

## INFLUENCE OF TRUST AND CONSPIRACY BELIEFS ON THE DISCLOSURE OF PERSONAL DATA ONLINE

Ignas ZIMAITIS , Sigitas URBONAVIČIUS <sup>\*</sup>, Mindaugas DEGUTIS ,  
Vaida KADUŠKEVIČIŪTĖ 

*Faculty of Economics and Business Administration, Vilnius University, Vilnius, Lithuania*

Received 15 February 2021; accepted 13 September 2021; first published online 28 February 2022

**Abstract.** The issue of trust-based personal data disclosure online remains of high importance both in social networking and online purchasing. Additionally, social networking is linked with a controversial factor of conspiracy beliefs that recently received attention because of Covid-19 pandemic. Conspiracy beliefs trigger activities online, but generate hesitations in regards to rational ideas, requests and procedures. Therefore, it is unclear how they impact rational requests of data disclosure in online shopping. The paper analyses how trust and conspiracy beliefs impact willingness to disclose personal data in social networking and in online shopping. The modelling based on the social exchange theory conceptualizes these two online activities as reciprocal and negotiated types of exchange. The findings based on structural equation modelling show some similarities between the impacts of trust and conspiracy beliefs in case of social networking, but disclose their radical differences in regards to willingness to disclose personal data in online purchasing.

**Keywords:** trust, conspiracy beliefs, social networking, self-disclosure, willingness to disclose personal data, social exchange theory.

**JEL Classification:** M31.

### Introduction

One of the major trends in modern business is digitalisation of almost all its functions (Koe & Sakir, 2020; Shpak et al., 2020). This is especially noticeable in digital marketing, personalized advertising and online selling that experience a substantial growth in almost all countries of the world (Morimoto, 2021; Vadana et al., 2019; Wirtz et al., 2017). However, the success of digital marketing and e-commerce is highly dependent on the extensive use of customer personal data (Bleier et al., 2020). In order to develop personalized offers and be efficient in online sales, businesses largely employ user-generated data that helps reaching their marketing objectives (Strycharz et al., 2019). Though technical means of data collection are rapidly developing, the collection of personal data is not easy because consumers tend

---

\*Corresponding author. E-mail: [sigitas.urbonavicius@evaf.vu.lt](mailto:sigitas.urbonavicius@evaf.vu.lt)

to be worried about the issues of personal data disclosure and the loss of privacy (Grosso & Castaldo, 2014; Cheng & Wang, 2018). This makes their willingness to disclose personal data rather low, often limited to the types and amount of data that is absolutely required to make a transaction or to reach another online objective (Bansal et al., 2016).

The willingness to disclose personal data online includes a number of rather complex considerations and has several meanings (Degutis et al., 2020). There are very strong arguments to state that willingness to provide personal data is a situational (contextual) factor that depends on where, when, for what purpose the data is being disclosed (Bansal et al., 2016; Masur, 2019; Padyab et al., 2019). The amount and types of data disclosed also depend on a situation. In rather basic cases of online shopping, it is required to provide just a minimal information (like name, address, e-mail address); in more complex ones it is required to disclose more extensive set of personal information, often amended with the permission to track online activities or geographical location (Joinson & Paine, 2007; Wang et al., 2016; Martin & Palmatier, 2020). Quite often some part of the personal information is “a must”, since otherwise the objective (online transaction or a digital service) cannot be provided (Zimmer et al., 2010; Prince, 2018). In many other cases, the requests for information/permissions are more flexible, and providing of the personal data largely depends on the willingness of a person to provide it (Mosteller & Poddar, 2017). In this case, the dispositional type of the willingness to provide data starts to be increasingly important. It means that some people are more pre-disposed to disclose personal facts than others and that some other dispositional or attitudinal factors also impact the willingness to disclose data (Urbonavičius, 2020). Among such, the factors of trust-distrust nature play the most important roles (Chang & Fang, 2013; Bansal et al., 2016; Kim et al., 2019).

General trust is a trait that positively impacts numerous human interactions, including activities online that require disclosure of personal data. However, trust is differently linked with willingness to disclose personal data in social networking and in online shopping. People are rather easily disclosing details of their private lives in social networking, but are rather restrictive to do it in registering for online shopping reasons (Barth & de Jong, 2017). These two data disclosure situations have been quite extensively analysed separately, but their linkage in terms of the willingness to disclose personal data has been observed rather recently (Zimaitis et al., 2020a, 2020b). The supportive climate and continuous interactions with peers develop trust and encourage further interactions, thus developing extensive data disclosure in social networking (Lin et al., 2020). Data disclosure in online buying is much more formalized and regulated, and the mechanisms of the disclosure are rather different (Robinson, 2018; Degutis et al., 2020). These differences have been integrated into a model that was grounded on the Social Exchange Theory (SET) by classifying data disclosure in social media as reciprocal social exchange and data disclosure in online shopping as negotiated social exchange, justifying the interaction between them (Zimaitis et al., 2020b; Urbonavičius et al., 2021). Trust played an important predictive role in regards to both instances.

On the other hand, the online activities are impacted by variables that reflect the uncertainty and are linked with not necessarily relevant perceptions of risks, distrust or false beliefs (Ahmad & Sun, 2018). One of controversial factors that represents distrust in commonly known facts is beliefs in conspiracies (van Prooijen & de Vries, 2016). The issue of

conspiracy beliefs recently received a new wave of attention from researchers because of Covid-19 (Georgiou et al., 2020; Pellegrini et al., 2021). It has been observed that conspiracy beliefs are linked with social networking (Goreis & Kothgassner, 2020). However, the impact of conspiracy beliefs on data disclosure in social media and – even more – in online purchasing presents a noticeable research gap that is addressed in this study. This attempt is based on the use of SET as the theoretical grounding that helps to consider trust and conspiracy beliefs as two key antecedents of the data disclosure in social media and of the willingness to disclose personal data in online shopping. More concretely, the study is aiming to answer these research questions: “How the impact of trust and conspiracy beliefs on self-disclosure in social networking and on willingness to disclose personal data in online purchasing can be modelled with the help of SET?” “What are the total effects of trust on self-disclosure in social networking and on willingness to disclose personal data in purchasing online?” “What are the total effects of conspiracy beliefs on self-disclosure in social networking and on willingness to disclose personal data in online purchasing?” The modelling of interactions is based on earlier studies that employed social exchange theory in marketing-related studies (Mosteller & Poddar, 2017; King, 2018; Zimaitis et al., 2020b). The model that is developed in the current study reflects a case of personal data disclosure and thus presents a novelty aspect among the applications of SET. Analysis of empirical data allows to test the predicted relationships and to draw conclusions.

The paper consists of five main parts: literature review, methodology (research model, measures and data), analysis (testing of hypotheses), discussion and conclusions together with limitations and directions for future research.

