simultaneous effects of interpersonal and brand trust suggests that interpersonal trust enhances brand trust and brand trust ultimately drives commitment and performance outcomes (Doney and Cannon 1997; Yim et al. 2008). This research departs from prior work by consider the exchange as the fundamental unit of analysis and examining interpersonal and brand trust as simultaneous inputs of exchange. By adopting this approach, I uncover a novel effect. In Studies 1 and 2 I find that interpersonal trust can substitute for brand trust, and vice versa. I demonstrate that increases in brand trust do not have a significant effect on performance when interpersonal trust reaches approximately 66%, suggesting that when interpersonal trust is slightly above neutral, brand trust

no longer has a positive effect on performance. Alternatively, increases in interpersonal trust do not have a significant effect on performance when brand trust is approximately 78%, suggesting that brand trust must reach a higher threshold before interpersonal trust is no longer effective. Thus, whereas current models ignore this important relationship between interpersonal and brand trust, I demonstrate this view (interpersonal and brand trust as joint inputs) sheds important insight on the functional form of different sources of trust. Previous work has found that in some situations trust from one source augments trust in another source. For example, trust in an industry can augment trust in a firm (Grayson et al. 2008). At the unit of exchange, however, trust from multiple sources takes an opposite form. Rather than enhance the effects of brand trust, interpersonal trust obviates them. This finding has additional critical importance for practice, which I discuss below.

Moderating Effects of Social Integration. Furthermore, my research offers a system of effects that hold across a common set of moderators—socially integrative factors. By exploring the effects of social integration on customer relationships, I integrate market theories from economics and social psychological theories of interpersonal processes to understand the effects of demographic shifts that are fundamentally changing the customer base within the U.S. Social integration reflects the importance individuals place on others in their social environment (Baller and Richardson 2002), and economic theories suggest social integration occurs in customers' personal lives but influences how customers interface with the market (Hirschman 1982). I present four factors that influence social integration: age, interdependence, community values, and residential stability. Each factor occurs at varying levels of customer's social experience that range from individual (age) to community (community values and residential stability). As customers grow older, they are more prone to rely on others, even if they do not

particularly favor others. As customers become more interdependent, they see the self as a part of rather than separate from close others and in-groups. As community values increase, customers become more concerned with the welfare of others around them. As residential stability increases, customers become less threatened by their neighbors and believe they have a greater ability to achieve community-beneficial results. Thus, each of these factors increase the extent to which customers value others in their everyday lives—their extent of social integration—which in turn influences the value they place on interpersonal trust in the marketplace relative to brand trust. As current demographic shifts are enhancing the importance of social integration in the U.S—customers are becoming older, more interdependent, more invested in their communities, and more residentially stable (Census 2010b; Hofstede et al. 2010; Oishi et al. 2007)—the effects of social integration are increasingly critical to managers developing marketing strategies.

Furthermore, this research offers commitment as a mechanism underlying the moderating effects of social integration on the effectiveness of interpersonal and brand trust. Specifically, in Study 3 I find that exchange commitment mediates the moderating effects of community values on the effects of interpersonal and brand trust on firm performance. In other words, customers with higher community values were more motivated to commit to exchange when interpersonal trust was emphasized, whereas customers with lower community values were more motivated to commit to exchange when brand trust was emphasized. Commitment then resulted in higher performance (willingness to pay, word of mouth, and loyalty). This is consistent with my theorizing that social integration creates a “person premium” that then enhances the likelihood customers will value the exchange relationship (i.e., be committed).

Age, Self-Construal, and Community Values. In addition to the theoretical contributions

to interpersonal and brand trust and customer relationships, findings enrich the literature on age, self-construal, and community values. Specifically, researchers have previously identified that age reduces the capacity for certain types of cognitive processing (Yoon 1997), and findings presented here demonstrate that an outcome of reductions in cognitive processing may be greater social integration, such that older consumers place a higher premium on the people in their immediate environment. Furthermore, this research improves the delineation between interdependent self-construal, which is self-focused, and community values, which are other focused. Ostensibly, though these constructs both reflect a high level of social integration, as my findings suggest, they are socially integrative for different reasons. Customers can have high community values and low interdependence, or the reverse. Thus findings offer evidence delineating self-construal from community values.

Implications for Practice

Trust Trade-Offs. Findings from this research provide several important insights for managers. While brand trust is a regularly evaluated brand metric (Harris-Poll 2010), interpersonal trust is not. If managers assume brand trust reflects interpersonal trust (in Study 1 brand and interpersonal trust across categories were only weakly correlated at $r=.18, p<.01$), they may be over or underinvesting in initiatives, such as communication or 3rd party reviews, to enhance brand trust. In other words, if brand trust is relatively low, but interpersonal trust is relatively high, measuring only brand trust but not interpersonal trust may falsely encourage attempts to increase brand trust. Thus the substitutability of interpersonal and brand trust suggests managers should evaluate both when seeking to enhance trust to build customer relationships.

Leveraging Trustworthy People and Brands. Furthermore, findings provide insight into

when managers can benefit most from interpersonal and brand trust. For example, in Study 1, from a longitudinal sample of 615 actual customers, I observed a significant and positive moderating effect of age on the effect of interpersonal trust on performance, such that for older customers (those who are one standard deviation above the mean or 46 years old), increases in interpersonal trust have a positive and significant effect on performance ($b=1.42, p<.01$), whereas for younger customers (those who are one standard deviation below the mean or 25 years old), increases in interpersonal trust have no effect on performance ($b=.25, NS$). Furthermore, for older customers, increases in brand trust had no effect on performance ($b=.11, NS$), but for younger customers, increases in brand trust had a significant positive effect on performance ($b=1.49, p<.01$). Managers seeking to increase customer commitment among older customers may benefit from interpersonal rather than brand trust strategies.

Furthermore, Study 2 indicates that higher levels of interdependence, which is uncorrelated with age, enhance the effect of interpersonal trust on performance and suppress the effects of brand trust. Specifically, the effects of interpersonal trust on performance are positive and significant ($b=5.76, p<.01$) for those with high interdependence, whereas the effects of interpersonal trust are negative and significant for those with low interdependence ($b=-2.21, p<.05$), suggesting that those with low interdependence are willing to pay significantly less as interpersonal trust increases. Alternatively, the effects of brand trust on willingness to pay are positive and significant for those with low interdependence ($b=6.79, p<.01$), whereas the effects of brand trust on performance are not significant for those with high interdependence ($b=.31, NS$). Thus managers seeking to build customer relationships with culturally interdependent diasporas (Economist 2011) may find interpersonal trust is more effective than brand trust for enhancing performance among these groups.

