

Norms as Regulating Factors for Self-Disclosure in a Collapsed Context: Norm Orientation Among Referent Others on Facebook

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Users face the challenge of balancing the tension between disclosing and concealing personal information on social network sites. We argue that users handle this challenge by collectively establishing norms. Applying a focus group methodology, we analyzed which norms of self-disclosure exist among German Facebook users and the reference groups to which they referred, how they shape users' self-disclosure practices on Facebook, and how these norms and practices have changed over time. Descriptive norms manifested themselves mainly by referring to negative self-disclosure practices of relevant others, but the injunctive norms of self-disclosure were of great relevance to the participants. The participants stated that users should present themselves strategically, communicate consciously concerning their privacy, and not post about the private lives of others. Users can manage the context collapse on Facebook by adapting their communicative activities there to the norms they perceive within their reference groups.

Keywords: norms, self-disclosure, privacy, reference group, context collapse, Facebook

Using social network sites (SNSs) always means disclosing information about oneself (Taddicken & Jers, 2011). The necessity to provide personal information on SNSs may cause conflicts about how to handle self-disclosure. On the one hand, the more users disclose about themselves, the more they may benefit from using SNSs. On the other hand, the more users disclose, the more they risk their privacy (Walther, 2011). Consequently, users face the challenge of balancing a "tension between revealing and concealing information" (Vitak & Ellison, 2012, p. 244) on SNSs. This challenge becomes increasingly difficult given that SNSs converge people from different contexts into one audience (Davis & Jurgenson, 2014). This flattening of multiple audiences into one homogenous group has been termed "context collapse" (Marwick & boyd, 2010; Vitak, 2012). Trying to handle the requirement to disclose oneself simultaneously to family, friends, and coworkers on SNSs might result in strategies for managing context collapse, such as self-censorship (Marwick & boyd, 2014; Vitak, Blasiola, Patil, & Litt, 2015) as well as apathetic attitudes. Users express resignation about inevitable privacy violations due to the practices of other users who also disclose

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Date submitted: 2018-11-17

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information about them, while simultaneously regarding the option to quit SNSs as unrealistic (Hargittai & Marwick, 2016).

On SNSs, privacy is networked because the practices of users implicate each other and achieving privacy “requires that people have an understanding of and influence in shaping the context in which information is being interpreted” (Marwick & boyd, 2014, p. 1063). The concept of networked privacy demonstrates that managing context collapse only partly works out on an individual level, but also has to be practiced collectively. Therefore, we argue that questions of self-disclosure tackle the entanglement between individual options and collective processes to control privacy and that a better understanding is needed of how these two levels are intertwined. We regard the use of SNSs as a practice that occurs in a distinct social sphere where users negotiate among each other what personal information can be shared on SNSs and to whom. During this active negotiation process, norms are formed (Postmes, Spears, & Lea, 2000) that help inform users how to use SNSs (Ammari & Schoenebeck, 2015; Lambert, 2016; McLaughlin & Vitak, 2011; Uski & Lampinen, 2016).

Against the background of context collapse on SNSs, the present study, therefore, examined norms that regulate self-disclosure on Facebook to understand their impact on communication processes. Applying a focus group methodology, we analyzed which norms of self-disclosure exist among German Facebook users and the reference groups to which they refer, how they shape users’ actual self-disclosure practices on Facebook, and how these norms and practices change over time. In doing so, we aimed to fill the gap in the existing literature in three ways: First, rather than conceptualizing norms broadly as rules that guide behavior, this study distinguished between descriptive and injunctive norms, thus capturing both typical self-disclosure practices on SNSs as well as appropriate and inappropriate forms of self-disclosure. Second, instead of addressing the norms of self-disclosure merely as one of several factors of Facebook use in general, this study analyzed the types of norms of self-disclosure and the relevant reference groups to which they refer explicitly. Third, this study extends existing research on the entanglement of privacy concerns and norms of self-disclosure by applying it to highly privacy-sensitive SNS users. Compared with SNS users of other European and non-European countries, German SNS users are more concerned about their online privacy and more deliberate when posting personal information (Trepte & Masur, 2016). Thus, questions of self-disclosure should be highly relevant to German Facebook users, as norms of self-disclosure are believed to be negotiated comprehensively among this group. This study focused on Facebook because it is the most popular SNS, with 2.2 billion users worldwide. The present study included Facebook users of a broad age range (17–67 years of age) and, thus, presents norms that are shared by a certain scope of German Facebook users.

Selective Self-Disclosure Toward Multiple Audiences on SNSs

Self-disclosure is a precondition for any social interaction and an integral part of communication (Altman & Taylor, 1973; Wheeless & Grotz, 1976). The concept comprises the process of revealing “any message about the self that a person communicates to another” (Wheeless & Grotz, 1976, p. 338). Revealing personal information fulfills an important function for an individual as it strengthens social ties and bonds in relationships (Jourard, 1971). However, revealing personal information also implies that information belonging to an individual is now co-owned by others who may partially control that information; hence,

self-disclosure can be seen as the result of an individual's attempt to balance benefits and risks (Petronio, 2002). Specific properties on SNSs underlie this negotiation process that are typically not present in face-to-face interactions (boyd, 2007; Taddicken, 2014): Self-disclosed information is persistent and can be copied and distributed to a large number of scattered users, including invisible audiences. Thus, personal information that is revealed on an SNS may be accessible to all people across space and time, and SNS users have actively adapted their communication accordingly.