## 1. Literature review

*Theoretical backgrounds.* The research interest in issues of privacy and personal data disclosure perhaps starts from the concept of privacy paradox – the observation of the declared privacy concerns and limited willingness to disclose personal data, followed with rather relaxed behaviours in data disclosure (Norberg et al., 2007; Weinberger et al., 2017a, 2017b). In order to explain the paradox and other privacy and data disclosure issues, a number of theoretical backgrounds and models have been employed. The privacy-related issues have been analysed on the basis of the theory of planned behaviour, technology acceptance model and principal-agent theory (Kim & Kim, 2014; Zhao et al., 2018; Parker & Flowerday, 2021). The attempts of a deeper analysis were made from the commodity view of privacy and from the aspect of psychological ownership over personal information (Xu et al., 2011; Kehr et al., 2015). This allowed to analyse ownership-risk interaction on the basis of prospect theory. Such an interpretation evolved into the concept of privacy calculus that emphasizes the rational behaviour of consumers. It is assumed that they evaluate the trade-off between the value they obtain from the data disclosure and the potential negative consequences of the loss of control over the disclosed data (Kehr et al., 2015). Though privacy calculus is criticized for the putting to high emphasis on argument of rationality (Kehr et al., 2015; Wakefield, 2013), this approach is accepted by many researchers who agree that consumers tend to disclose facts about themselves in exchange for the foreseen benefits (Barth & Jong, 2017; Robinson, 2017).

*Social exchange theory.* The above-mentioned theoretical approaches help to analyse privacy issue and personal data disclosure to a large extent, but they do not specifically address the two typical online behaviours: social networking and online purchasing, where the approaches in regards to the personal data disclosure are different. This requires to look for a different theoretical background that would allow the two types and link them with the relevant antecedents. The suitable solution for this is the use of Social Exchange Theory. This theory has been developed by George C. Homans (1961) and Phillip Blau (1964), followed by Richard Emerson (1976). Though the theory uses the principles of rationality in human behaviour, it considers the difference of its manifestation in negotiated and reciprocal exchange (Levi-Strauss, 1969; Emerson, 1981). An exchange of the negotiated type occurs when the terms of an exchange are discussed by the participating parties in advance, therefore at the moment of the exchange they are agreed on and formalized. The basis for the negotiation is benefits and costs of the exchange, though there might be additional aspects of the exchange (such as timing, etc.) included as well. These conditions are present in many exchanges that include economic aspect, and they are typically classified as negotiated exchanges (Molm et al., 2000). Reciprocal exchange is based on mutual interactions of an exchange participants that are performed in response of the earlier behaviour of an exchange partner. This is based on the expectation that a partner will reciprocate in a similar manner. The terms of the exchange are not agreed upon in advance, which means that this type of an exchange is largely based on the mutual and gradually developed trust (Molm et al., 2000). This type of exchange occurs in networking and friendships (Olk & Gibbons, 2010).

*Disclose of personal data online.* Very early in its development, the SET started to consider information as a resource that could be used in exchanges (Foa & Foa, 1974). This interpretation of information as an important type of resources continues to be used in modern contexts (Cheshire, 2007). SET helped to analyse privacy related behaviours or attitudes (Metzger, 2004; King, 2018) and rather recently SET was specifically used in studies on willingness to disclose personal data in online purchasing (Zimaitis et al., 2020b). Though this research stream is not yet widely developed, it seems to be very promising, because it is able to reflect and integrate data disclosure in social networking and in online shopping.

In case when the SET is employed, social networking and disclosure information on social networks is considered as reciprocal, while purchasing online and willingness to disclose personal information there – as negotiated exchange.

People are using social media in order to interact with others, to socialize. The typical interaction means providing information about themselves, their experiences, feelings or emotions to others with expectation that the other side will respond similarly, which perfectly represents a reciprocal exchange situation (Cheng et al., 2011). Other aspects of reciprocal exchange are also present in social networking: there is no formalised obligation to reciprocate, exchange relations develop gradually, on the basis of mutual trust. In terms of regulations, social networks apply just very general rules/terms to be followed, no strict assurance structures are present, the shortest forms of informing about them are the most preferred (van der Schyff et al., 2020; Meier et al., 2020). Important outcome of the participation in social networking is self-disclosure to others, as the result of mutual trust that develops in the process of reciprocal interactions (Lee & Choi, 2017). Social media allows rather easy

disclosure of personal information to other persons, and many people are doing this rather willingly (Schlosser, 2020; Varnali & Toker, 2015; Zhang & Fu, 2020). The information is revealed with high levels of openness and spontaneity as an outcome of general trust that is further developed in reciprocal social networking (Koohikamali et al., 2017).

The disclosure of personal information in the case of online purchasing is different. The process typically is formalized by terms of an agreement that includes aspects about how the provided personal data can be used. The other side grants its handling in accordance to the certain procedures that often are predetermined or assured by wider legal regulations (Goddard, 2017). Perceptions about the effectiveness of assurance are among the important factors in this type of social exchange (Hong et al., 2021). In online purchasing one side of interaction typically is an online store that requires to provide certain amount of information to enable a transaction. Additional amounts of personal information can be provided in exchange for other benefits – easier access, convenience in future transactions, monetary compensation, etc. (Malgiery & Custers, 2018). All this perfectly describes the information disclosure situation that SET categorizes as a negotiated social exchange. However, the negotiated exchanges between individuals and online stores are not necessarily continuous: a buyer may disclose personal data as it is required for a single-time transaction, and limit it to the scope of mandatory information that is absolutely necessary for the one specific transaction (Urbonavičius, 2020). Broader disclosure of personal data is required for registration to online stores, since it includes both the mandatory and additional items of personal information.

It is important that some empirical evidence confirms the interaction between social networking/personal data disclosure in social networks and willingness to disclose personal data in online shopping. Though not yet abundant, it allows to predict impact of reciprocal exchange on negotiated exchange (Zimaitis et al., 2020b; Degutis et al., 2020).

*Trust.* Trust is an antecedent of various behavioural intentions, and it is especially salient in social exchange relationships (Bernerth & Walker, 2009). Trust is also an essential factor for modelling numerous internet-based activities, including online transactions (Zhang et al., 2020). It is observed that online trust highly depends on past experiences with online activities (Chen et al., 2015; Dinev et al., 2006; Murphy, 2003) and develops over repeated interactions (Alarcon et al., 2018). In the disclosure of personal data as a social exchange, trust plays the role that is of the special importance, since it both creates and is created by the reciprocity of social exchange (Molm et al., 2000). When it regards transactions that require information, trust also is one of the major factors that encourage individuals to disclose information about themselves (Koohikamali et al., 2017). However, trust influences the willingness to disclose information in online purchasing (that is a form of negotiated exchange) not just directly. Since trust develops in the process of reciprocal social exchanges, that are present in social networking, the growing involvement in social media increases the level of personal disclosure in social networking. Additionally, self-disclosure is a result of trust-based perceptions about the safety of self-disclosure, which means that perceptions about the effectiveness of regulations mediate the impact of trust on self-disclosure. Thus, the total effects of trust on self-disclosure include its direct and all indirect impacts:

H1: Total effect of trust on self-disclosure in social networking is positive.

