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More than just financial performance: Trusting investors in social trading<sup>☆</sup>Veit Wohlgemuth<sup>a,\*</sup>, Elisabeth S.C. Berger<sup>b</sup>, Matthias Wenzel<sup>c</sup><sup>a</sup> HTW Berlin, Business School (FB 3), Treskowallee 8, 10318 Berlin, Germany<sup>b</sup> University of Hohenheim, Entrepreneurship (570 C), Wollgrasweg 49, 70599 Stuttgart, Germany<sup>c</sup> European University Viadrina, Chair of Management and Organization, Große Scharnstraße 59, 15230 Frankfurt (Oder), Germany

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## ABSTRACT

Social trading is a new form of online community in which investors can automatically, simultaneously, and unconditionally copy the investments of other traders whom they trust. Using data from the social trading network eToro, this study uses fuzzy-set qualitative comparative analysis to explore configurations of cognition-based and affect-based signals of trustworthiness that generate trust and prompt one investor to copy another. This study identifies two configurations that prompt trust and the decision to copy. Those configurations rely on both cognition-based and affect-based signals of trustworthiness. Furthermore, the study identifies six configurations in which weak cognition-based and affect-based signals of trustworthiness lead to parties failing to establish trust. These findings contribute to a better understanding of the establishment and non-establishment of trust in online communities and have implications for social trading platforms and their members.

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## 1. Introduction

Scholars and practitioners increasingly emphasize the central role of trust in explaining the behavior of online community members (e.g. Chen & Dibb, 2010, Gupta & Kabadayi, 2010). Prior research in offline contexts shows that signals of trustworthiness are important means for actors to create trust (Mayer, Davis, & Schoorman, 1995). Yet, scholars emphasize that signaling trustworthiness plays an even more important role in online communities (O'Sullivan, 2015; Pagani, Hofacker, & Goldsmith, 2011; Shankar, Urban, & Sultan, 2002; Yang & Wang, 2015; Yousafzai, Pallister, & Foxall, 2005; Zhou, Wu, Zhang, & Xu, 2013). The volatility of relationships and a lack of face-to-face interactions among online community members can prevent the development of trust in long-term relationships (Morgan & Hunt, 1994). Scholars emphasize that “lack of trust is one of the greatest barriers inhibiting online trade” (Shankar et al., 2002, pp. 325) and that trust signals “play important roles” (Pagani et al., 2011, p. 442) in overcoming these barriers. Community members who proactively signal their trustworthiness online possess a powerful means to affect the behavior of other members (Gamboa & Gonçalves, 2014). However, although scholars strongly emphasize the importance of signaling

trustworthiness to support the coordination of behavior in online communities, trust within such communities is a nascent and largely untapped area of research.

This study aims to contribute to this emerging debate by examining signals of trustworthiness in the context of social trading. Scholars frequently examine online communities that serve as marketing channels (Ashley & Tuten, 2015), evaluation platforms (Orlikowski & Scott, 2013), sharing facilities (Yang & Wang, 2015), and sites for networking (Park, Shin, & Ju, 2015), but pay far less attention to social trading as a growing application of online communities (Doering, Neumann, & Paul, 2015; Pan, Altshuler, & Pentland, 2012). Social trading platforms allow investors to invest immediately and to observe other investors' trades and track records. Such social trading platforms form networks in which copy trading is a unique and increasingly popular opportunity. A network permitting copy trading means one where investors can automatically, simultaneously, and unconditionally replicate other investors' trades. The trustworthiness of online community members plays an even more important role in the online trading context. By directly copying the investment decisions of other online community members without evaluating the specific investments beforehand, investors entrust their investment decisions to other traders they have probably never seen in person. This trust-based delegation of decision authority is not common in other online communities and, owing to the immediate impact of trust on investment decisions, constitutes an interesting context for the examination of signals of trustworthiness.

The present study draws on the differentiation between cognition-based and affect-based signals of trustworthiness (McAllister, 1995) to investigate the necessary and sufficient signals that make traders appear trustworthy in the eyes of other investors, and thus prompt

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copy-trading decisions. The establishment of trust in online communities through the signaling of trustworthiness is a complex process (Shankar et al., 2002), and accordingly examining the phenomenon demands sophisticated methods to unlock its complexity (O'Sullivan, 2015; Roig-Tierno, Baviera-Puig, & Buitrago Vera, 2013; Weijo, Hietanen, & Mattila, 2014). Therefore, the current study applies fuzzy-set qualitative comparative analysis (fsQCA): fsQCA consciously infuses a qualitative logic to unbundle multifaceted, asymmetric, and equifinal phenomena that scholars might not be able to explore equally well using common quantitative methods (Armstrong, 2012; Fiss, 2011; Rauch, Decker, & Woodside, 2013; Woodside, 2013; Woodside & Zhang, 2013). This study investigates the focal phenomenon by examining activity on eToro – currently the largest social trading platform – with a dataset of signals of trustworthiness from 642,488 members.