Previous studies on self-disclosure on SNSs have shown that users commonly disclose some factual information, such as their real names, and sensitive information, such as their political views or personal photos and experiences on the social Web (Acquisti & Gross, 2006; Taddicken, 2014; Tufekci, 2008). These studies illustrate that the extent of self-disclosure and the quality of the information provided on SNSs often relate to users' informational privacy: "the ability to control who gathers and disseminates information about one's self . . . under what circumstances" (Burgoon et al., 1989, p. 134). Findings indicate that the meaning a culture places on informational privacy seems to play a crucial role in the privacy rules adopted by individuals (Petronio, 2002). Privacy also seems to be based on collective concepts that are shared in a specific context. Privacy expectations, for example, are reportedly higher in the European Union than in non-European countries, such as the United States or China (Trepte & Masur, 2016). German social media users especially value privacy, as they are more deliberate about the information they post on SNSs than other European users, such as users in the United Kingdom or the Netherlands (Trepte & Masur, 2016). Relatedly, there is considerable legislation surrounding privacy in Germany, which is protected by the right of informational self-determination (BVerfG, 1983). Thus, the sociolegal environment of a culture can contribute to its privacy norms (Baruh, Secinti, & Cemalcilar, 2017). In addition, privacy norms relate not only to what and how much personal information users disclose on SNSs, but also to whom. Thus, users may disclose themselves selectively toward multiple audiences.

Context Collapse on SNSs

As SNSs are growing, users' networks may become larger and more diversified, including people from different aspects of users' lives, such as family, friends, classmates, coworkers, and neighbors (Vitak et al., 2015). Consequently, private and public spheres are blurred because previous segmented contexts collapse and commonly distinct social groups are brought together. Individuals in offline settings hold many identities, which remain relatively separate from one another and perform multiple roles. Individuals seek to maintain the identities associated with each role and their related networks (Davis & Jurgenson, 2014). According to Mead (1934), for each role an individual is performing, he or she refers to a generalized other, namely the individual's understanding of what the average counterpart for whom the role is performed expects of him or her. Individuals tailor their self-presentation to varying audiences to realize an appropriate performance of their numerous identities (Goffman, 1959). On SNSs, such differentiations do not work anymore. The generalized others converge into one unspecific group, requiring users to simultaneously fulfill the expectations of different audiences that potentially conflict with one another and manage their performance in light of these audiences (Davis & Jurgenson, 2014). Thus, self-disclosure on SNSs becomes increasingly challenging when users "can no longer distinguish the audience for whom they are performing or when they cannot easily alter those performances for different audiences" (Vitak et al., 2015, p. 1486).

This holds especially true for Facebook. Facebook is a friend-based SNS on which users tend to connect predominantly with people with whom they have a preexisting offline connection. Facebook friends typically are close people but also people who users once knew but no longer have contact with or even people they have not met in person (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). The default is that all users who a Facebook user has accepted as a “friend” can see all content; thus, the audience to whom a user is disclosing personal information is often not entirely known. This problem is aggravated by the fact that Facebook changes its privacy policies frequently, complicating the privacy settings for its users. In addition, Facebook’s site structure promotes public communication over more personal communication, making it difficult to disclose oneself to different audiences selectively (Hargittai & Marwick, 2016; Vitak, 2012; Vitak et al., 2015). Twitter and Instagram are unidirectional SNSs on which users often follow others without these users having to follow in return. Similar to Facebook, communication on Twitter and Instagram is more public and spans different audiences. However, both SNSs provide only limited modalities of content and focus on short text messages or pictures. Thus, the multiple modalities of content that can be shared on Facebook make it harder for users to control their self-disclosure toward various audiences in different modalities of content (Marwick & boyd, 2010; Waterloo, Baumgartner, Peter, & Valkenburg, 2018).

As previous research has shown, Facebook users engage in several technical and social strategies to manage their privacy concerns and to avoid context collapse (Vitak, 2012; Vitak et al., 2015). However, as Facebook continues to grow and diversify in users, these strategies of privacy management may sometimes be insufficient to align multiple audiences. We argue that the collective negotiation of norms among Facebook users serves as an additional mechanism to minimize the risks of inappropriate self-disclosure on Facebook. Drawing on the concept of networked privacy, Marwick and boyd (2014) illustrate that privacy on SNSs is not an individual process because users have only a little control over what their Facebook friends post about them and how they handle the information received. Instead, privacy is a social construct that can be achieved only through the ongoing understanding of networked contexts. Consequently, “privacy might best be maintained through shared social norms over information-sharing” (Marwick & boyd, 2014, p. 1063). Thus, users learn about and negotiate norms through direct observations and interactions on Facebook; these norms help inform users about the appropriateness of disclosing personal information in a collapsed context (Lambert, 2016; McLaughlin & Vitak, 2011; Uski & Lampinen, 2016) and, ultimately, adjust their own behaviors to these norms.