On the other hand, SET suggests that online selling also includes elements of reciprocity (Swoboda & Winters, 2021). Therefore, the above-mentioned effects of trust are also present in the process of data disclosure in online shopping. This is supported by the conceptual statement of SET developers that trust is important in both types of social exchange (Emerson, 1981). Again, this is applicable to the exchange of information: it is found that dispositional trust is one of the main predictors of the willingness to disclose personal data in online purchasing (Meinert et al., 2006; Chen et al., 2015; Keith et al., 2015; Zimaitis et al., 2020b). This is not limited to just the direct impact of trust on the willingness to exchange data. The impact of trust often is mediated by additional factors, two of them being extremely important.

First, having limited relative power against an online store, an individual tends to rely on additional assurance of third parties. Most typically, the role of a third party is played by legal systems, procedures and institutions that look after the privacy issues in online activities (Zimaitis et al., 2020b). Positive perception on effectiveness of regulations increases the relative power of individuals in their social exchange with online stores, and contribute to willingness to disclose personal data online. For instance, introduction of GDPR in 2018 increased buyers' sense of perceived security, third-party assurance and perceived openness (Zhang et al., 2020). Therefore, the impact of trust on willingness to disclose personal data online is mediated by perceived regulatory effectiveness.

Second, recent findings show that willingness to disclose personal data in online purchasing is also positively impacted by other online activity: social networking (Zimaitis et al., 2020b). Social networking or the overall involvement in social media might seem not closely linked with activities in online shopping; however, SET helps to explain this relationship. There is an evidence (Zimaitis et al., 2020b) that involvement in social media (reciprocal exchange) impacts the willingness to disclose data in online shopping (negotiated exchange). This even stronger justifies both direct and indirect impact of trust on willingness to disclose personal data in online shopping. Specifically, it means that the impact of trust on willingness to disclose personal data in online purchasing is mediated by factors that represent activities in social networking and are reciprocal by their nature.

Therefore, trust is expected to exert both direct and indirect positive impact on willingness to disclose personal data in online purchasing:

H2: Total effect of trust on willingness to disclose personal data in online purchasing is positive.

*Conspiracy beliefs.* Conspiracy beliefs refer to personal allegations that powerful groups or authorities are implementing misdemeanours or other unethical behaviours towards society and represents a form of distrust (van Prooijen & de Vries, 2016). Beliefs in conspiracies has been attracting attention of researchers already for some time; however, worldwide pandemic generated additional growth of interest for this phenomenon (Georgiou et al., 2020; Pellegrini et al., 2021). The nature of this factor suggests that people with higher level of conspiracy beliefs should be cautious about disclosing their personal information. At the same time, people, who believe in conspiracy theories, tend to be involved into social networking in order to find support and confirmation for their beliefs (Allington et al., 2021; Goreis &

Kothgassner, 2020). It is relevant to expect that conspiracy beliefs play more and more important role in social networking and positively impact involvement in social media that is influenced by numerous factors of both dispositional and situational nature (Chung et al., 2019). This is additionally justified by fact that some reasons for the involvement in social media might be triggered by rather unexpected personal characteristics (such as paranoia, as disclosed by Urbonavičius & Zimaitis, 2018; Zimaitis et al., 2020a) or by the search for information on rather controversial ideas, including conspiracy theories (Allington et al., 2021). Additionally, involvement in social networks offer opportunities to interact with others sharing similar ideas regarding conspiracies (Allington et al., 2021). Therefore, conspiracy beliefs are expected to have direct positive impact on involvement in social media. One of the reasons of involvement in social media includes the desire to preserve social image and enhance it in the eyes of significant others (Douglas et al., 2019). Being noticed and “visible” seems to be even more important to people who tend to represent original ideas, life-styles and beliefs (Bazarova & Choi, 2014). Therefore, conspiracy beliefs not just motivate to be active in social networking, but also stimulate conspiracy believers to self-disclose themselves to similar others in a more exaggerated way than typically. This justifies the proposition that conspiracy beliefs impact self-disclosure in social networking both directly and via mediation of the involvement in social networking. We predict that the total effect of conspiracy beliefs on self-disclosure in social networking is positive:

H3: Total effect of conspiracy beliefs on self-disclosure in social networking is positive.

The link between conspiracy beliefs and willingness to disclose personal data in online purchasing is still largely unknown and represents a research gap. However, individuals with conspiracy beliefs typically are cynical about the majority of regulations and express rather negative attitudes towards all kinds of authorities in general (Goreis & Voracek, 2019). Therefore, any regulated activity or request should be perceived by them negatively, and conspiracy beliefs should reduce the willingness to disclose personal data in all of them. Since the interaction between an individual and an online store is largely regulated, conspiracy beliefs should impact the willingness to disclose personal data in online purchasing negatively.

The direct negative impact of conspiracy beliefs on the willingness to disclose personal data in purchasing lacks empirical evidence, but is somehow predictable on the basis of the indirect considerations and logical arguments. However, the question how conspiracy beliefs influence the willingness to disclose data in online purchasing is complicated by the fact that the willingness is also impacted by the effects of social networking. Since it is predictable that conspiracy beliefs impact activities in social networking positively, these may exert further positive indirect effect of conspiracy beliefs towards the willingness to disclose data in online purchasing. This positive indirect effect would conflict with negative direct influence of conspiracy beliefs, and the direction of total effect on the willingness to disclose data in online shopping appears unknown. The lack of empirical evidence does not allow to know whether the direct negative or indirect positive effect is be stronger. We propose that the total effect of conspiracy beliefs will be negative, despite the existing indirect positive effects:

H4: Total effect of conspiracy beliefs on willingness to disclose personal data in online purchasing is negative.

*Mediators.* As discussed above, trust and conspiracy beliefs impact the dependent variables both directly and indirectly. The two considered mediators include involvement in social networking and the factor of perceived regulatory effectiveness.

*Involvement in social networking.* Networking with the help of social media is a part of daily lives of population (Appel et al., 2020). People are involved in social media in various ways and at different levels, but in all instances they share own information in exchange to information shared by their peers. From the perspective of social exchange theory, involvement in social networking is a form of mutual trust-based reciprocal exchange (Yang, 2019; Zimaitis et al., 2020b). This is even stronger supported by the fact that the use of social media platforms involves interactions between users with rather limited or non-existent formal regulations of the information exchange (King, 2018).

*Perceived regulatory effectiveness.* The concept of perceived regulatory effectiveness is associated with consumer attitudes regarding to capability of the legal regulations to provide protection for internet users in terms of the online privacy (Urbonavičius, 2020; Moyaery & Urbonavičius, 2021). This perception largely depends on a personal trait of trust (measured as general trust, dispositional trust, propensity to trust) (Sun et al., 2018). Perceived regulatory effectiveness has been found to be positively related with perceived privacy control (Xu et al., 2011) and perception of security (Balapour et al., 2020), but negatively linked to perceived privacy risks (Xu et al., 2011) and perceived privacy concerns (Skrinjaric et al., 2019). Most importantly, the perceived regulatory effectiveness has been found to be related to willingness to disclose personal data, as the negotiated type of social exchange (Skare et al., 2020; Urbonavičius, 2020; Zimaitis et al., 2020a).