## 2. Signaling trustworthiness in social trading

Trust is “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviors of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). The willingness to accept vulnerability does not reflect a desire to be hurt, but builds on an expectation that no harm will occur (Möllering, 2006). Therefore, trust is a matter of a trustor's general propensity to trust and various signals that make the trustee appear trustworthy (Mayer et al., 1995). A person with absolute knowledge would have no reason to trust, and a person with a total lack of information would have no basis on which to establish trust (Luhmann, 1979; McAllister, 1995). In a social trading situation that lacks offline interaction, traders can only rely on the signals that other members on the social trading platform send (Pan et al., 2012).

McAllister (1995) and Deutsch (1960) differentiate between cognition-based and affect-based signals of trustworthiness. Cognition-based signals of trustworthiness indicate that the trustee is (technically) competent at a domain-specific task and also build on professional credentials. Accordingly, because a person trusts another in one specific domain does not mean that the trustor trusts the trustee in another. The domain-specific task in this study is the identification and execution of profitable investment decisions (Doering et al., 2015).

Affect-based signals of trustworthiness indicate that a trustee shares similar values with the trustor and does not pursue self-centered reward-seeking behavior (McAllister, 1995). These signals of trustworthiness complement the rather technical cognition-based signals of trustworthiness by adding a social component. Affect-based signals of trustworthiness also differ from cognition-based signals of trustworthiness in that they are not domain-specific but transferable among tasks. Thus, in social trading, affect-based signals of trustworthiness extend beyond professional credentials in making profitable investment decisions and include a host of potential social signals of trustworthiness (Pan et al., 2012), such as the provision of the full name, a personal picture, and frequent interactions.

Prior research in offline contexts suggests that trustees must use both cognition-based and affect-based signals of trustworthiness to build trust (McAllister, 1995). Therefore, although financial trading is a highly technical profession, and one in which cognition-based signals of trustworthiness are very likely to play an important role, this study also aims to investigate if affect-based signals are necessary for trustees to appear trustworthy and thus worthy of copying. As Lewis and Weigert (1985) and Möllering (2006) argue, when actors are able to complement hard facts with social signals of affect those actors appear trustworthy. If, on the other hand, parties transmit only weak cognition-based or affect-based signals, their relationships are likely to feature low or no perceived trustworthiness. Consequently, in social trading, several configurations of various signals of both types might equifinally explain the establishment of trust and hence the likelihood of copy trading (Doering et al., 2015). Fig. 1 illustrates how this study

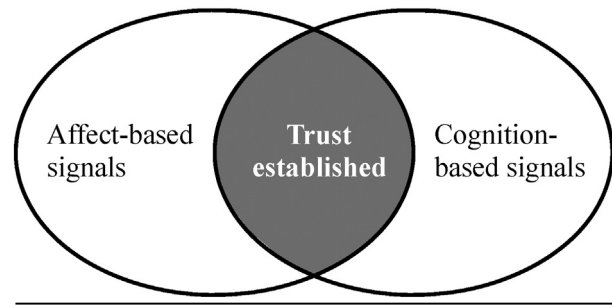


Fig. 1. Theoretical model.

conceives cognition-based and affect-based signals of trustworthiness as sets that in combination explain the super-set of established trust. Accordingly, this study hypothesizes:

- H1.** Configurations of both cognition-based and affect-based signals of trustworthiness explain established trust, and hence the decision to copy a trader.
- H2.** Configurations of only cognition-based or affect-based signals of trustworthiness explain the absence of established trust, and hence the decision not to copy a trader.