Descriptive and Injunctive Norms

The concept of norms clarifies how members of a group establish rules to coordinate their interactions. However, the study of norms lacks consistent terminology; hence, researchers have introduced different conceptualizations and types of norms (for an overview, see Chung & Rimal, 2016; Interis, 2011). We follow the established distinction between descriptive and injunctive norms, which was first introduced by Cialdini and colleagues (Cialdini, Kallgren, & Reno, 1991; Cialdini & Trost, 1998). Descriptive norms illustrate what most people do, and injunctive norms refer to the perception of what most people approve or disapprove of. Hence, descriptive norms express the norm of “is,” whereas injunctive norms express the norm of “ought” (Cialdini et al., 1991). Descriptive norms provide information about the strength of a norm by referring to individuals’ beliefs about how widespread a particular behavior is (Rimal & Real, 2003, 2005). Injunctive norms refer to the “extent to which

individuals feel pressured into engaging in a behavior" (Rimal & Real, 2003, p. 186). This pressure can comprise either perceived threats or perceived benefits, and arises from the expectation of whether a behavior is right or wrong. A violation of this expectation usually implies sanctions (Interis, 2011). Thus, a major difference between descriptive and injunctive norms is that noncompliance with injunctive norms typically entails social sanctions, whereas noncompliance with descriptive norms is usually free of such sanctions (Cialdini & Trost, 1998; Interis, 2011; Lapinski & Rimal, 2005).

Although descriptive and injunctive norms are often congruent, they are sometimes also in conflict with one another (Chung & Rimal, 2016) and can have an independent influence on an individual's behavior. Although some researchers have postulated that only descriptive norms have a direct effect on behaviors and injunctive norms solely moderate this influence (Rimal & Real, 2005), empirical findings have demonstrated a direct influence from both descriptive norms (Cialdini, 2007; Mollen, Rimal, Ruiter, & Kok, 2013) and injunctive norms (Baumgartner, Valkenburg, & Peter, 2011; Rimal & Real, 2005) on behavioral intent. Consequently, descriptive and injunctive norms can be regarded as two distinct types of norms, as shown in a confirmatory factor analysis by Park and Smith (2007). Thus, it seems likely that both play a role in negotiating the appropriate extent of self-disclosure on Facebook.

Both descriptive and injunctive norms depend on a reference group, that is, referent others who behave in a specific way and approve or disapprove of the respective behavior (Interis, 2011; Rimal & Real, 2003). A reference group is "a group, collectivity, or person which the actor takes into account in some manner in the course of selecting a behavior from among a set of alternatives, or in making a judgment about a problematic issue" (Kemper, 1968, p. 32). Thus, a reference group comprises those people whose expectations matter to an individual in a specific situation and provide orientation to the individual. In doing so, reference groups serve to guide individuals toward playing their appropriate roles in society (Kemper, 1968).

In the present study, we conceptualized descriptive and injunctive norms as perceived norms (Rimal & Real, 2003). Perceived norms refer to a collective social entity's code of conduct and represent each individual's understanding and construction of the prevailing collective norm. Perceived descriptive norms refer to individuals' perceptions about the prevalence of a specific behavior, and perceived injunctive norms refer to the perceived pressure to conform. These norms can be measured by asking individuals about their beliefs regarding behaviors that are common among and approved by referent others (Lapinski & Rimal, 2005; Rimal & Lapinski, 2015). The present study focused on the perceived descriptive and injunctive norms that regulate users' self-disclosure on Facebook.

Norms Regulating Self-Disclosure on Facebook

Previous research has indicated that norms of online self-disclosure are distinct from norms of offline self-disclosure (Mesch & Beker, 2010) and that norms of online self-disclosure are a central factor in self-disclosure on SNSs. However, it is hard to identify a preexisting set of norms that defines how to use SNSs, such as Facebook, appropriately, given that Facebook is a medium that is constantly evolving and expanding to new individuals and groups (Vitak et al., 2015). In addition, attempts to develop a written list of rules for behaviors on Facebook, such as Netiquette, are often ineffective and too broad

(Preece, 2004). Previous studies on norms and SNSs have indicated that users, nevertheless, perceive implicit norms of self-disclosure and privacy. Lambert (2016) demonstrated that Australian users are aware of norms regarding appropriate self-disclosure. The participants of his study did not approve of overly intimate posts, but simultaneously disapproved of posts that were not intimate enough. By changing the communication channel from a public interaction (i.e., the wall or status updates) to a more private channel (i.e., Chat or Messenger), the Facebook users adjusted their behaviors to "what they believe are the norms of appropriate public intimacy" (Lambert, 2016, p. 2568). McLaughlin and Vitak (2011) examined the norms of friending practices, communication, and photo sharing on Facebook among college students in the United States. Their analysis revealed that users are considerate of their friends' expectations and goals for self-presentation, indicating a norm of consideration or privacy. Research also has shown that parents are highly sensitive about sharing information on SNSs that might violate their children's privacy (Ammari & Schoenebeck, 2015). These findings suggest that Facebook users are striving to figure out how to communicate on Facebook appropriately and that communication on Facebook is based on norms. Thus, we argue that Facebook users negotiate norms of self-disclosure behind the background of a collapsed context.

Collapsing contexts have become a relevant factor of interactions on SNSs, especially on Facebook. There, people from different social contexts and of varying degrees of perceived relational closeness, such as family, friends, classmates, coworkers, neighbors, and even people who users have not met in person, converge into one's Facebook friends (Vitak, 2012; Vitak et al., 2015). As users interact with numerous groups on Facebook, groups with different norms may intermingle within an individual's Facebook friends (McLaughlin & Vitak, 2011) and, by association, within her or his audience, too. As norms of self-disclosure on Facebook must be balanced among heterogeneous users, it is necessary to focus on users' reference groups concerning norm orientation to understand how self-disclosure is managed. As research has shown, users distinguish between Facebook friends and actual friends (Vitak et al., 2015). Correspondingly, users might also make a distinction between their Facebook friends and their reference group, that is, those people whose expectations matter to them when disclosing personal information and who provide orientation to them (Kemper, 1968). Therefore, we aimed to gain a deeper understanding of how users' reference groups relate to the broad group of Facebook friends:

RQ1: How do German Facebook users perceive their reference group when considering norms of self-disclosure? How does this perception compare with their conceptualization of Facebook friends?