## 2. Research model, measures and data

The study aims to assess total effects of trust and conspiracy beliefs on self-disclosure in social media and on willingness to disclose personal data in online purchasing. The modelling is based on social exchange theory and includes two mediators: involvement in social media and perceived regulatory effectiveness (Figure 1).

The key interest of this study is concentrated on the total effects of the two antecedents: trust and conspiracy beliefs on the two dependent variables: self-disclosure in social media and willingness to disclose personal data in online shopping. The set of total effects includes direct effects together with indirect effects that are mediated by involvement in social media

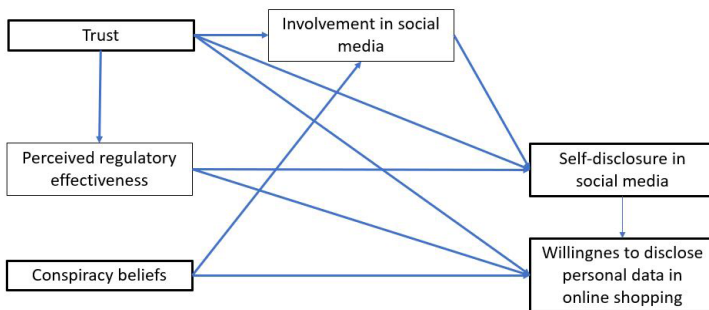


Figure 1. Research model



and perceived regulatory effectiveness. The importance of the two mediators and the presence of direct effects are justified by the earlier findings that help developing the research model (Zimaitis et al., 2020b).

The survey is based on the questionnaire, which included scales that has been successfully used in former studies. All items were measured on a 1–7 Likert scale. More specifically, the perceived regulatory effectiveness scale (3 items,  $\alpha = 0.83$ ) was adapted from Lwin et al. (2007); a minor amendment was made to include GDPR in one of the statements; the scale with this adaptation has been successfully used by Zimaitis et al. (2020a) and Urbonavicius et al. (2021). Trust was measured on a 4-item scale (Frazier et al., 2013). The involvement in social media was assessed with 10-items SMUIS scale, developed by Jenkins-Guarnieri et al. (2013). Self-disclosure was measured with 6-items scale, recently used by Jacobson et al. (2020). Willingness to disclose personal data (WTD) was measured by using the scale that was initiated by Gupta et al. (2010) and later used by Heirman et al. (2013). Conspiracy beliefs were assessed using the Brotherton et al. (2013) generic conspiracist beliefs scale. The scale was reduced to 7 items; two items were modified in order to include the two most recent conspiracy beliefs (vaccinations and 5G issues).

The data was collected in Lithuania with the use of a representative online survey; the sample included 1000 respondents. After visual inspection 15 unengaged respondents were removed, therefore the analysis was based on 985 responses. The sample included respondents from 15 to 60 years old; 29% were in the age group of 15–29; 32% the represented the group of 30–44; remaining 39% were 45–60 years old. By gender, 49% were males and 51% females. 53% of the respondents had university education.

Exploratory factor analysis (maximum likelihood; Promax rotation with Kaiser normalization) showed good sampling adequacy ( $KMO = 0.897$ ), Bartlett’s test of sphericity was significant (0.000), approx. Chi-square 1555.330,  $df = 345$ . The extracted factors explained 61.804 of the total variance (cumulative Eigenvalues 68.527). There were only 23 (4.0%) non-redundant residuals, which confirmed the adequacy. All loadings were above 0.5 (validity), at least 0.2 difference of variables in factors, and no more than 0.7 correlation between factors (the largest was 0.521), which refers to acceptable discriminant validity.

Confirmatory factor analysis showed a good model fit:  $CMIN/DF = 2.992$ ;  $TLI \rho_2 = 0.948$ ;  $CFI = 954$ ;  $RMSEA = 0.045$  (Byrne, 2010). Further validity check showed that in all instances average variance extracted (AVE)  $>0.5$ , composite reliability (CR)  $>0.7$ , root of AVE greater than correlations (Table 1).

Table 1. Validity checks

	CR	AVE	Conspir	SelfDiscl	RegEffect	SocMediaInt	Trust	WTD
Conspiracy	0.900	0.566	0.752					
Self-Disclosure	0.899	0.598	0.228	0.773				
Regulation Effectiveness	0.819	0.601	0.067	0.159	0.775			
Social Media	0.909	0.559	0.103	0.547	0.211	0.748		
Trust	0.914	0.726	0.039	0.176	0.272	0.233	0.852	
WTD	0.873	0.580	-0.041	0.020	0.298	0.185	0.270	0.762

The result of common latent bias test was positive (difference in chi-square = 518.8, difference in df = 32, p = 0.000), therefore the data imputation was performed with consideration of the common latent factor.

### 3. Testing of hypotheses

The fit of the structural model (CMIN/DF = 2.593; TLI = 0.982; CFI = 0.998; RMSEA = 0.040) allowed testing the hypotheses (Figure 2).

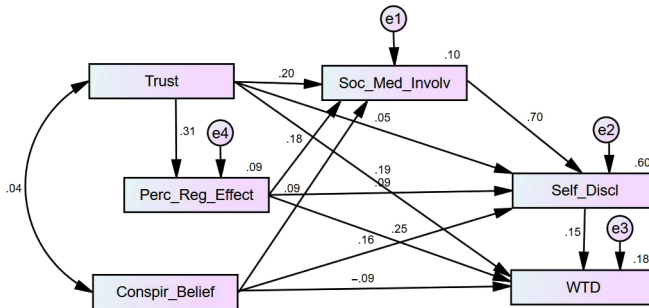


Figure 2. Structural model

All individual relationships in the model appeared significant.

*Direct effects.* All direct effects among the variables appeared significant. This means that every indirect effect, as well as all total effects are also significant, which allows to test hypotheses about total effects. The level of significance of direct effects was  $p < 0.001$  in all cases, except three instances: Conspiracy beliefs on social media involvement ( $p = 0.003$ ), trust on self-disclosure ( $p = 0.030$ ) and conspiracy beliefs on WTD ( $p = 0.003$ ).

*Mediation.* Involvement in social media mediated the relationships from trust to self-disclosure, from perceived regulatory effectiveness to self-disclosure and from conspiracy beliefs to self-disclosure. Its direct effect on self-disclosure was very strong ( $\beta = 0.703$ ,  $p < 0.001$ ). Perceived regulatory effectiveness was an important mediator of trust in regards to both dependent variables; its direct effect on self-disclosure in social networks was  $\beta = 0.088$ ; on willingness to disclose personal data in purchasing  $\beta = 0.246$  ( $p < 0.001$  in both instances).

The hypotheses were concentrating on the total effects of trust and conspiracy beliefs on self-disclosure in social networks and on willingness to disclose personal data in e-purchasing. For this, the standardized total effects have been assessed (Table 2).

Table 2. Standardized Total Effects

	Conspiracy beliefs	Trust
Self-disclosure	0.242	0.246
Willingness to disclose data in online purchasing	-0.062	0.304

Total effects of trust on self-disclosure in social media was strong and positive, thus H1 was confirmed. Trust influenced self-disclosure in three different ways: directly, via media-

tion of involvement in social media and via mediation of perceived regulatory effectiveness. Direct and indirect effects were positive and significant; however, the direct effect was weaker than indirect ( $\beta = 0.047$  and  $\beta = 0.204$ , respectively).