## 3. Method and data

To explore the signals that are necessary and sufficient to make traders appear trustworthy, and to prompt copy-trading decisions, this study applies fuzzy-set qualitative comparative analysis (fsQCA). The method is especially appropriate for this study because fsQCA allows for causal conjunction, asymmetry, and equifinality (Fiss, 2011; Ragin, 2008). Causal conjunction refers to the fact that different conditions may explain an outcome in combination with, rather than independent of, each other. Equifinality means that various alternative configurations can produce the same outcome. Causal asymmetry relates to the fact that the identification of a cause of an outcome does not necessarily imply that the absence of the very same cause leads to an inverse effect. Therefore, these effects merit separate consideration (Schneider & Wagemann, 2012).

This study analyzes data on signals of trustworthiness in a social trading context using the platform eToro, currently the world's largest social trading network. eToro allows its members to trade currencies, commodities, indices, and stocks. The eToro online community offers its members various opportunities to demonstrate trustworthiness, and accordingly is an ideal fit with this study's research purpose. The dataset contains the signals of 642,488 community members between January 2013 and May 2015. To explain different configurations of signals of trustworthiness and their outcomes, this study identifies those signal providers who successfully establish trust and those who fail to establish trust. The current research requires traders to be visible to potential copiers, and accordingly the data analysis only includes leading active traders, with more than 30 days' activity, who trade at least once per fortnight, and have at least one investor copying them. The final dataset includes signals from 2048 individual traders.

The study analyzes the outcomes “trust established” and “no trust established,” operationalizing the outcomes as the number of copiers, that is, the number of people willing to trust the trader with their investment decisions. Table 1 provides an overview of descriptive statistics and calibration criteria for the outcome and all seven conditions.

eToro grants a separate payment to traders who attract many copiers and thereby help the online community grow. This payment increases at certain thresholds. The calibration of the number of copiers builds on eToro's remuneration scheme. The “rising star payment,”

**Table 1**  
Descriptive statistics (not calibrated) and calibration criteria.

Outcome/Conditions	Mean	Std. Dev	Calibration criteria		
			Full-member	Crossover	Non-member
Copiers	28.1	202.35	50	4	1
Profitable trades	0.7	0.20	0.9	0.7	0.5
Return	0.2	4.53	0.5	0.1	0
Max. drawdown	−0.1	0.09	−0.1	−0.05	−0.03
Risk level	5.6	2.20	6	4	2
Picture	0.8	0.40		Dichotomous (1/0)	
Full name	0.4	0.49		Dichotomous (1/0)	
Activeness	605.9	263.69	365	180	90

which a trader earns on attracting 50 copiers or more, indicates full membership in the set of “trust established.” One copier indicates non-membership and four copiers, the threshold at which eToro classifies its members as “community leaders,” is the crossover point.

For each trader, eToro provides numerous professional credentials as cognition-based signals of trustworthiness (McAllister, 1995) that relate to the traders' competence to trade successfully (Doering et al., 2015). Trustors must filter a wealth of complex information to decide whether a trader is trustworthy enough to copy, and the trustors therefore welcome any aids that can reduce the complexity of the process (Luhmann, 1979). eToro helps its members by publishing classifications that traders can easily access. Given that the reduction of complexity is crucial to the process of establishing trust, and that eToro's classifications provide the central tool for reducing complexity, this study primarily relies on eToro's classifications as calibration criteria. Owing to the perceptual nature of trust (Rousseau et al., 1998), this study focuses on those signals of trustworthiness that eToro displays most prominently. With regard to cognition-based signals of trustworthiness, this study employs the following four conditions.

First, “profitable trades” expresses the amount of profitable trades in percentage terms. The calibration follows eToro's classification of low, medium, and high performance. A record of more than 90% trade success indicates full membership, 70% trade success is the crossover point, and less than 50% trade success indicates non-membership.

Second, “return” refers to the annual return on investment in percentage terms. This study follows eToro's classification of returns and considers returns above 10% as indicating full membership, 5% as the crossover point, and a return of less than 3% as indicating non-membership.

Third, “maximum drawdown” refers to the greatest weekly loss as a percentage of the accounts equity at the time of the loss. In line with eToro's classification of low to high drawdowns, this study calibrates maximum drawdowns above 10% as full membership, 5% as the crossover point, and a maximum drawdown of less than 3% as non-membership.

Fourth, “risk level” relates to the degree to which investors engage in risky investments. eToro's risk level score (1–10) reflects the volatility of the financial instruments; that is, the more the investments' values change in both directions, the higher the volatility. A portfolio can hedge the individual risks of multiple investments, for example, by simultaneously investing in the possibility that a market declines and expands. The risk level score reflects the risk-reduction effects of hedging. eToro classifies traders with a score of six or more as constituting an extreme risk, those with a score of four as of medium risk, and traders with a score below two as not constituting a risk. The study uses these values as thresholds for full membership, the crossover point, and non-membership, respectively.