Additionally, findings suggest that managers can benefit from brand trust more when community values and residential stability are low, but benefit from interpersonal trust when community values are high. In Study 3, respondents with higher community values were more loyal, willing to pay, and willing to engage in positive word of mouth when interpersonal trust was highlighted, whereas respondents who believed they had lower community values were more loyal, willing to pay, and willing to engage in positive word of mouth when brand trust was highlighted. Furthermore, in Study 4, in areas with low residential stability, there was a negative effect of focusing on interpersonal rather than brand trust ($b=-.15, p<.01$), whereas there was no significant difference in areas with high residential stability ($b=-.02, NS$). Similarly, in areas with low residential stability, there was a significant negative effect of focusing on interpersonal than brand trust ($b=-.15, p<.01$), whereas there was no significant difference when residential stability was high ($b=.05, NS$). Thus, although trust source can be substituted, interpersonal vs. brand trust can have drastically different effects depending on the level of customer social integration.

Limitations and Future Research

Despite incorporating multiple methods, multiple samples, and multiple categories, this research contains several limitations. For example, the performance outcomes measured were all hypothetical, and actual performance outcomes may differ. Furthermore, the effects observed for each socially integrative factor controlled for the effects of alternate factors, where possible, but the effects of age and residential stability did not include such controls due to data collection limitations. As such, these effects may have been partially due to the effects of factors that were not measured. However, the weak or absent correlations among factors reduces this concern.

This research focused on isolating the effects of separate socially integrative factors, but future research may consider the joint effects of these factors. While I do not expect the effects

of one factor to diminish in the presence of another—indeed, controlling for alternate factors did not attenuate effects observed—it is possible socially integrative factors may have synergistic effects. Future research may consider this possibility and its implications for customer relationship strategy.

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TABLE 1
REPRESENTATIVE RESEARCH ON INTERPERSONAL TRUST

<i>Authors</i>	<i>Year</i>	<i>Primary Constructs Examined</i>	<i>Target</i>	<i>Context</i>	<i>Method</i>	<i>Key Findings</i>
Kollock	1994	<i>Trust, commitment, uncertainty, reputation</i>	Individual	Fictitious exchange	Experiment	For most trusted partners, <i>trust</i> and <i>commitment</i> were both higher in situations of high quality uncertainty. For least trusted partners, buyers were considered least <i>trustworthy</i> when quality was uncertain, whereas sellers were considered most <i>trustworthy</i> when quality was uncertain. Thus sellers, even least trusted sellers, are <i>trusted</i> more when uncertainty is high.
Morgan and Hunt	1994	Trust, commitment, communication, benefits, <i>cooperation, uncertainty</i>	Selling company	B2B: Tire retailers	Survey	Trust and commitment serve as to mediate effect of relational antecedents on performance outcomes (e.g., <i>cooperation</i>). Trust has a direct effect on outcomes and an indirect effect through commitment.
Doney and Cannon	1997	Supplier trust, salesperson trust, <i>choice, future anticipated interaction</i>	Individual and selling company	B2B: Industrial manufacturers	Survey	Trust of an individual was significantly associated with trust of a selling company, and vice versa. After controlling for experience, trust had no remaining effect on <i>anticipated future interaction</i> , though selected sellers were trusted much more than unselected sellers.
Garbarino and Johnson	1999	Trust, commitment, satisfaction, <i>future intentions</i>	Selling company	B2C: Theater company	Survey	For occasional customers, satisfaction is a mediator of effect of attitudes on future intentions, whereas for consistent customers, trust and commitment mediate.
De Wulf, Odekerken-Schroder, and Iacobucci	2001	Trust, commitment, relationship investments, <i>loyalty</i>	Selling company	B2C: Food, apparel, retail	Survey	Perceptions of relationship investments increase relationship quality (trust, commitment, and satisfaction), which enhances <i>behavioral loyalty</i> . Interpersonal communication has the strongest association with perceived relationship investment.
Sirdeshmukh, Singh, and Sabol	2002	Competence, benevolence, trust, value, <i>loyalty</i>	Individuals and selling company	B2C: Retail apparel and airlines	Survey	In a retail context, value mediates effect of trust on <i>loyalty</i> , whereas in an airline context, value partially mediated the effect of trust in management policies and practices on <i>loyalty</i> .
Narayandas and Rangan	2004	Trust, commitment, <i>performance, power asymmetry</i>	Selling company	B2B: Across several industries	Qualitative field study	Trust (distrust) at the dyadic level spreads to (lack of) commitment between firms, which works over time to balance (deteriorate) initial contract terms and subsequent performance and improve (worsen) initial <i>power asymmetries</i> and <i>performance</i> .
Palmatier, Dant, Grewal, and Evans	2006	Trust, expertise, <i>cooperation, expectations of continuity</i>	Individual or organization	111 academic studies	Meta-analysis	Expertise and communication are most effective at building customer trust. Objective financial performance is driven most by relationship quality (composite measure of relationship strength). Trust has largest effect on expectations of continuity and cooperation.
Fang, Palmatier, Scheer, and Li	2008	Agency, intraentity trust, and interorganizational trust, <i>coordination, responsiveness</i>	Individual and selling company	B2B: International joint ventures	Survey	Collaborating firms interorganizational trust enhances coentity investment. Interorganizational trust enhances the positive effect of intraentity trust on <i>coordination</i> and its negative effect on <i>responsiveness</i> .
Grayson, Johnson, and Chen	2008	System, generalized, and narrow-scope trust, satisfaction, <i>performance</i>	Selling company	B2C: Financial services	Survey	Effect of overall trust of an industry (system trust) on satisfaction and performance is mediated by trust in individual sellers (narrow-scope trust), suggesting that system helps build trust at a local-level, which ultimately drives performance outcomes.

Note: outcome variables emphasized in *italics*.