Total effect of trust on willingness to disclose data in online shopping was strong  $\beta = 0.304$ ; the hypothesis H2 was confirmed. This influence was composed from the direct effect  $\beta = 0.191$  and indirect effect of  $\beta = 0.113$  that is a sum of effects in four paths (see the structural model in Figure 2).

Hypothesis H3 predicted positive total effect of conspiracy beliefs on self-disclosure in social networking. It was confirmed, the total effect is  $\beta = 0.242$ . It is made up from the direct effect of  $\beta = 0.160$  and indirect effect with mediation of involvement in social media ( $\beta = 0.062$ ).

The most contradictory was H4, since it included aggregation of the direct negative and indirect positive effects of conspiracy beliefs on willingness to disclose data in online shopping. The analysis showed that the direct effect was negative  $\beta = -0.088$  and relatively stronger than indirect positive effect ( $\beta = 0.034$ ), which resulted in to negative total effect of  $\beta = -0.054$ . Therefore, H4 was confirmed.

#### **4. Discussion**

A causal model outlined two alternative ways how the analysed antecedents may impact willingness to disclose personal data in shopping online: in both cases the total effect is combined of direct and indirect (mediated) effects. The positive direct effect of trust is in compatibility with social exchange theory statements about the importance of negotiation type of exchange and trust in social interactions (Molm et al., 2000). Negative direct effect of conspiracy beliefs was rather under-researched and not empirically assessed, therefore the findings of the current study present a new evidence on the issue. The finding stays in accordance with the conceptualization of the construct as the one that is linked to the extreme distrust.

The second way how the analysed factors impact WTD is through social media involvement and via the self-disclosure in social networks. Both trust and conspiracy beliefs have positive relations with social media involvement, which positively and very strongly impacts self-disclosure and willingness to disclose personal data. These findings are in accordance with findings of earlier studies (e.g. Kim & Park, 2013; Chen et al., 2015; Koohikamali et al., 2017) that reported relation between trust and social media/self-disclosure. However, this study further elaborates on not much researched (only addressed by Urbonavicius et al., 2021) relation between reciprocal exchange (represented by disclosure of information in social media) and negotiated exchange (represented by disclosure of personal data in online shopping) and once again confirms suitability of social exchange theory for research on the topic of personal data disclosure.

Overall, the study demonstrates that conspiracy beliefs is an important factor for social networking and self-disclosure in social media (as predicted by Douglas et al., 2019; Goreis & Kothgassner, 2020). More specifically, the impact of conspiracy beliefs on self-disclosure in social networks is stronger than on general involvement in social media ( $\beta = 0.160$  and  $0.076$ , respectively). This is a very novel observation that signals that conspiracy beliefs are stronger

linked with demonstration of the self to others than being involved in other networking activities. It also contributes to the understanding of the issue by showing that conspiracy beliefs have an ambiguous impact on willingness to disclose personal data in online shopping: the direct negative effect is largely compensated by the positive indirect effect.

## Conclusions

*Conclusions and managerial implications.* The study allows to make several conclusions and managerial implications. First, the study confirms that influence of trust factors on willingness to disclose personal data online can be successfully grounded on SET. This adds to the theoretical knowledge about SET applications in marketing research. Second, the results suggest conclusion that trust is a very important factor in the SET-based model that positively influences both the data disclosure in social networking and the willingness to disclose personal data online. This is supported by other studies and is in-line with the conceptual framework of SET. Third, the study allows to conclude that conspiracy beliefs encourage involvement in social media and, consequently, the self-disclosure in social networking. However, in case of the willingness to disclose personal data in online shopping, the positive effect that is mediated by self-disclosure in social networking is weaker than negative direct effect of conspiracy beliefs. Therefore, the final conclusion is that conspiracy beliefs influence the willingness to disclose personal data in online shopping negatively.

The main managerial implication is based on the observation that negative effects of conspiracy beliefs on willingness to disclose personal data in online shopping could be at least partially neutralized through social networking that represents a two-way communication and stands for reciprocal social exchange. This suggests that businesses may consider a closer integration between the sites of social networking and online shopping, since the trust in social networking positively impacts the data disclosure in shopping.

Additionally, active support to regulatory systems as well as active promotion of social networking that prompts self-disclosure of consumers should be an aim of organizations that want to encourage disclosure of consumer data.

*Limitations and further research.* The main limitation of the current study is related to the scale that was used to measure conspiracy beliefs. The concept of conspiracy beliefs is rapidly evolving, and the tested beliefs have to be adequately included into studies. Though there is no evidence of any imperfections of the measurement in this study, the assessment of conspiracy beliefs remains to be limited to the specific time period and to the cultural context where the research has been performed.

The current study demonstrates importance of trust and conspiracy beliefs in regards of data disclosure and suggests ideas for future research. The findings suggest that further studies may consider to include factors of previous personal experience with personal data breaches, benefits of data disclosure, and power relations in exchange, which also are important aspects of SET. Additionally, future research can focus on how conspiracy beliefs impact institutional and interpersonal trust as the necessary elements of social exchanges.

## Funding

This project by the Research Council of Lithuania (LMTLT) under Agreement No S-MIP-19-19.

## Disclosure statement

Authors declare that they have no competing financial, professional, or personal interests from other parties.

## References

- Ahmad, W., & Sun, J. (2018). Modeling consumer distrust of online hotel reviews. *International Journal of Hospitality Management*, 71, 77–90. <https://doi.org/10.1016/j.ijhm.2017.12.005>
- Alarcon, G. M., Lyons, J. B., Christensen, J. C., Bowers, M. A., Klosterman, S. L., & Capiola, A. (2018). The role of propensity to trust and the five factor model across the trust process. *Journal of Research in Personality*, 75, 69–82. <https://doi.org/10.1016/j.jrp.2018.05.006>
- Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2021). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine*, 51(10), 1763–1769. <https://doi.org/10.1017/S003329172000224X>
- Appel, G., Grewal, L., Hadi, R., & Stephen, A. T. (2020). The future of social media in marketing. *Journal of the Academy of Marketing Science*, 48(1), 79–95. <https://doi.org/10.1007/s11747-019-00695-1>
- Balapour, A., Nikkhah, H. R., & Sabherwal, R. (2020). Mobile application security: Role of perceived privacy as the predictor of security perceptions. *International Journal of Information Management*, 52, 1–13. <https://doi.org/10.1016/j.ijinfomgt.2019.102063>
- Bansal, G., Zahedi, F. M., & Gefen, D. (2016). Do context and personality matter? Trust and privacy concerns in disclosing private information online. *Information & Management*, 53(1), 1–21. <https://doi.org/10.1016/j.im.2015.08.001>
- Barth, S., & de Jong, M. D. T. (2017). The privacy paradox – Investigating discrepancies between expressed privacy concerns and actual online behavior – A systematic literature review. *Telematics and Informatics*, 34(7), 1038–1058. <https://doi.org/10.1016/j.tele.2017.04.013>
- Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending the functional approach to disclosure motivations and characteristics on social network sites. *Journal of Communication*, 64(4), 635–657. <https://doi.org/10.1111/jcom.12106>
- Bernerth, J., & Walker, H. J. (2009). Propensity to trust and the impact on social exchange. An empirical investigation. *Journal of Leadership & Organizational Studies*, 15(3), 217–226. <https://doi.org/10.1177/1548051808326594>
- Blau, P. (1964). *Exchange and power in social life*. Wiley.
- Bleier, A., Goldfarb, A., & Tucker, C. (2020). Consumer privacy and the future of data-based innovation and marketing. *International Journal of Research in Marketing*, 37(3), 466–480. <https://doi.org/10.1016/j.ijresmar.2020.03.006>
- Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology*, 4, 1–15. <https://doi.org/10.3389/fpsyg.2013.00279>
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2<sup>nd</sup> ed.). Routledge Taylor & Francis Group.