The four cognition-based signals of trustworthiness provide a comprehensive picture of the trustee's trading competence. The first and second signals indicate the success of past investments by displaying the number of successful trades and the amount of return the accounts accrue in relation to the account sizes. The third and fourth signals are indicators of risk. They indicate the highest loss and the volatility of

the investments in relation to hedging activities. Unlike the other signals, the two signals of risk are reverse indicators of trustworthiness; that is, the less risky a trader appears, the stronger is the cognition-based signal of trustworthiness.

The study's conditions that relate to affect-based signals of trustworthiness build on McAllister's (1995) two indicators of affect-based trustworthiness. The first one pertains to citizenship behavior, that is, behavior conducive to effective community functioning that does not directly result from receiving a reward or from another form of self-interest (MacKenzie, Podsakoff, & Fetter, 1991). Given that trustors must be able to identify the person behind the role if they are to establish trust in the trustee, revealing personal information is an important signal of citizenship behavior (Luhmann, 1979; Mesch, 2012). If a community member fails to abide by the unwritten rules of citizenship behavior, a previous revelation of personal information could be harmful. Therefore, community members with bad intentions tend to be unwilling to reveal their identity (e.g., Lee, Im, & Taylor, 2008). This study considers two signals that reveal a trader's identity: displaying a personal picture and providing a full bona fide name in addition to a user name. These conditions are dichotomous, that is, the presence of the identity signal represents full membership and its absence indicates non-membership.

The second indicator of affect-based trustworthiness is interaction frequency (McAllister, 1995). In the case of social trading, interaction frequency pertains to the activity level of members in the online community. In other words, the longer a trader participates in the online community, the more likely is a social affect toward the online community and its members (Gausdal, 2012; Lim & Van der Heide, 2014). This study uses the traders' number of active days since joining the online community as an easily accessible signal for members. This study calibrates more than 365 days of activity as full membership, 180 days as the crossover point, and less than 90 days as non-membership.

#### 4. Results

The current study follows the advice of Schneider and Wagemann (2012) in conducting its necessity and sufficiency analysis in two separate steps. The necessity analysis does not point to any necessary conditions based on the consistency and coverage measures. The non-existence of necessary conditions applies to both an outcome of established trust and to one of no trust established.

For its sufficiency analysis, the current study sets the frequency cut-off at four and the consistency cut-off at 0.80. Running the sufficiency analysis for the outcome of established trust produces two configurations with a good solution consistency of 0.80 and a solution coverage of 0.17. Table 2 presents the results of the analysis. In line with the work of Fiss (2011) on the presentation of fsQCA results, the filled circles indicate the presence of a condition, empty circles represent the absence of a condition, and blank spaces relate to neutral permutations. Furthermore, large circles represent core conditions and small circles represent peripheral conditions based on the intermediate and parsimonious solutions of the analysis. The distinction between the intermediate and parsimonious solutions relates to the handling of counterfactuals in the logical reduction process. Whereas the parsimonious solution includes all possible counterfactuals, the intermediate solution only includes simple counterfactuals (Fiss, 2011).

Configurations 1 and 2 require both cognition-based and affect-based conditions to explain established trust, thus supporting H1 (see Table 2). The two configurations are identical with regard to the affect-based conditions; that is, a picture, the full name, and high activity are all vital for establishing trust, and providing a full name is a core condition. With regard to the cognition-based signals, the two configurations both require a high return as a core condition. Configuration 1 additionally explains established trust with high profitability and a low risk level, and configuration 2 includes high profitability and high drawdowns in the subset.