It is difficult to find a detailed analysis of self-disclosure norms on Facebook in recent studies. Most studies have addressed the questions of self-disclosure and privacy as a smaller component of more general research questions (Ammari & Schoenebeck, 2015; Lambert, 2016; McLaughlin & Vitak, 2011). Research has provided few empirical insights into the types of self-disclosure norms that exist on Facebook and how they relate to users' actual communication on Facebook. Therefore, it is important to not only identify the relevant norms of self-disclosure, but also to examine how these norms shape the use of Facebook in our daily lives. Knowing the underlying processes and mechanisms of this negotiation process will allow us to assess the benefits and risks perceived by Facebook users more appropriately. Therefore, we distinguished between users' perceptions about what information their referent others

typically disclose on Facebook (perceived descriptive norms) and what information is approved by their referent others (perceived injunctive norms). We, therefore, asked the following:

RQ2: Which descriptive norms of self-disclosure are perceived among German Facebook users?

RQ3: Which perceived injunctive norms of self-disclosure are shared among German Facebook users, and how do they guide users' self-disclosure on Facebook?

In addition, initial studies have shown that Facebook users become more skilled at navigating Facebook over time, increase their privacy settings, and reduce the amount of personal information on Facebook (McLaughlin & Vitak, 2011). Although Facebook has been regarded as a medium of the younger generation for a long time, a growing number of middle-age and older adults have recently been joining Facebook, making it the primary platform for most SNS users. At the same time, younger users increasingly use other SNSs such as Snapchat or Instagram additionally (Koch & Frees, 2017; Smith & Anderson, 2018). The specific manners regarding using Facebook might have changed over the course of time, not only because of the expansion to new individuals and groups, but also to its continuous diversification of communicative features. Consequently, users' established sets of norms might also change. Therefore, we were interested in how both users' own practices of self-disclosure and those of relevant others may have contributed to a change of self-disclosure norms on Facebook:

RQ4: How do the perceived norms of self-disclosure change over time?

Method

We conducted six focus groups with 30 active German Facebook users between December 2016 and February 2017. Users qualified as "active" if they used Facebook at least several times per week to read content and communicate. Participants had to be registered on Facebook for at least one year as a prerequisite. Participants were recruited from various local Facebook groups and in the high schools, vocational schools, community colleges, and universities of a mid-sized German town to access a diverse range of users. Of the 30 participants, 21 (70%) were women and nine (30%) were men. The participants were an average of 27 years old and the age range was 17–67 years; thus, nearly all age groups of typical German Facebook users were considered in this study (Koch & Frees, 2017). We assembled the focus groups based on common sociodemographic characteristics to facilitate the expression of shared experiences (Barbour, 2018): Two groups consisted of high school students/apprentices, two groups of college students, and two groups of working people/retirees (see Table 1). The number of participants assigned to each group ranged from four to six to avoid impairing their interactions by having too many or too few participants (Barbour, 2018). Each focus group discussion lasted approximately 90 minutes and was conducted in German.

Table 1. Sociodemographic Characteristics of Participants.

Group	Pseudonym	Age (years)	Sex	Education/profession
1	Kirsten	24	Female	College students
	Maria	26	Female	
	Odetta	25	Female	
	Wayne	26	Male	
	Kathy	18	Female	
2	Keren	50	Female	Working person
	Kevin	18	Male	
	Dreanna	33	Female	
	Helen	26	Female	
	Kurt	33	Male	
3	Korbin	20	Male	Apprentices ^a
	Scarlett	20	Female	
	Bonnie	19	Female	
	Fred	26	Male	
	Hillary	22	Female	
4	Scottlyn	22	Female	College students
	Rosalie	24	Female	
	Harvey	24	Male	
	Grace	23	Female	
	Laura	19	Female	
5	Heidi	22	Female	High school students
	Barbara	28	Female	
	Teresa	18	Female	
	Rachel	17	Female	
	Rebecca	18	Female	
6	Moiria	18	Female	Working person/retiree
	Polly	67	Female	
	Harry	67	Male	
	Warren	26	Male	
	Zechariah	26	Male	

Note. All participants were Caucasian. This is a common characteristic of German samples in social sciences because the highest share of migrants in Germany (people from Turkey, Poland, Romania, and Italy; see Statistisches Bundesamt, 2019) are also Caucasians.

^aIn Germany, apprentices are students on vocational courses who attend in-service training in a company as well as at a state school.