- Chang, Y. S., & Fang, S. R. (2013). Antecedents and distinctions between online trust and distrust: Predicting high- and low-risk internet behaviors. *Journal of Electronic Commerce Research*, 14(2), 149.
- Chen, Y., Yan, X., Fan, W., & Gordon, M. (2015). The joint moderating role of trust propensity and gender on consumer's online shopping behaviour. *Computers in Human Behavior*, 43, 272–283. <https://doi.org/10.1016/j.chb.2014.10.020>
- Cheng, F. C., & Wang, Y. S. (2018). The do not track mechanism for digital footprint privacy protection in marketing applications. *Journal of Business Economics and Management*, 19(2), 253–267. <https://doi.org/10.3846/jbem.2018.5200>
- Cheng, J., Romero, D. M., Meeder, B., & Kleinberg, J. (2011). Predicting reciprocity in social networks. In *2011 IEEE Third International Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third International Conference on Social Computing* (pp. 49–56). IEEE. <https://doi.org/10.1109/PASSAT/SocialCom.2011.110>
- Cheshire, C. (2007). Selective incentives and generalized information exchange. *Social Psychology Quarterly*, 70(1), 82–100. <https://doi.org/10.1177/019027250707000109>
- Chung, K. L., Morshidi, I., Yoong, L. C., & Thian, K. N. (2019). The role of the dark tetrad and impulsivity in social media addiction: Findings from Malaysia. *Personality and Individual Differences*, 143, 62–67. <https://doi.org/10.1016/j.paid.2019.02.016>
- Degutis, M., Urbonavičius, S., Zimaitis, I., Skare, V., & Laurutyte, D. (2020). Willingness to disclose personal information: How to measure it? *Engineering Economics*, 31(4), 487–494. <https://doi.org/10.5755/j01.ee.31.4.25168>
- Dinev, T., Bellotto, M., Hart, P., Russo, V., Serra, I., & Colautti, C. (2006). Privacy calculus model in e-commerce – A study of Italy and the United States. *European Journal of Information Systems*, 15, 389–402. <https://doi.org/10.1057/palgrave.ejis.3000590>
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding conspiracy theories. *Political Psychology*, 40(S1), 3–35. <https://doi.org/10.1111/pops.12568>
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, 2, 335–362. <https://doi.org/10.1146/annurev.so.02.080176.002003>
- Emerson, R. M. (1981). Social exchange theory. In M. Rosenberg & R. H. Turner (Eds.), *Social psychology: Sociological perspectives* (pp. 30–65). Basic Books.
- Foa, U. G., & Foa, E. B. (1974). *Societal structures of the mind*. Charles Thomas.
- Frazier, M. L., Johnson, P. D., & Fainshmidt, S. (2013). Development and validation of a propensity to trust scale. *Journal of Trust Research*, 3(2), 76–97. <https://doi.org/10.1080/21515581.2013.820026>
- Georgiou, N., Delfabbro, P., & Balzan, R. (2020). COVID-19-related conspiracy beliefs and their relationship with perceived stress and pre-existing conspiracy beliefs. *Personality and Individual Differences*, 166, 110201. <https://doi.org/10.1016/j.paid.2020.110201>
- Goddard, M. (2017). The EU general data protection regulation (GDPR): European regulation that has a global impact. *International Journal of Market Research*, 59(6), 703–705. <https://doi.org/10.2501/IJMR-2017-050>
- Goreis, A., & Kothgassner, O. D. (2020). Social media as vehicle for conspiracy beliefs on COVID-19. *Digital Psychology*, 1(2), 36–39. <https://doi.org/10.24989/dp.v1i2.1866>
- Goreis, A., & Voracek, M. (2019). A systematic review and meta-analysis of psychological research on conspiracy beliefs: Field characteristics, measurement instruments, and associations with personality traits. *Frontiers in Psychology*, 10, 1–13. <https://doi.org/10.3389/fpsyg.2019.00205>
- Grosso, M., & Castaldo, S. (2014). Retailer-customers relationships in the online setting: An empirical investigation to overcome privacy concerns and improve information sharing. In F. Musso & E. Druica (Eds.), *Handbook of research on retailer-consumer relationship development* (pp. 404–425). IGI Global. <https://doi.org/10.4018/978-1-4666-6074-8.ch022>