**Table 2**  
Results of the sufficiency analysis.

Conditions	Trust established		No trust established					
	1	2	3	4	5	6	7	8
Profitable trades	●	●●		○				○
Return	●●	●●	○	○	○			
Max. drawdown		●●	○			○		
Risk level	○			●			●	●
Picture	●	●					○	
Full name	●●	●●			○	○	○	○
Activeness	●	●						
Consistency	0.81	0.81	0.83	0.92	0.83	0.84	0.91	0.92
Raw coverage	0.10	0.09	0.53	0.39	0.48	0.40	0.15	0.29
Unique coverage	0.08	0.07	0.10	0.05	0.06	0.04	0.01	0.02
Solution consistency		0.80				0.80		
Solution coverage		0.17				0.84		

- Core condition (present)
- Peripheral condition (present)
- Core condition (absent)
- Peripheral condition (absent)
- Blank space: neutral permutation

Causal asymmetry dictates that understanding the conditions of trust-building is not sufficient to draw conclusions about the conditions of the absence of trust (Ragin, 2008). Therefore, this study conducts the sufficiency analysis for the outcome “no trust established” separately. Table 2 illustrates the results of the analysis in its second column. Six configurations explain a large share of the non-outcome (84%) at a consistency level of 0.80. In all configurations, either cognition-based or affect-based signals of trustworthiness are weak, thus supporting H2. The first two configurations explain the non-establishment of trust solely based on weak cognition-based signals, more specifically, low returns, a low maximum drawdown (configuration 3), and a low percentage of profitable trades, but a high risk level (configuration 4). Configurations 5 to 8 represent combinations of low levels of cognition-based and affect-based signals. Those conditions all include the absence of the full name in combination with low returns (configuration 5), a low maximum drawdown (configuration 6), a high risk level (configurations 7 and 8), no picture (configuration 7), and low rates of profitable trades (configuration 8).

**5. Discussion and conclusion**

The findings of this study contribute to the nascent field of research on trust in online communities in general (e.g. Gamboa & Gonçalves, 2014, Shankar et al., 2002, Yang & Wang, 2015) and social trading platforms in particular (Doering et al., 2015; Pan et al., 2012). The first contribution pertains to the complementarity of cognition-based and affect-based signals of trustworthiness. Both configurations that build trust and thereby prompt copying decisions rely on cognition-based and affect-based signals. This finding echoes previous studies on trust in offline contexts that establish the complementary nature of cognition-based and affect-based signals of trustworthiness in the process of building trust (Lewis & Weigert, 1985; Möllering, 2006). The same finding also suggests that the shift from offline to online contexts does not diminish the importance of this complementarity (O’Sullivan, 2015; Shankar et al., 2002). Clearly, for financial traders wishing to appear trustworthy, financial performance matters, but the study indicates that those traders must complement such cognition-based signals of trustworthiness with affect-based signals.

The second contribution relates to a more complex understanding – that fsQCA facilitates (Woodside, 2013) – of the interaction among

trustees and trustors in the process of building trust. Specifically, all affect-based signals are present in both configurations that lead to the establishment of trust. The findings therefore suggest that one signal does not suffice to indicate the presence of affect, but several affect-based signals are essential to building trust; however, none of the conditions is a necessary one. Similarly, the failure to identify a sufficient configuration for a single cognition-based signal indicates the importance of sending many cognition-based signals to build trust. At the same time, however, the establishment of trust does not rely on a specific cognition-based signal. While these constellations echo the complex nature of building trust through signals of trustworthiness in online communities (Shankar et al., 2002), the study puts forward the surprising result that risk-related conditions seem to have opposing effects. In configuration 1, a low risk level supports the establishment of trust, whereas in configuration 2, a high maximum drawdown produces the same outcome. Thus, the higher a drawdown, the higher is the potential volatility in a negative direction. A potential reason for this theoretical puzzle pertains to the nature of investments as risk–return trade-offs: the greater the risk, the greater the potential gain (Fama & MacBeth, 1973). Thus, risk might attract a certain group of investors, whereas other types of investor prefer less risky options. Another potential reason relates to the possibility that copiers accept high maximum drawdowns when other signals of trustworthiness are strong enough to outweigh that temporary risk indicator (Bagozzi, 1996). These findings highlight that trustors, as consumers of signals of trustworthiness, play an important role in the process of building trust by self-selecting whom they trust based on their preferences and their perception of signals of trustworthiness. Given that much of the trust literature emphasizes the important role of trustees as producers of signals of trustworthiness (Kramer, 2001), this study complements this literature by presenting a more complex picture of the process of building trust in which both trustees and trustors play an important role.