An interview outline was used to structure the discussion and set impetuses for conversation. All group discussions started with an opening phase during which the participants talked freely about their use of Facebook and their perceptions regarding appropriate and inappropriate Facebook use. As Leiner, Kobilke, Rueß, and Brosius (2018) point out, "There is no one Facebook, instead there is a collection of different functions running under the label Facebook" (p. 201). Therefore, alternative perceptions about the

appropriateness of a particular communication on Facebook may be created. Regarding the evaluation of norms of self-disclosure, we concentrated on self-disclosures through public communication via users' profile and newsfeed, as they are most likely to be visible to different audiences and, therefore, highly conflictual regarding context collapse. Photos and status updates that are often shared in newsfeeds were created for fictional users to illustrate common Facebook activities and used as stimuli during the group discussions. We presented status updates with both positive and negative tenor and photographs of ordinary social situations, such as portraits of couples and families, but also more controversial examples of self-disclosure, such as photographs of friends at the beach, people partying together, or drinks and food (see Figures 1 and 2) to demonstrate the range of different self-disclosures on Facebook. The participants were asked to describe their own typical use and the typical use of referent others for each communication feature, to compare their own use with the use of these referent others, and what uses were deemed appropriate by others.



Figure 1. Status update used as a stimulus (translated from German).



Figure 2. Photograph used as a stimulus.

The focus groups were video- and audio-recorded, then were transcribed and analyzed with a qualitative content analysis (Barbour, 2018) using Atlas.ti. All names were anonymized to protect the privacy of participants. In the first step, we developed a set of categories that was inductively expanded during the analysis. Based on this set of categories, we conducted a line-by-line coding of each transcript to identify the common topics across participants. The codes aided in identifying not only the central norms of self-disclosure, but also their actual implementation in Facebook communication. In the second step, we condensed the codes, determined their hierarchies and relationships, and generalized them to distill their central meaning. Finally, we compared the norms identified. The following results synthesize the overarching norms of self-disclosure and their respective reference groups that emerged from this process.

Results

Reference Groups

Regarding our first research question, we give an overview of the composition of our participants' Facebook friends and then compare participants' conceptualization of Facebook friends with their perceived reference group. All participants reported that they are connected to close friends via Facebook. Most of our participants also stated that family members and relatives belong to their Facebook friends: "I use Facebook for keeping in touch with my family. My sister, cousins. All family members from the same generation as me" (Rosalie, Group 4). Many participants' Facebook friends also consist of friends with whom they have not been in touch for a long time, such as classmates from primary school or people they got to know while traveling, as well as ex-partners. In addition, their Facebook network spans the professional context and includes coworkers, fellow students or fellow apprentices, and teachers; however, only a few participants reported accepting friend requests from strangers (see also Vitak et al., 2015). Furthermore, our participants expressed that they wish to share a common interest (such as a hobby or political opinion) with their Facebook friends and expect them to be reliable or interesting. Even though the participants' Facebook network is diverse and comprises various social groups (see also Duggan et al., 2015), their Facebook friends mostly but not necessarily correspond to real-life relationships. Only a specific subset of these Facebook friends serves as a reference group when negotiating norms of self-disclosure (e.g., close friends and family members). Referent others are, therefore, people with whom participants maintain a meaningful relationship and who provide social, emotional, and instrumental support (Vitak et al., 2015). Thus, when revealing personal information on Facebook, German Facebook users refer to a rather small and specific reference group, a practice that can be compared with the principle of "trust" that Marwick and boyd (2014) found as a privacy-protecting strategy among U.S. teenagers. In the following, we analyze which norms of self-disclosure exist among the participants' reference groups and how they shape users' actual self-disclosure practices on Facebook.

Perceived Descriptive Norms of Self-Disclosure

Regarding our second research question, we analyzed the roles that referent others play in our participants' disclosure of personal information on Facebook and whether they comply with the communication of referent others. It became apparent that a general extent of self-disclosure would be difficult to identify because most of the participants perceived a diverse range of Facebook uses within their

reference groups. Scottlyn (Group 3), for example, stated, "Some use it like me, others use it totally differently." We found three roles that referent others play when disclosing personal information on Facebook.

First, several participants stated that the people close to them—especially those who are the same age—use Facebook in a similar manner. Among these users, Facebook functions as a communication platform "mostly for functional stuff" (Odette, Group 1), which helps them stay in contact with others, share interesting posts or vacation photos, read news, and create and organize events. Thus, it seems that self-disclosure only occurs in a very restricted and selected way. However, given that the participants agreed with the common way of their referent others' self-disclosure, this reference group might be especially relevant for norm orientation.

Second, several participants named friends and family members who disclose themselves more extensively than the participants. A consistent theme among these referent others was that they often share aspects of their daily lives or on special occasions, especially when traveling. Although our participants would not disclose themselves in a similar way, they regard telling stories and sharing special experiences, such as photos from exotic places and news about important milestones in life, as a successful way of disclosing oneself on Facebook. Bonnie (Group 3) reported that she liked her brother's updates when he lived in Australia for a year: "The photographs he took were just great. I loved to follow them. Also, seeing him developing. He went there with short hair and came back with long hair." Thus, this reference group serves as a window to the world by typically disclosing extraordinary experiences.

Third, most of our participants distance themselves from friends and family members who share too much or uninteresting personal information. This reference group tends to use Facebook more often for self-presentation, communication of personal issues, and political positioning, which is different from the participants' own use. Warren (Group 6) stated, "Yes, some . . . use everything that is possible. They post five photos of their children each day, something one should not do. Or their food and how they go for a walk. Everything. Everything." Some participants referred to these differences as cultural practices; for them, the careless handling of private, political, or suggestive content is typical of friends from the United States, Russia, or Australia. In addition, the participants thought that disclosing such information is rather common among "people from the old circle of friends, old acquaintances" (Harvey, Group 4) with whom they no longer have close contact and who are, therefore, less relevant for norm orientation. Thus, these norms are not based on what most people typically disclose on Facebook, but on what some explicitly sharing friendly referent others reveal of themselves. By addressing these extreme examples of self-disclosure, participants referred to counterdescriptive norms.