TABLE 2
REPRESENTATIVE RESEARCH ON BRAND TRUST

<i>Authors</i>	<i>Year</i>	<i>Primary Constructs Examined</i>	<i>Target</i>	<i>Context</i>	<i>Method</i>	<i>Key Findings</i>
Maheswaran, Mackie, and Chaiken	1992	Brand valence (trust), involvement, <i>product evaluations</i>	Company brand	B2C: Tele-communications	Experiment	Under conditions of low importance, brand trust results in positive brand attitudes that led to favorable product evaluations. Under high importance, brand trust only influenced product evaluations when brand attributes were relevant.
Leuthesser, Kohli, and Harich	1995	Brand attributes, global brand assessment, halo effect	Product brand	B2C: Home cleansers	Survey	Overall brand impression biases ratings of independent brand characteristics, making the assessment of such characteristics difficult. This halo effect bias may be indicative of individual-level brand equity.
Chaudhury and Holbrook	2001	Brand trust, brand affect, <i>brand loyalty, market share, willingness to pay</i>	Product brand	B2C: multiple categories	Survey	Brand trust and brand affect influence behavioral and attitudinal loyalty. Behavioral loyalty results in increased market share, whereas attitudinal loyalty enhances willingness to pay.
Dillon, Madden, Kirmani, and Mukherjee	2001	Brand-specific associations, general brand impressions, brand equity	Product brand	B2C: multiple categories	Survey	Brand associations can be decoupled into ratings of global brand characteristics and specific attribute performance. Global ratings account for more variance in responses from low experience customers. Product extensions and brand equity depend on customer's abilities to make attribute-level assessments.
Erdem, Swait, and Valenzuela	2006	Price, credibility, quality, information costs, risk, <i>purchase intentions</i>	Product brand	B2C: Electronics, food	Survey	Brands serve to signal quality, reduce risk, increase price expectations, and reduce information search costs, all of which, except price, increase <i>purchase intentions</i> . These relationships are enhanced when customers are uncertainty avoidant.
Roehm and Brady	2007	Brand equity, service failure, evaluation delay, distraction	Company brand	B2C: Food service	Experiment	Service failures differentially impact subsequent evaluations of firms with high (vs. low) brand equity (familiarity). Severe failures result in reduced delayed (vs. immediate) ratings for high equity (vs. low equity) brands. Distraction works to reduce negative evaluations.
Fischer, Völckner, and Sattler	2010	Brand relevance in category (BRiC), risk reduction, symbolism	Company and product brands	B2C: multiple categories	Survey	Risk reduction and social signaling are positively associated with the relevance of a brand within its category. Overall brand equity and ad spend are positively correlated with relevance within category.
Park, MacInnis, Priester, Eisingerich, and Iacobucci	2010	Brand attachment, attitude strength, <i>purchase, share of wallet</i>	Company and product brands	B2C: Retail	Experiment; survey	Individual brand attachment (self connection and prominence) motivates purchases, even when purchases are difficult, and increases purchase share. This is separate from the positive effects of brand attitude.
Yannopoulou, Koronis, and Elliott	2011	Brand crisis, media amplification, <i>brand trust</i>	Product brand	B2C: Packaged food	Qualitative	Negative effects of product recall on brand trust were amplified by media dissemination of recall information; negative effects were more severe for those who did not use rather than those who used the affected product.
Herbst, Finkel, Allan, and Fitzsimons	2012	Trust, disclaimer speed, <i>purchase intention</i>	Product brand	B2C: Electronics	Experiment	Trust reduces the negative impact of message cues (disclaimer speed) such that for untrusted and unknown brands, speedy disclaimers reduce purchase intentions, whereas for trusted brands, speedy disclaimer have no adverse effect on purchase intention.

Note: outcome variables emphasized in *italics*.

TABLE 3
CONSTRUCTS, DEFINITIONS, AND REFERENCES

<i>Construct</i>	<i>Study</i>	<i>Definition</i>	<i>Sample measure</i>	<i>Reference</i>
Interpersonal trust	1, 2, 3, 4	An assessment of reliability and integrity in a firm's employee, agent, or other representative.	"This person is very trustworthy."	Fang et al. 2008; Yim et al. 2008
Brand trust	1, 2, 3, 4	An assessment of reliability and integrity in a firm's brand or brands.	"This brand is very trustworthy."	Chaudhuri and Holbrook 2001; Yim et al. 2008
Commitment	3	Desire to maintain a valued relationship.	"I am committed to this seller."	Palmatier et al. 2006
Age	1	The biological maturation of consumers.	Age in years.	Cazja et al. 2001; Schau et al. 2009
Interdependence	2	Construal of the self as a part of rather than separate from close others and in-groups.	"It is important for me to maintain harmony within my group."	Markus and Kitayama 1991; Singelis 1994; Vandello and Cohen 1999
Community values	3	Importance "placed on developing and maintaining relational ties with one's local geographic community."	"I am very concerned about the welfare of my community."	Burroughs and Rindfleisch 2002, p. 357
Residential stability	4	Perceived stability of residents in a local geographic area.	Proportion of residents who do not move year-over-year.	Oishi et al. 2007; Sampson 1988; Sampson et al. 2002
Willingness to pay	1, 2, 3	Maximum amount of money a customer will exchange for value provided.	"How much (%) more or less are you willing to pay for a product from this firm?"	Palmatier et al. 2006; Rucker and Galinsky 2008
Word of mouth	3, 4	Likelihood of consumers to recommend and speak favorably about a seller.	"I am likely to recommend this firm."	Berger and Schwartz 2011
Loyalty	3, 4	the "favorable correspondence between attitudes and behaviors" stemming from an underlying motivation to maintain a relationship with one entity over another.	"I would consider this firm before any competing firm."	Dick and Basu 1994, p. 102

Table 4
Summary Statistics from Study 1

Construct	M	SD	AVE	1	2	3	4	5	6	7	8	9	10
1. Generalized trust	5.58	1.86	—	—									
2. Product visibility	6.29	2.56	.93	.02	.90								
3. Product complexity	5.82	2.07	.86	.05	.27	.80							
4. Service level	4.11	3.48	—	.07	-.52	-.02	—						
5. Relationship duration	6.44	2.71	—	.07	.25	.03	-.30	—					
6. Brand configuration	1.46	.50	—	-.01	-.08	.02	.00	-.20	—				
7. Interpersonal trust	5.78	2.07	.92	.17	-.24	-.01	.33	-.10	.05	.95			
8. Brand trust	6.85	1.65	.87	.09	.24	.02	-.19	.34	-.20	.18	.95		
9. Consumer age	35.74	10.60	—	.01	-.06	.04	.04	.13	.01	.04	.03	—	
10. Willingness to pay	4.16	11.63	—	.05	-.07	.00	.09	.07	-.04	.18	.16	.05	—

Note: Chronbach's alpha presented in diagonal; off-diagonal indicates Pearson correlation coefficients. Boded coefficients are significant at $p < .05$.