- Gupta, B., Iyer, L. S., & Weisskirch, R. S. (2010). Facilitating global e-commerce: A comparison of consumers' willingness to disclose personal information online in the US and India. *Journal of Electronic Commerce Research*, 11(1), 41–52.
- Heirman, W., Walrave, M., Ponnet, K., & van Gool, E. (2013). Predicting adolescents' willingness to disclose personal information to a commercial website: Testing the applicability of a trust-based model. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 7(3), 3. <https://doi.org/10.5817/CP2013-3-3>
- Homans, G. C. (1961). *Social behaviour: Its elementary forms*. Taylor & Francis.
- Hong, W., Chan, F. K. Y., & Thong, J. Y. L. (2021). Drivers and inhibitors of internet privacy concern: A multidimensional development theory perspective. *Journal of Business Ethics*, 168, 539–564. <https://doi.org/10.1007/s10551-019-04237-1>
- Jacobson, J., Gruzd, A., & Hernández-García, Á. (2020). Social media marketing: Who is watching the watchers? *Journal of Retailing and Consumer Services*, 53, 1–12. <https://doi.org/10.1016/j.jretconser.2019.03.001>
- Jenkins-Guarnieri, M. A., Wright, S. L., & Johnson, B. (2013). Development and validation of a social media use integration scale. *Psychology of Popular Media Culture*, 2(1), 38–50. <https://doi.org/10.1037/a0030277>
- Joinson, A. N., & Paine, C. B. (2007). Self-disclosure, privacy and the internet. In *Oxford handbook of Internet psychology* (pp. 237–252). Oxford University Press.
- Kehr, F., Kowatsch, T., Wentzel, D., & Fleisch, E. (2015). Blissfully ignorant: The effects of general privacy concerns, general institutional trust, and affect in the privacy calculus. *Information Systems Journal*, 25(6), 607–635. <https://doi.org/10.1111/isj.12062>
- Keith, M. J., Babb, J. S., Lowry, P. B., Furner, C. P., & Abdullat, A. (2015). The role of mobile-computing self-efficacy in consumer information disclosure. *Information Systems Journal*, 25(6), 637–667. <https://doi.org/10.1111/isj.12082>
- Kim, D., Park, K., Park, Y., & Ahn, J. H. (2019). Willingness to provide personal information: Perspective of privacy calculus in IoT services. *Computers in Human Behavior*, 92, 273–281. <https://doi.org/10.1016/j.chb.2018.11.022>
- Kim, J., & Kim, J. (2014). A study on the causes of information privacy concerns and protective responses in e-commerce: Focusing on the principal-agent theory. *The Journal of Information Systems*, 23(4), 119–145. <https://doi.org/10.5859/KAIS.2014.23.4.119>
- Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, 33(2), 318–332. <https://doi.org/10.1016/j.ijinfomgt.2012.11.006>
- King, J. (2018). *Privacy, disclosure, and social exchange theory* [Dissertation]. University of California, Berkeley.
- Koe, W. L., & Sakir, N. A. (2020). The motivation to adopt e-commerce among Malaysian entrepreneurs. *Organizations and Markets in Emerging Economies*, 11(1), 189–202. <https://doi.org/10.15388/omee.2020.11.30>
- Koohikamali, M., Peak, D. A., & Prybutok, V. (2017). Beyond self-disclosure: disclosure of information about others in social network sites. *Computers in Human Behaviour*, 69, 29–42. <https://doi.org/10.1016/j.chb.2016.12.012>
- Lee, S., & Choi, J. (2017). Enhancing user experience with conversational agent for movie recommendation: Effects of self-disclosure and reciprocity. *International Journal of Human-Computer Studies*, 103, 95–105. <https://doi.org/10.1016/j.ijhcs.2017.02.005>
- Lévi-Strauss, C. (1969). *The elementary structures of kinship* (Revised ed.). Beacon.

- Lin, C. Y., Chou, E. Y., & Huang, H. C. (2020). They support, so we talk: The effects of other users on self-disclosure on social networking sites. *Information Technology & People*, 34(3), 1039–1064. <https://doi.org/10.1108/ITP-10-2018-0463>
- Lwin, M., Wirtz, J., & Williams, J. D. (2007). Consumer online privacy concerns and responses: A power–responsibility equilibrium perspective. *Journal of the Academy of Marketing Science*, 35(4), 572–585. <https://doi.org/10.1007/s11747-006-0003-3>
- Malgieri, G., & Custers, B. (2018). Pricing privacy – the right to know the value of your personal data. *Computer Law & Security Review*, 34(2), 289–303. <https://doi.org/10.1016/j.clsr.2017.08.006>
- Martin, K. D., & Palmatier, R. W. (2020). Data privacy in retail: Navigating tensions and directing future research. *Journal of Retailing*, 94(4), 449–457. <https://doi.org/10.1016/j.jretai.2020.10.002>
- Masur, P. K. (2019). The theory of situational privacy and self-disclosure. In *Situational privacy and self-disclosure* (pp. 131–182). Springer, Cham. [https://doi.org/10.1007/978-3-319-78884-5\\_7](https://doi.org/10.1007/978-3-319-78884-5_7)
- Meier, Y., Schäwel, J., & Krämer, N. C. (2020). The shorter the better? Effects of privacy policy length on online privacy decision-making. *Media and Communication*, 8(2), 291–301. <https://doi.org/10.17645/mac.v8i2.2846>
- Meinert, D. B., Peterson, D. K., Criswell, J. R., & Crossland, M. D. (2006). Privacy policy statements and consumer willingness to provide personal information. *Journal of Electronic Commerce in Organizations*, 4(1), 1–17. <https://doi.org/10.4018/jeco.2006010101>
- Metzger, M. (2004). Privacy, trust, and disclosure: Exploring barriers to electronic commerce. *Journal of Computer-Mediated Communication*, 9(4). <https://doi.org/10.1111/j.1083-6101.2004.tb00292.x>
- Molm, L., Takahashi, N., & Peterson, G. (2000). Risk and trust in social exchange: An experimental test of a classical proposition. *American Journal of Sociology*, 105(5), 1396–1427. <https://doi.org/10.1086/210434>
- Morimoto, M. (2021). Privacy concerns about personalized advertising across multiple social media platforms in Japan: The relationship with information control and persuasion knowledge. *International Journal of Advertising*, 40(3), 431–451. <https://doi.org/10.1080/02650487.2020.1796322>
- Mosteller, J., & Poddar, A. (2017). To share and protect: Using regulatory focus theory to examine the privacy paradox of consumers' social media engagement and online privacy protection behaviors. *Journal of Interactive Marketing*, 39, 27–38. <https://doi.org/10.1016/j.intmar.2017.02.003>
- Moyaery, M., & Urbonavičius, S. (2021). Importance of privacy regulatory environments on willingness to disclose personal data in e-stores. In *Proceedings of AIRSI 2021 Conference* (pp. 41–44). Zaragoza University, Spain.
- Murphy, G. B. (2003). Propensity to trust, purchase experience, and trusting beliefs of unfamiliar e-commerce ventures. *New England Journal of Entrepreneurship*, 6(2), 53–64. <https://doi.org/10.1108/NEJE-06-02-2003-B008>
- Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *Journal of Consumer Affairs*, 41(1), 100–126. <https://doi.org/10.1111/j.1745-6606.2006.00070.x>
- Olk, P. M., & Gibbons, D. E. (2010). Dynamics of friendship reciprocity among professional adults. *Journal of Applied Social Psychology*, 40(5), 1146–1171. <https://doi.org/10.1111/j.1559-1816.2010.00614.x>
- Padyab, A., Päivärinta, T., Ståhlbröst, A., & Bergvall-Kärebörn, B. (2019). Awareness of indirect information disclosure on social network sites. *Social Media+ Society*, 5(2), 2056305118824199. <https://doi.org/10.1177/2056305118824199>
- Parker, H. J., & Flowerday, S. (2021). Understanding the disclosure of personal data online. *Information & Computer Security*, 29(3), 413–434. <https://doi.org/10.1108/ICS-10-2020-0168>
- Pellegrini, V., Giacomantonio, M., De Cristofaro, V., Salvati, M., Brasini, M., Carlo, E., Mancini, F., & Leone, L. (2021). Is Covid-19 a natural event? Covid-19 pandemic and conspiracy beliefs. *Personality and Individual Differences*, 188, 111011. <https://doi.org/10.1016/j.paid.2021.111011>