Thus, we found that referent others were present in our participants' thoughts when they considered descriptive norms of self-disclosure, either by serving as a negative example or by serving as a guide or a window to the world. In addition, the results demonstrate that participants have generally accepted the heterogeneous dealings of self-disclosure. As Dreanna (Group 2) stated, "I have learned that they have a different approach than me. This is some kind of self-presentation or positioning that I do not practice, but that I am absolutely OK with." One reason for the perceived heterogeneity of the descriptive norms might be that violations of descriptive norms are usually free from sanction (Cialdini & Trost, 1998;

Interis, 2011; Rimal & Lapinski, 2015). However, it is also possible that the perceived discrepancy between participants' own restricted self-disclosure on Facebook and the extensive self-disclosure of referent others is based on the third-person effect (Davison, 1983), which states that people tend to assume that media have a greater effect on others than on themselves.

Perceived Injunctive Norms of Self-Disclosure

Focusing now on the injunctive norms perceived by our participants (RQ3), we also analyzed the information that is approved for disclosure on Facebook by referent others and how they guide self-disclosure on Facebook. The injunctive norms of self-disclosure are overall of great relevance to the participants. These norms regulate mainly how to maintain privacy and present a favorable image of one's life and personality. Our findings indicate three injunctive norms that regulate self-disclosure on Facebook.

As the participants are very conscious of the information they provide about themselves, they refer to the norm that Facebook users should communicate with integrity. They are expected to communicate a coherent impression of their personality and "not to contradict the impression that other people have of [them]" (Rosalie, Group 4). This is visible in the choice of profile pictures. The participants usually select photographs that show their best side, a funny cartoon or a picture-text combination that communicates a positive message, similar to Odette (Group 11), who has chosen a profile picture showing a flower and a saying "with which I am trying to express that I am an optimistic person." Concerning status updates, they select themes and topics that represent their interests and points of view adequately and do not bother their friends with useless information. High school and college students and apprentices, for example, accuse adults in their 30s and older of communicating about too many banal subjects, thus disclosing themselves in a way that others may perceive negatively: "I am a Facebook friend with friends of my parents. . . . They have not grown up with Facebook. So, they do not know that it is recently more appropriate to share a photo [instead of status updates]" (Rebecca, Group 5). At first sight, the selective practice of self-disclosure seems to contradict integrity. However, it does not from the participants' point of view. They regard integrity to be realized as long as they tell the truth about themselves online, which does not necessarily mean to present one's personality comprehensively. Disclosing oneself via Facebook follows the principle of profile work (i.e., strategic self-presentation on SNSs; Uski & Lampinen, 2016). However, our participants stated that they avoid self-promotion in the form of expressing personal success or capabilities. Showing one's personality is only accepted when it is communicated authentically and decently (Uski & Lampinen, 2016).

Second, our participants discussed the injunctive norm that Facebook users should communicate consciously concerning one's privacy. This confirms that privacy is important to most of the participants, as it is to most Germans (Trepte & Masur, 2016). The participants underlined to not disclose too much of oneself and restrict the amount of private information visible on Facebook, as well as to "consider whether you will feel ashamed for what you have written ten years in advance" (Zechariah, Group 6). It should not be apparent from one's profile, for example, whether one lives in a relationship, where one lives, or what one's daily life is like. However, the participants appreciate when users disclose relevant biographical events and major achievements by using the function "life events" (e.g., passing an exam or getting married). They also accept when others posted negative events, such as the loss of a family member, as they expect that they would feel better after receiving comfort:

If you have a bereavement in your family, posting it on Facebook may be like honoring this specific person. He or she is so relevant that I publish a posting about my loss. But I personally would not do it. (Laura, Group 4)

Still, like Laura, they themselves avoid posting status updates that include private information about their feelings or about failure. In this way, they prevent third parties, such as employers, from getting a comprehensive picture of their private lives. This norm further includes avoiding unfavorable self-disclosure, for example, by posting photos of themselves looking drunk at a party, which might be used against them by third parties. Thus, this norm not only fosters strategic self-presentation (Uski & Lampinen, 2016), but also follows the principle of self-censorship (Hargittai & Marwick, 2016).

Third, privacy is also maintained when communicating about friends and family. The participants referred to the norm of not posting about the private lives of others. Most would not share photos of or tag their friends in photos (McLaughlin & Vitak, 2011). They would also never embarrass their friends, even if they could: "You can upload an awkward photograph of any friend and write, 'Look what he looked like at that time'" (Keren, Group 2). They also refuse to publish information or pictures of people who do not have a Facebook account, such as children (see also Ammari & Schoenebeck, 2015). Thus, they seem to respect that others may like to decide how their personal information is disclosed. Having control over self-representation is regarded as an important practice and a user's right when communicating on Facebook (see also Marwick & boyd, 2014).

Changing Norms in Changing Media Ecologies

We analyzed how norms and practices of self-disclosure have developed in the long run as facebook.de was launched in Germany in 2008 (RQ4). Our data confirm that they both change throughout the whole period of being an active Facebook user. Participants generally reduced self-disclosure on Facebook over time. Immediately after joining Facebook, most naturally shared their private lives and everyday activities via status updates and their newsfeed, just like Bonnie (Group 3): "Formerly, . . . you just posted pictures for attention-grabbing. . . . Today, I no longer post status updates." We found three reasons why users started limiting self-disclosure.