TABLE 5
STUDY 1: MODERATING EFFECTS OF AGE

	Performance outcome: Willingness to pay			
	β	(S.E.)	<i>95% HPDI</i>	
			<i>Lower</i>	<i>Upper</i>
Fixed effects				
Intercept	4.33 **	(.54)	2.95	5.77
<i>Controls</i>				
Generalized trust	.27	(.30)	-.29	.88
Visibility	-.29	(.26)	-.81	.24
Complexity	.02	(.27)	-.53	.54
Service level	.16	(.19)	-.24	.54
Duration	.26	(.22)	-.17	.71
Brand configuration	-.28	(1.10)	-2.54	1.84
<i>Primary predictors</i>				
Interpersonal trust	.83 **	(.30)	.23	1.43
Brand trust	.82 *	(.36)	.09	1.54
Age	.04	(.05)	-.06	.13
Age x interpersonal trust	.05 *	(.02)	.00	.10
Age x brand trust	-.06 *	(.03)	-.12	-.01
Interpersonal x brand trust	-.31 *	(.16)	-.63	-.01
Random effects				
Offering category	.39	(.00)		
Model Characteristics				
-2 Log Likelihood	1,755			
AIC	3,541			
BIC	3,602			
REML deviance	3,511			

Notes: * $p \leq .05$; ** $p < .01$; sample includes 455 consumers across 8 categories; willingness to pay measured one-week after all predictors.

Table 6
Summary Statistics from Study 2

Construct	M	SD	AVE	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	32.92	10.87	—	—											
2. Gender	1.44	.50	—	.13	—										
3. Income	4.96	2.87	—	.15	.05	—									
4. Residential stability	2.72	3.22	—	.08	.14	-.06	—								
5. Material success	3.37	1.30	.68	-.25	-.04	.01	-.04	.85							
6. Material centrality	3.76	1.11	.44	-.20	.06	.07	.03	.69	.73						
7. Material happiness	4.19	1.20	.58	-.28	.02	-.10	-.03	.60	.58	.81					
8. Community values	4.25	1.13	.52	.15	.19	.02	-.00	-.11	-.19	-.20	.91				
9. Interdependence	4.63	.80	.61	.02	.08	-.03	-.04	.02	-.09	-.05	.36	.80			
10. Interpersonal trust	5.81	1.81	.72	.09	.17	.10	.00	.20	.12	.08	.18	.26	.95		
11. Brand trust	5.96	2.20	.80	.13	.20	.05	.11	.26	.17	.13	.13	.21	.81	.96	
12. Willingness to pay	1.65	22.32	—	.07	.14	.03	.03	.27	.20	.14	.13	.19	.55	.58	—

Note: Chronbach's alpha presented in diagonal; off-diagonal indicates Pearson correlation coefficients. Bolded coefficients are significant at $p < .05$.

TABLE 7
STUDY 2: MODERATING EFFECTS OF
INTERDEPENDENCE

	Performance outcome:			
	Willingness to pay			
			<i>95% CI</i>	
Fixed effects	β	(S.E.)	<i>Lower</i>	<i>Upper</i>
Intercept	-41.64 *	(20.44)	-81.88	-1.40
<i>Controls</i>				
Age	.06	(.11)	-.15	.26
Gender	.18	(2.20)	-4.16	4.52
Income	.00 *	(.00)	.00	.00
Residential stability	-.03	(.33)	-.68	.61
Material success	2.22 †	(1.23)	-.19	4.63
Material centrality	1.65	(1.38)	-1.07	4.37
Material happiness	-.86	(1.20)	-3.21	1.49
Community values	.69	(1.02)	-1.32	2.70
<i>Primary predictors</i>				
Interdependence	-4.99	(4.38)	-13.60	3.63
Interpersonal trust	-17.44 *	(7.86)	-32.91	-1.97
Brand trust	25.29 **	(6.67)	12.15	38.43
Interdependence x int. trust	4.92 **	(1.65)	1.67	8.17
Interdependence x brand trust	-3.93 **	(1.44)	-6.77	-1.10
Interpersonal x brand trust	-.58 *	(.24)	-1.06	-.10
Model Characteristic				
	R ²	.38**		

Notes: †p<.10, *p<.05, **p<.01; sample includes 300 consumers considering an Apple iPad.

Table 8
STUDY 3: MODERATED MEDIATION

Performance outcomes	Indirect effect	Standard error	95% Confidence intervals	
			Lower	Upper
Willingness to pay				
High community values				
Commitment	3.08	1.69	.46	7.31
Involvement	1.06	.81	-.04	3.42
Fluency	-.25	.76	-2.11	1.06
Anthropomorphism	.48	.77	-.47	2.83
Low community values				
Commitment	-3.19	1.46	-6.88	-.99
Involvement	.14	.94	-1.93	1.92
Fluency	-.73	.78	-2.77	.44
Anthropomorphism	-.91	.78	-3.28	.05
Word of mouth				
High community values				
Commitment	.84	.40	.06	1.64
Involvement	.05	.05	-.01	.21
Fluency	-.03	.08	-.25	.09
Anthropomorphism	.02	.04	-.03	.19
Low community values				
Commitment	-.82	.32	-1.48	-.23
Involvement	-.01	.05	-.14	.07
Fluency	-.05	.08	-.25	.08
Anthropomorphism	-.03	.05	-.20	.04
Loyalty				
High community values				
Commitment	.80	.40	.04	1.60
Involvement	.04	.06	-.02	.24
Fluency	-.01	.04	-.15	.03
Anthropomorphism	.02	.05	-.03	.20
Low community values				
Commitment	-.78	.31	-1.40	-.17
Involvement	-.01	.05	-.14	.07
Fluency	-.02	.04	-.17	.03
Anthropomorphism	-.03	.06	-.22	.04

Notes: Indirect effects computed using Hayes (2013) macro; 10,000 bootstrapped samples; interpersonal trust coded as 1, brand trust coded as 0.