- Prince, C. (2018). Do consumers want to control their personal data? Empirical evidence. *International Journal of Human-Computer Studies*, 110, 21–32. <https://doi.org/10.1016/j.ijhcs.2017.10.003>
- Robinson, C. (2017). Disclosure of personal data in ecommerce: A cross-national comparison of Estonia and the United States. *Telematics and Informatics*, 34(2), 569–582. <https://doi.org/10.1016/j.tele.2016.09.006>
- Robinson, S. C. (2018). Factors predicting attitude toward disclosing personal data online. *Journal of Organizational Computing and Electronic Commerce*, 28(3), 214–233. <https://doi.org/10.1080/10919392.2018.1482601>
- Schlosser, A. E. (2020). Self-disclosure versus self-presentation on Social media. *Current Opinion in Psychology*, 31, 1–6. <https://doi.org/10.1016/j.copsyc.2019.06.025>
- Shpak, N., Kuzmin, O., Dvulit, Z., Onysenko, T., & Sroka, W. (2020). Digitalization of the marketing activities of enterprises: Case study. *Information*, 11(2), 109. <https://doi.org/10.3390/info11020109>
- Skare, V., Urbonavicius, S., Laurutyte, D., & Zimaitis, I. (2020). Dispositional willingness to provide personal data online: Antecedents and the mechanism. In *Proceedings of the European Marketing Academy 49<sup>th</sup> Conference*.
- Skrinjaric, B., Budak, J., & Rajh, E. (2019). Perceived quality of privacy protection regulations and online privacy concern. *Economic Research-Ekonomska Istraživanja*, 32(1), 982–1000. <https://doi.org/10.1080/1331677X.2019.1585272>
- Strycharz, J., van Noort, G., Helberger, N., & Smit, E. (2019). Contrasting perspectives-practitioner's viewpoint on personalised marketing communication. *European Journal of Marketing*, 53(4), 635–660. <https://doi.org/10.1108/EJM-11-2017-0896>
- Sun, Y., Zhang, Y., Shen, X. L., Wang, N., Zhang, X., & Wu, Y. (2018). Understanding the trust building mechanisms in social media: Regulatory effectiveness, trust transfer, and gender difference. *Aslib Journal of Information Management*, 70(5), 498–517. <https://doi.org/10.1108/AJIM-03-2018-0072>
- Swoboda, B., & Winters, A. (2021). Reciprocity within major retail purchase channels and their effects on overall, offline and online loyalty. *Journal of Business Research*, 125, 279–294. <https://doi.org/10.1016/j.jbusres.2020.12.024>
- Urbonavičius, S. (2020). Willingness to disclose personal data online: Not just a situational issue. In *Proceedings of AIRSI 2020 Conference* (pp. 66–90). Zaragoza University, Spain.
- Urbonavičius, S., & Zimaitis, I. (2018). The mediating role of paranoia on online consumer behaviour. In *Proceedings of the 9<sup>th</sup> EMAC Regional Conference*. Prague, Czech Republic.
- Urbonavicius, S., Degutis, M., Zimaitis, I., Kaduskeviciute, V., & Skare, V. (2021). From social networking to willingness to disclose personal data when shopping online: Modelling in the context of social exchange theory. *Journal of Business Research*, 136, 76–85. <https://doi.org/10.1016/j.jbusres.2021.07.031>
- Vadana, I. I., Torkkeli, L., Kuivalainen, O., & Saarenketo, S. (2019). Digitalization of companies in international entrepreneurship and marketing. *International Marketing Review*, 37(3), 471–492. <https://doi.org/10.1108/IMR-04-2018-0129>
- van der Schyff, K., Flowerday, S., & Furnell, S. (2020). Duplicitous social media and data surveillance: An evaluation of privacy risk. *Computers & Security*, 94, 101822. <https://doi.org/10.1016/j.cose.2020.101822>
- van Prooijen, J.-W., & de Vries, R. E. (2016). Organizational conspiracy beliefs: Implications for leadership styles and employee outcomes. *Journal of Business Psychology*, 31, 479–491. <https://doi.org/10.1007/s10869-015-9428-3>
- Varnali, K., & Toker, A. (2015). Self-disclosure on social networking sites. *Social Behavior and Personality*, 43(1), 1–14. <https://doi.org/10.2224/sbp.2015.43.1.1>
- Wakefield, R. (2013). The influence of user affect in online information disclosure. *The Journal of Strategic Information Systems*, 22(2), 157–174. <https://doi.org/10.1016/j.jsis.2013.01.003>

- Wang, T., Duong, T. D., & Chen, C. C. (2016). Intention to disclose personal information via mobile applications: A privacy calculus perspective. *International Journal of Information Management*, 36(4), 531–542. <https://doi.org/10.1016/j.ijinfomgt.2016.03.003>
- Weinberger, M., Bouhnik, D., & Zhitomirsky-Geffet, M. (2017a). Factors affecting students' privacy paradox and privacy protection behavior. *Open Information Science*, 1(1), 3–20. <https://doi.org/10.1515/opis-2017-0002>
- Weinberger, M., Zhitomirsky-Geffet, M., & Bouhnik, D. (2017b). Factors affecting users' online privacy literacy among students in Israel. *Online Information Review*, 41(5), 655–671. <https://doi.org/10.1108/OIR-05-2016-0127>
- Wirtz, B. W., Göttel, V., & Daiser, P. (2017). Social networks: Usage intensity and effects on personalized advertising. *Journal of Electronic Commerce Research*, 18(2), 103–123.
- Xu, H., Dinev, T., Smith, J., & Hart, P. (2011). Information privacy concerns: Linking individual perceptions with institutional privacy assurances. *Journal of the Association for Information Systems*, 12(12), 798–824. <https://doi.org/10.17705/1jais.00281>
- Yang, X. (2019). How perceived social distance and trust influence reciprocity expectations and eWOM sharing intention in social commerce. *Industrial Management & Data Systems*, 119(4), 867–880. <https://doi.org/10.1108/IMDS-04-2018-0139>
- Zhang, J., Hassandoust, F., & Williams, J. E. (2020). Online customer trust in the context of the general data protection regulation (GDPR). *Pacific Asia Journal of the Association for Information Systems*, 12(1), 86–122. <https://doi.org/10.17705/1pais.12104>
- Zhang, R., & Fu, J. S. (2020). Privacy management and self-disclosure on social network sites: The moderating effects of stress and gender. *Journal of Computer-Mediated Communication*, 25(3), 236–251. <https://doi.org/10.1093/jcmc/zmaa004>
- Zhao, J., Zhu, C., Peng, Z., Xu, X., & Liu, Y. (2018). User willingness toward knowledge sharing in social networks. *Sustainability*, 10(12), 4680. <https://doi.org/10.3390/su10124680>
- Zimaitis, I., Degutis, M., & Urbonavicius, S. (2020a). Social media use and paranoia: Factors that matter in online shopping. *Sustainability*, 12(3), 904. <https://doi.org/10.3390/su12030904>
- Zimaitis, I., Urbonavicius, S., Degutis, M., & Kaduskeviciute, V. (2020b). Impact of age on the willingness to disclose personal data in e-shopping. In *Proceedings of EMAC 11<sup>th</sup> Regional Conference*. Zagreb. <http://proceedings.emac-online.org/pdfs/R2020-84569.pdf>
- Zimmer, J. C., Arsal, R. E., Al-Marzouq, M., & Grover, V. (2010). Investigating online information disclosure: Effects of information relevance, trust and risk. *Information & Management*, 47(2), 115–123. <https://doi.org/10.1016/j.im.2009.12.003>