First, they adapted to the norm that privacy protection is important, like many other Germans. They became aware of the fact that Facebook collects the data that they provide for commercial purposes. Heidi (Group 4) explained, "Today, I wonder . . . if they might potentially sell the photos. That's why I have strongly limited publishing them." Consequently, users decided to communicate less about their private lives as they regard extensive self-disclosure to be inappropriate and partly to be risky: "Concerning security, one is more experienced by now, which means to have a better feeling for the dos and don'ts of uploading content" (Moirá, Group 5).

Second, the participants' understanding of appropriate self-disclosure is based on a learning process that has been influenced by their friends and family. On the one hand, they reported that they observed how their Facebook friends communicated and thus "grew into" it (Grace, Group 4) and that they have "somehow educated each other" (Kurt, Group 2). As our participants were confronted with multiple

postings on their friends' private lives shortly after Facebook registration, they assumed that it was also appropriate to disclose themselves comprehensively and communicate their private lives: "In the beginning, like most of my friends, I posted status updates on what I had been doing recently" (Kathy, Group 1). On the other hand, relevant others told them shortly before and after registration to communicate in a well-considered way and to care about privacy protection. Such advice was given by close friends, parents, older siblings, and adult children. Younger participants, such as Rachel (Group 5), were monitored by their mother or father, who told her to "watch out, be careful and not to upload any nonsense." The older participants were monitored by their adult children: "My daughter always tells me not to share private information and not to comment on any professional things she publishes" (Keren, Group 2). Against this background, the participants had to figure out how to disclose themselves appropriately. They often followed the example of their Facebook friends in the first instance but later adapted to stricter privacy norms of relevant others.

Third, the whole media ecology has to be considered to understand the changing practices of self-disclosure on Facebook. For the older participants, Facebook was still the first choice for communicating about themselves at the time of data collection. However, younger participants have turned away from it: "Generally, I suppose that it [posting status updates or photos on Facebook] happens less frequently. That's how my friends have behaved recently. Because everyone moves from Facebook to other social media" (Odette, Group 1). Thus, as the scope of SNSs has grown during the last few years, the younger participants also use other SNSs or instant messaging platforms, such as Instagram, WhatsApp, or Snapchat, for self-disclosure. From the participants' point of view, Instagram is naturally regarded to be "the platform for sharing photos" (Teresa, Group 5) for a wider public, as they might "only annoy people" (Odette, Group 1) if they are posted on Facebook, especially when it comes to sharing photos of food or other aspects of everyday life. New SNSs are also regarded to be "more fascinating" (Rebecca, Group 5) and to be better for managing privacy issues. Participants stated that Instagram allows one "to easily adjust" privacy settings (Rachel, Group 5) and WhatsApp to address "really only close friends" (Rebecca, Group 5), thus sending specific photos to selected audiences. Overall, the norm to communicate consciously concerning one's privacy has supported the establishment of using more privacy-sensitive SNSs (see also Waterloo et al., 2018). Furthermore, it has generated a new norm, namely, to publish selected content exclusively via selected media for addressing different audiences to minimize context collapse.

Discussion

Our findings show that Facebook users establish practices to handle questions of self-disclosure and to achieve privacy when communicating on Facebook that allow them to reduce context collapse. Most try to minimize context collapse by choosing Facebook friends carefully. Furthermore, they engage in self-censorship concerning their Facebook postings, specifically by reducing posts on everyday life over time (see also Hargittai & Marwick, 2016; Vitak et al., 2015). Differing from previous research, our results show explicitly that these practices are based on norms; thus, they are not developed individually but are negotiated collectively with referent others. Our results demonstrate that norms serve as an important regulating factor for self-disclosure on Facebook and have mainly two functions. First, they guide self-disclosure when communicating via Facebook. Second, they allow one to affiliate with the reference group that shares the same injunctive norms of self-presentation and, thus, to ultimately conform to these norms. Strategic self-presentation as the guiding principle of self-disclosure is, therefore, based on a shared

understanding among the reference group on how to disclose oneself appropriately. It includes disclosing only authentic aspects of one's personality or everyday life (Uski & Lampinen, 2016) but foremost favorable aspects to avoid negative effects on social life or occupational career. However, injunctive norms not only encompass one's own handling of self-disclosure and privacy on SNSs, but also span the privacy of other users, thus reducing possible privacy violations for friends and families.

In contrast to findings from the United States (Hargittai & Marwick, 2016), our participants did not report cynical or apathetic attitudes but tried to manage the challenges of context collapse via establishing norms that are valid for themselves and their reference group. We, thus, argue that Germans, owing to their cultural background of being privacy-sensitive, may be more inclined to find appropriate ways to deal with issues of privacy on Facebook and handle the tension between the need for self-disclosure and the cultural accordance of maintaining one's privacy. From their perspective, they only share personal information that is appropriate for disclosure according to distinctive norms they have negotiated.