Table 9
Summary Statistics from Study 4

Construct	M	SD	1	2	3	4	5	6	7	8	9	10	11	12
1. Total population (000's)	695.54	1,223.48												
2. Population density (000's)	1.89	.01	.15											
3. Per capita income (000's)	26.41	7.02	.07	.29										
4. Per capita retail (000's)	13.03	3.97	.05	.03	.52									
5. Number of households (000's)	336.89	561.53	.99	.20	.09	.06								
6. Age	46.18	16.54	-.07	-.06	-.03	.01	-.07							
7. Familiarity	2.72	1.18	-.00	.02	.01	.02	.00	.14						
8. Current usage	1.94	1.39	-.02	.01	.00	.00	.00	-.03	.44					
9. Number of companies rated	1.58	.75	-.02	-.01	.00	.01	-.02	.02	.01	.00				
10. Population stability	14.21	6.30	.01	-.17	-.22	-.15	.00	.03	-.02	.03	.01			
11. Word of mouth	.15	1.40	.02	.00	.00	.00	.01	-.05	.21	.47	.00	.02		
12. Loyalty	4.29	1.73	-.00	.02	.00	.00	.00	.00	.34	.55	.02	.00	.54	
13. Trust source	1.50	.50	-.02	-.01	.00	.00	-.02	.00	.00	-.08	.01	.00	-.06	.01

Note: Off-diagonal indicates Pearson correlation coefficients. Bolded coefficients are significant at $p < .05$.

TABLE 10
STUDY 4: MODERATING EFFECTS OF RESIDENTIAL STABILITY

	Model 1: Loyalty				Model 2: Word of mouth			
	β	(S.E.)	<i>95% HPDI</i>		β	(S.E.)	<i>95% HPDI</i>	
			<i>Lower</i>	<i>Upper</i>			<i>Lower</i>	<i>Upper</i>
Fixed effects								
Intercept	.05	(.04)	-.02	.12	.06	(.04)	-.01	.15
<i>County-level controls</i>								
Total population	.38 †	(.21)	.03	.68	.30	(.25)	-.06	.68
Population density	.03 †	(.02)	.00	.05	.01	(.02)	-.02	.04
Per capita income	.01	(.01)	-.01	.04	-.02	(.02)	-.04	.02
Per capita retail	-.02	(.01)	-.05	.00	.00	(.02)	-.03	.02
Number of households	-.37 †	(.21)	-.66	-.01	-.27	(.25)	-.65	.09
<i>Consumer-level controls</i>								
Age	-.06 **	(.01)	-.08	-.04	-.03 *	(.01)	-.06	-.01
Familiarity	.07 **	(.02)	.04	.11	.01	(.02)	-.03	.05
Current usage	.58 **	(.01)	.55	.60	.46 **	(.01)	.43	.48
Number of companies rated	.00	(.01)	-.02	.02	.00	(.01)	-.02	.03
<i>Primary predictors</i>								
Population stability	-.06 *	(.03)	-.13	-.01	-.07 *	(.04)	-.14	-.01
Trust source (interpersonal=1; brand=0)	-.07 **	(.02)	-.11	-.03	-.05 *	(.02)	-.09	.00
Stability x trust	.04 *	(.02)	.01	.09	.05 *	(.02)	.01	.10
Random effects								
County	.02	(.11)			.02	(.11)		
Model Characteristics								
-2 Log Likelihood	7,105				7,750			
AIC	14,240				15,529			
BIC	14,340				15,630			
REML deviance	14,210				15,499			

Notes: Sample includes 5,950 consumers across 1,217 counties; all continuous variables were converted to z-scores prior to estimation; † $p < .10$; * $p < .05$; ** $p < .01$, two-tailed; HPDI refers to highest probability density intervals; stability x trust interaction remains significant with only current usage as control on loyalty ($\beta = .04$, $p < .05$) and word-of-mouth ($\beta = .05$, $p < .05$).