Given that causal asymmetry in configurational approaches (e.g., Ragin, 2008) inhibits causal inferences about inverse effects when the conditions for a cause of an outcome are absent, the separate sufficiency analysis for the outcome “no trust established” produces a third contribution that pertains to explaining the failure to establish trust in online communities. As for the outcome “trust established,” this study does not identify necessary conditions for the absence of trust. The sufficient configurations indicate that an absence or low level of cognition-based trust in combination with weak affect-based signals of trustworthiness lead to the failure to establish trust. This finding substantiates the previous research on offline contexts (Lewis & Weigert, 1985; Möllering, 2006) in a social trading context by highlighting that the absence of either cognition-based or affect-based signals of trustworthiness leads to the non-establishment of trust. Thus, this study also adds to the nascent field of research on trust in online communities (e.g. Gamboa & Gonçalves, 2014, Shankar et al., 2002, Yang & Wang, 2015) by improving the understanding of the conditions that lead to the failure to establish trust in online communities.

Beyond the theoretical implications of this study, the findings are also useful for the operators of social trading platforms and the investors who use these platforms. The sufficient configurations provide the online community members with equifinal ways to increase the likelihood that they will attract copiers and thus receive a remuneration. Assuming the operator of the social trading platform wishes to swell the volume of copy trading, that operator could use the results of this study to adjust the user interface and present crucial conditions more prominently than others. The operator could also acknowledge the importance of affect-based signals of trustworthiness by obliging new and existing users to provide their full names and a profile picture. Operators of other social trading platforms might also use the results to improve their platforms’ remuneration schemes. To stimulate copy-trading behavior, the social trading platform might opt to employ a remuneration scheme based on behavioral pricing (Estelami & Maxwell, 2003) that

supports such copy-trading behavior. The managers of crowdfunding platforms might also find the results interesting (e.g., Mollick, 2014), given that crowdfunding and social trading platforms share a number of features.

In common with every study adopting a set-theoretic approach, this study could only include a limited amount of attributes (Fiss, 2011), and the authors chose to focus on cognition-based and affect-based signals of trustworthiness. Future research might explore the role of additional signals of trustworthiness (Mayer et al., 1995) in social trading networks and how they contribute to explaining the establishment of trust. Alternatively, future research might examine the role of trustors as receivers of signals of trustworthiness (Kramer, 2001). Furthermore, it is clear that users of the online community must perceive the community itself, and the technologies that community adopts, as trustworthy (Fiedler & Sarstedt, 2014; Orlikowski & Scott, 2013). A study comparing signals of trustworthiness in a sample of multiple social trading communities could extend the generalizability of the results of the current research and contribute a broader understanding of the technological affordances of online communities related to sending signals of trustworthiness. Future studies could also examine the focal phenomenon with longitudinal research designs (Langley, Smallman, Tsoukas, & Van de Ven, 2013) and a stronger focus on the descriptive characteristics of the members of social trading communities. Whereas this study examines configurations of the totality of signals of trustworthiness that lead to the establishment of trust and copying behavior, trustees' signaling behavior and trustors' copying behavior might evolve over time, and so too online communities and their technological affordances. Therefore, longitudinal studies that identify patterns and the underlying rationale of signaling behavior in the trust-building process offer the promise of finely nuanced insights into the establishment of trust through signaling trustworthiness in online communities.