Figure 1
 CONCEPTUAL FRAMEWORK: MODERATING EFFECTS OF SOCIAL INTEGRATION ON
 INTERPERSONAL AND BRAND TRUST

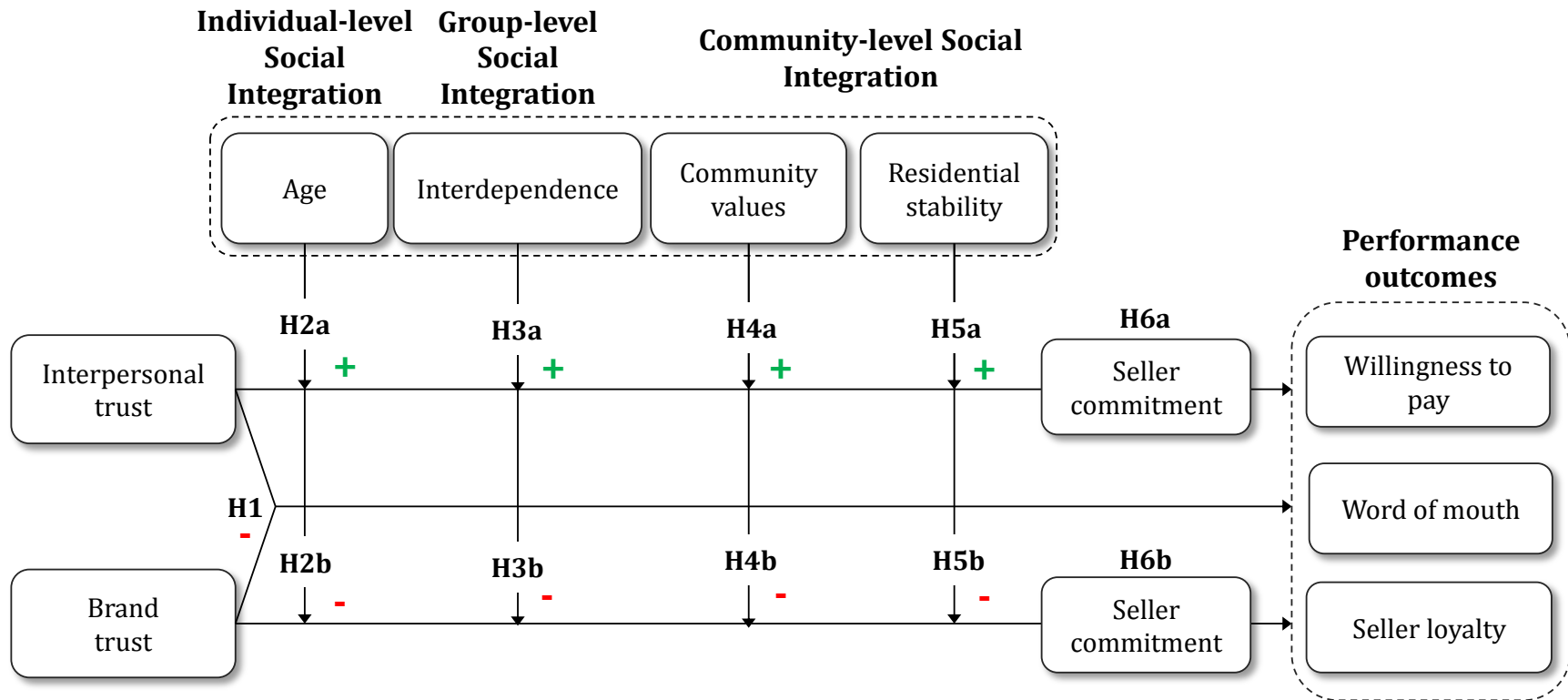
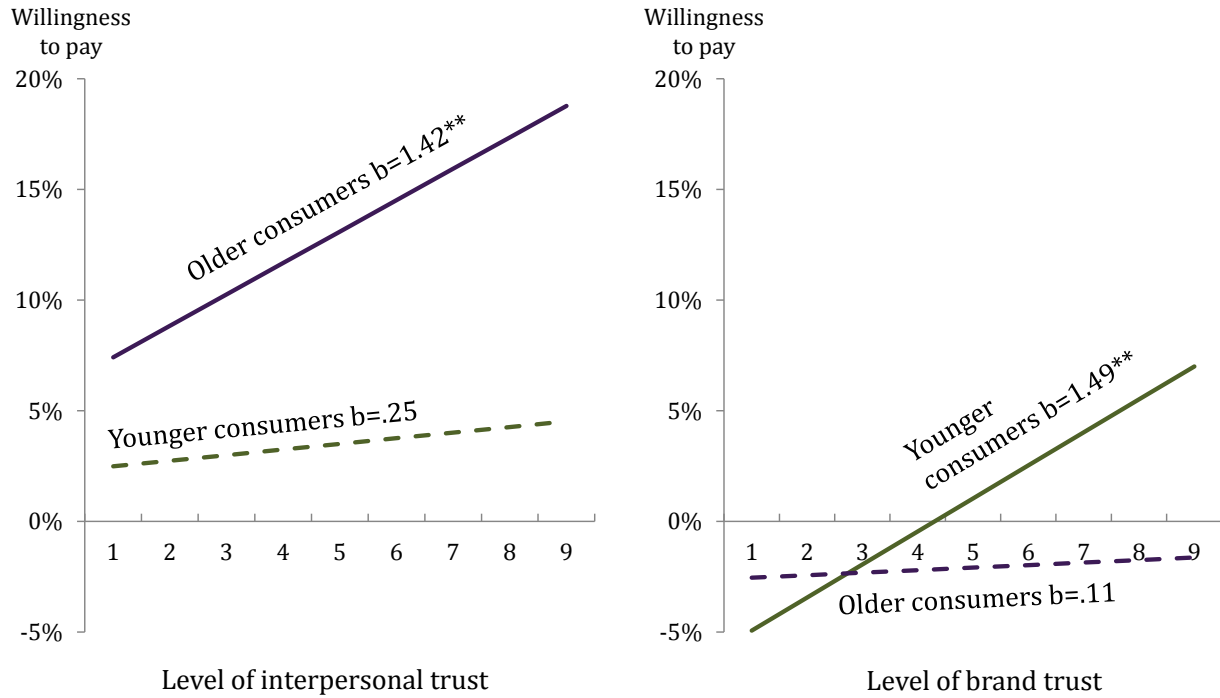
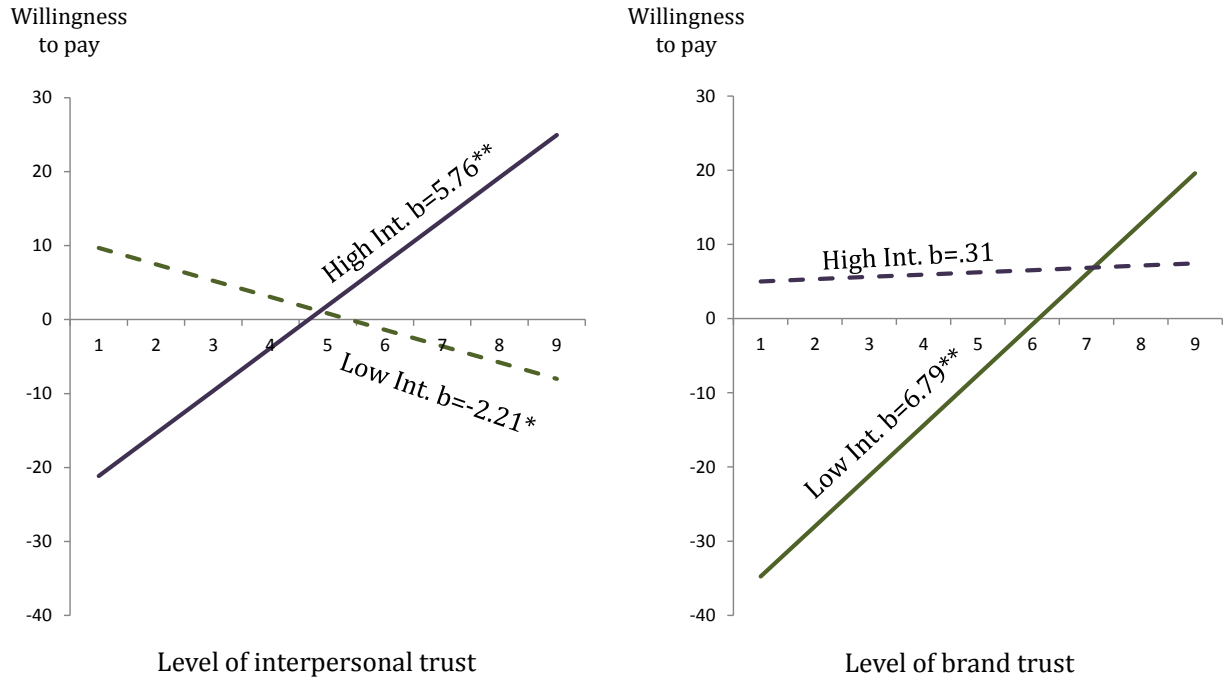


Figure 2
 STUDY 1: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON WILLINGNESS TO PAY FOR
 OLDER AND YOUNGER CONSUMERS



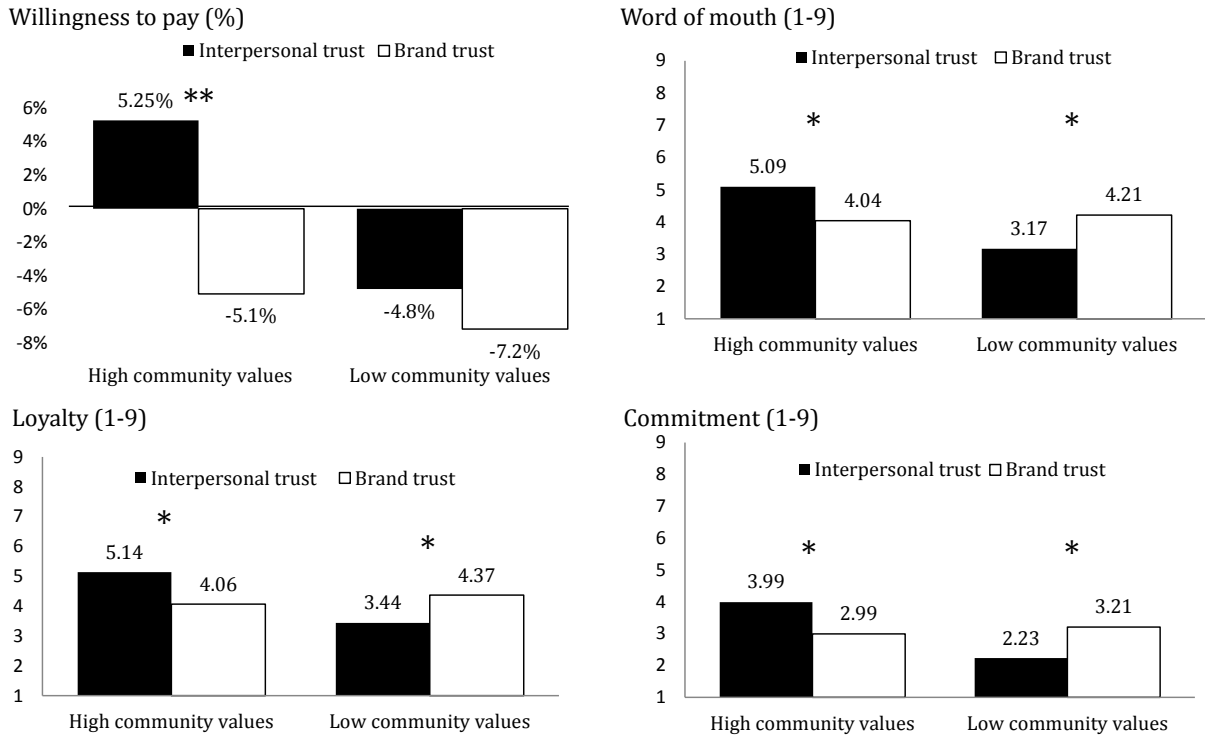
Notes: $**p<.01$; effects calculated at mean of all other variables from Study 1 model 2. For example, the effects of interpersonal trust on willingness-to-pay are at mean brand trust. "Older" (46.33 years) refers to one standard deviation (10.60) above the mean (35.73), whereas "younger" (25.13) refers to one standard deviation below the mean.

Figure 3
 STUDY 2: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON WILLINGNESS TO PAY FOR
 CONSUMERS WITH HIGH AND LOW INTERDEPENDENCE