## References

- Armstrong, J. S. (2012). Illusions in regression analysis. *International Journal of Forecasting*, 28(3), 689–694.
- Ashley, C., & Tuten, T. (2015). Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychology and Marketing*, 32(1), 15–27.
- Bagozzi, R. P. (1996). The role of arousal in the creation and control of the halo effect in attitude models. *Psychology and Marketing*, 13(3), 235–264.
- Chen, J., & Dibb, S. (2010). Consumer trust in the online retail context: Exploring the antecedents and consequences. *Psychology and Marketing*, 27(4), 323–346.
- Deutsch, M. (1960). The effect of motivational orientation upon trust and suspicion. *Human Relations*, 13(2), 123–139.
- Doering, P., Neumann, S., & Paul, S. (2015). A primer on social trading networks: Institutional aspects and empirical evidence. *Working paper*. Germany: Ruhr-University Bochum.
- Estelami, H., & Maxwell, S. (2003). Introduction to special issue: The behavioral aspects of pricing. *Journal of Business Research*, 56(5), 353–354.
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal of Political Economy*, 81(3), 607–636.
- Fiedler, M., & Sarstedt, M. (2014). Influence of community design on user behaviors in online communities. *Journal of Business Research*, 67(11), 2258–2268.
- Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2), 393–420.
- Gambo, A. M., & Gonçalves, H. M. (2014). Customer loyalty through social networks: Lessons from Zara on Facebook. *Business Horizons*, 57(6), 709–717.
- Gausdal, A. H. (2012). Trust-building processes in the context of networks. *Journal of Trust Research*, 2(1), 7–30.
- Gupta, R., & Kabadayi, S. (2010). The relationship between trusting beliefs and web site loyalty: The moderating role of consumer motives and flow. *Psychology and Marketing*, 27(2), 166–185.
- Kramer, R. M. (2001). Organizational paranoia: Origins and dynamics. *Research in Organizational Behavior*, 23, 1–42.
- Langley, A., Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1), 1–13.
- Lee, D.-H., Im, S., & Taylor, C. R. (2008). Voluntary self-disclosure of information on the Internet: A multimethod study of the motivations and consequences of disclosing information on blogs. *Psychology and Marketing*, 25(7), 692–710.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63(4), 967–985.
- Lim, Y., & Van der Heide, B. (2014). Evaluating the wisdom of strangers: The perceived credibility of online consumer reviews on Yelp. *Journal of Computer-Mediated Communication*, 20(1), 67–82.
- Luhmann, N. (1979). *Trust and power*. Chichester: Wiley.
- MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance. *Organizational Behavior and Human Decision Processes*, 50(1), 123–150.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.
- McAllister, D. J. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24–59.
- Mesch, G. S. (2012). Is online trust and trust in social institutions associated with online disclosure of identifiable information online? *Computers in Human Behavior*, 28(4), 1471–1477.
- Möllering, G. (2006). *Trust: Reason, routine, reflexivity*. Oxford: Elsevier Science.
- Mollick, E. (2014). The dynamics of crowdfunding: An exploratory study. *Journal of Business Venturing*, 29(1), 1–16.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment–trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38.
- O'Sullivan, S. R. (2015). The market maven crowd: Collaborative risk-aversion and enhanced consumption context control in an elicit market. *Psychology and Marketing*, 32(3), 285–302.
- Orlikowski, W. J., & Scott, S. V. (2013). What happens when evaluation goes online? Exploring apparatuses of valuation in the travel sector. *Organization Science*, 25(3), 868–891.
- Pagani, M., Hofacker, C. F., & Goldsmith, R. E. (2011). *Psychology and Marketing*, 28(5), 441–456.
- Pan, W., Altschuler, Y., & Pentland, A. (2012). Decoding social influence and the wisdom of the crowd in financial trading network. *2012 International Conference on Privacy, Security, Risk and Trust and 2012 International Conference on Social Computing* (pp. 203–209).
- Park, M.-S., Shin, J.-K., & Ju, Y. (2015). A taxonomy of social networking site users: Social surveillance and self-surveillance perspective. *Psychology and Marketing*, 32(6), 601–610.
- Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago: University of Chicago Press.
- Rauch, A., Decker, J. S., & Woodside, A. G. (2013). Consuming alone: Expanding Putnam's "bowling alone" thesis. *Psychology and Marketing*, 32(9), 967–976.
- Roig-Tierno, H., Baviera-Puig, A., & Buitrago Vera, J. M. (2013). Business opportunities analysis using GIS: The retail distribution sector. *Global Business Perspectives*, 1(3), 226–238.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393–404.
- Schneider, C. Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge: Cambridge University Press.
- Shankar, V., Urban, G. L., & Sultan, F. (2002). Online trust: A stakeholder perspective, concepts, implications, and future directions. *Journal of Strategic Information Systems*, 11(3), 325–344.
- Weijo, H., Hietanen, J., & Mattila, P. (2014). New insights into online consumption communities and netnography. *Journal of Business Research*, 67(10), 2072–2078.
- Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research*, 66(4), 463–472.
- Woodside, A. G., & Zhang, M. (2013). Cultural diversity and marketing transactions: Are market integration, large community size, and world religions necessary for fairness in ephemeral exchanges? *Psychology and Marketing*, 30(3), 263–276.
- Yang, H. C., & Wang, Y. (2015). Social sharing of online videos: Examining American consumers' video sharing attitudes, intent, and behavior. *Psychology and Marketing*, 32(9), 907–919.
- Yousafzai, S. Y., Pallister, J. G., & Foxall, G. R. (2005). Strategies for building and communicating trust in electronic banking: A field experiment. *Psychology and Marketing*, 22(2), 181–201.
- Zhou, Z., Wu, J. P., Zhang, Q., & Xu, S. (2013). Transforming visitors into members in online brand communities: Evidence from China. *Journal of Business Research*, 66(12), 2438–2443.