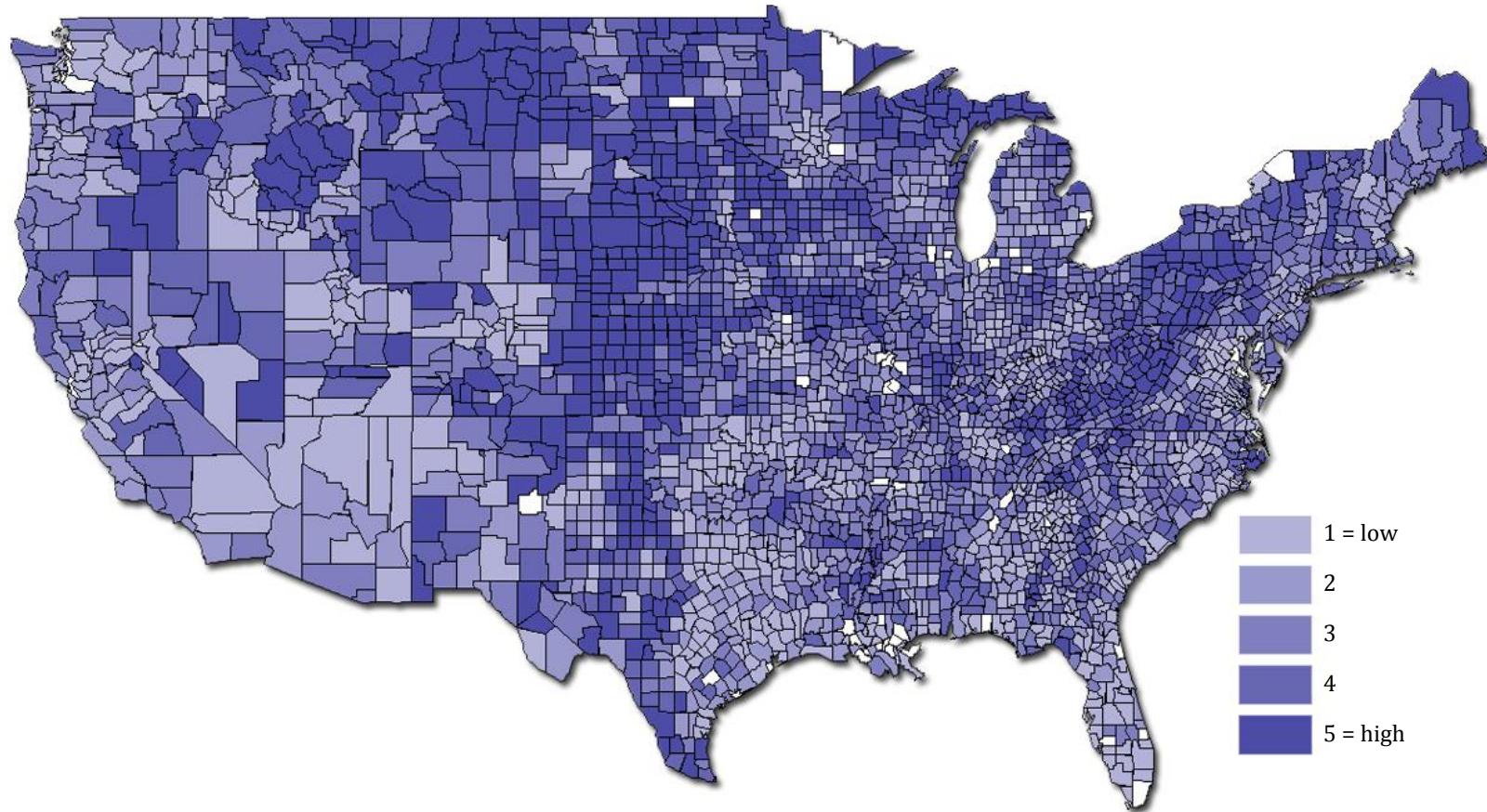
Notes: $**p < .01$; effects calculated at mean of all other variables from Study 2. For example, the effects of interpersonal trust on willingness-to-pay are at mean brand trust. "High Int." ($M = 5.43$) refers to one standard deviation (0.80) above the mean (4.63) level of interdependence, whereas "Low Int." ($M = 3.83$) refers to one standard deviation below the mean.

Figure 4
STUDY 3: MODERATED EFFECTS OF BRAND AND INTERPERSONAL TRUST ON PERFORMANCE



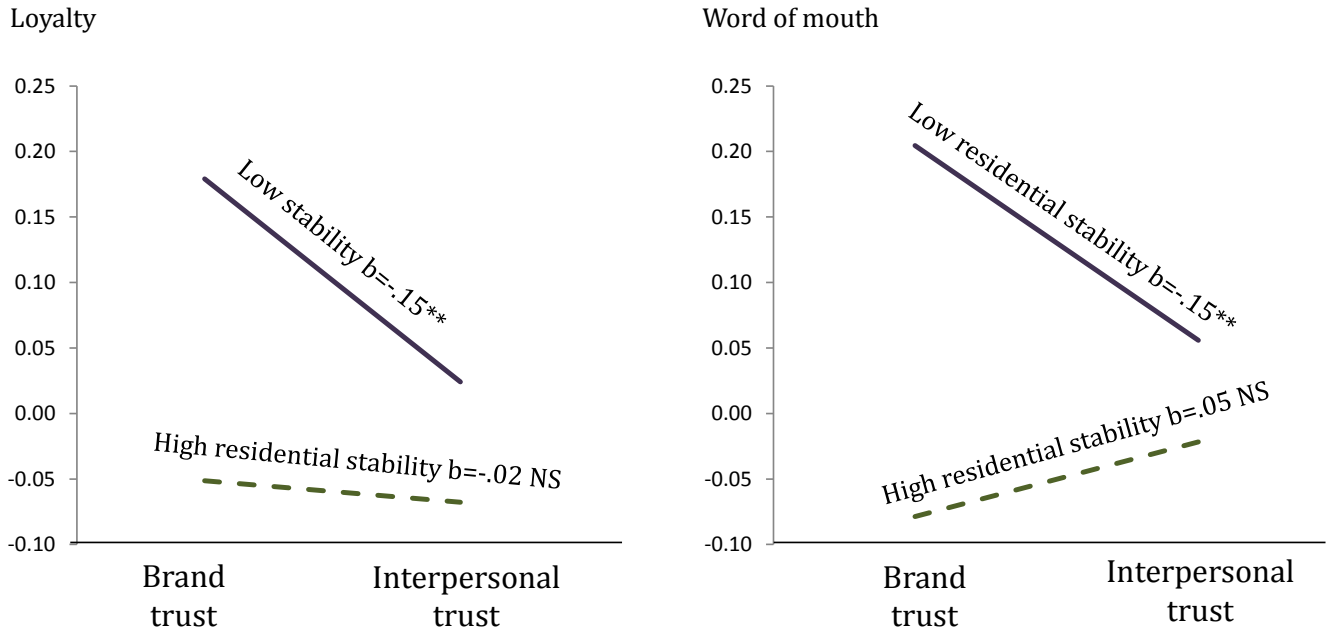
Notes: First symbols (*/**) indicate significantly different within high and low community values conditions at ($p < .05/p < .01$).

Figure 5
STUDY 4: RESIDENTIAL STABILITY ACROSS THE CONTIGUOUS UNITED STATES



Notes: Data are quintiled population stability scores computed as number of non-migrants divided by sum of inward and outward migrants for each county based on IRS (2010) data. Darker shades indicate greater stability. White indicates data are missing.

Figure 6
 STUDY 4: EFFECTS OF INTERPERSONAL AND BRAND TRUST ON PERFORMANCE WHEN
 RESIDENTIAL STABILITY IS HIGH VS. LOW



Notes: $**p < .01$; all variables z-scored; low is 2 standard deviations below mean residential stability; high is 2 standard deviations above mean.

Appendix A
STUDY 2: APPLE ADVERTISEMENT



Appendix B
STUDY 3: TRUST SOURCE MANIPULATIONS

Brand trust



Interpersonal trust