A limitation of this study is that we assumed that the participants of our study could easily name the injunctive norms of self-disclosure because they negotiated these norms extensively given that informational privacy is important for Germans. Further research in other cultural contexts is needed to better understand the role of norms governing self-disclosure on SNSs. Another limitation of our study is that most of the participants were quite young. Thus, our findings cannot be generalized for all older Facebook users. Furthermore, participants in focus groups mainly articulate norms that are easily remembered and socially appreciated because they might wish to affiliate with the other participants. Focus groups may also foster norm negotiation among the participants during evaluation. Therefore, further interview-based studies are needed to examine whether Facebook users address the same norms of self-disclosure when being interviewed alone. Conducting face-to-face focus groups that consist of participants who predominantly do not know each other also implies limitations. Interviewing natural groups would allow one to evaluate consistent sets of norms that are shared by specific groups. Further research should analyze norms that are negotiated among homogenous groups to manage strategic self-presentation on various SNSs against the background of context collapse.

Although our study was based on a small, nonrepresentative sample of Facebook users from a specific cultural context, we argue, with Davis and Love (2019), that social media data are theoretically generalizable. Our findings suggest that self-disclosure against the background of context collapse fosters the negotiation and establishment of norms as they help individuals manage the tension between the need to disclose themselves and act according to societal expectations. Consequently, users reflect the typical behavior of relevant others and often distance themselves from their negative self-disclosure practices (perceived descriptive norms), as well as comply with the perception about what information is approved by their referent others (perceived injunctive norms). Thus, German users comply with the behaviors expected of themselves and others by adapting communication on Facebook to the norms they perceive within their reference groups. Our findings therefore suggest that German Facebook users have internalized the principle of networked privacy (Marwick & boyd, 2014) and are versed users of a fitting set of norms of self-disclosure. As Germans value their privacy, they can be regarded as pioneers of managing networked privacy. Thus, it is relevant to observe whether less privacy-sensitive users adopt their practices of self-disclosure on Facebook accordingly in the future.

References

- Acquisti, A., & Gross, R. (2006). Imagined communities: Awareness, information sharing, and privacy on the Facebook. In G. Danezis & P. Golle (Eds.), *Privacy enhancing technologies: PET 2006* (pp. 36–58). Berlin, Germany: Springer.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York, NY: Holt, Rinehart & Winston.
- Ammari, T., & Schoenebeck, S. (2015). Understanding and supporting fathers and fatherhood on social media sites. In B. Begole & J. Kim (Eds.), *CHI 2015: Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 1905–1914). New York, NY: Association for Computing Machinery.
- Barbour, R. (2018). *Doing focus groups* (2nd ed.). London, UK: SAGE Publications.
- Baruh, L., Secinti, E., & Cemalcilar, Z. (2017). Online privacy concerns and privacy management: A meta-analytical review. *Journal of Communication*, 67, 26–53. doi:10.1111/jcom.12276
- Baumgartner, S. E., Valkenburg, P. M., & Peter, J. (2011). The influence of descriptive and injunctive peer norms on adolescents' risky sexual online behavior. *Cyberpsychology, Behavior and Social Networking*, 14, 753–758. doi:10.1089/cyber.2010.0510
- boyd, d. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 119–142). Cambridge, MA: MIT Press.
- Burgoon, J. K., Parrott, R., Le Poiré, B. A., Kelley, D. L., Walther, J. B., & Perry, D. (1989). Maintaining and restoring privacy through communication in different types of relationships. *Journal of Social and Personal Relationships*, 6, 131–158.
- BVerfG. (1983). Volkszählung. Urteil vom 15.12.1983 [Census decision on 1983/12/15]. *Entscheidungsammlung BVerfG* 65, pp. 1–71. Retrieved from <http://www.servat.unibe.ch/dfr/bv065001.html>
- Chung, A., & Rimal, R. N. (2016). Social norms: A review. *Review of Communication Research*, 4, 1–28. doi:10.12840/issn.2255-4165.2016.04.01.008
- Cialdini, R. B. (2007). Descriptive social norms as underappreciated sources of social control. *Psychometrika*, 72, 263–268. doi:10.1007/s11336-006-1560-6

- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. *Advances in Experimental Social Psychology*, 24, 201–234. doi:10.1016/S0065-2601(08)60330-5
- Cialdini, R. B., & Trost, M. R. (1998). Social influence: Social norms, conformity, and compliance. In D. Gilbert, T. Fiske, & L. Gardner (Eds.), *The handbook of social psychology* (pp. 151–192). New York, NY: McGraw-Hill.
- Davis, J. L., & Jurgenson, N. (2014). Context collapse: Theorizing context collusions and collisions. *Information, Communication & Society*, 17, 476–485. doi:10.1080/1369118X.2014.888458
- Davis, J. L., & Love, T. P. (2019). Generalizing from social media data: A formal theory approach. *Information, Communication & Society*, 22, 637–647. doi:10.1080/1369118X.2018.1555610
- Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly*, 47, 1–15.
- Duggan, M., Ellison, N. B., Lampe, C., Lenhart, A., & Madden, M. (2015). *Social media update 2014: While Facebook remains the most popular site, other platforms see higher rates of growth*. Washington, DC: Pew Research Center. Retrieved from <http://www.pewinternet.org/2015/01/09/social-media-update-2014/>
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NY: Doubleday Anchor.
- Hargittai, E., & Marwick, A. (2016). “What can I really do?” Explaining the privacy paradox with online apathy. *International Journal of Communication*, 10, 3737–3757.
- Interis, M. (2011). On norms: A typology with discussion. *The American Journal of Economics and Sociology*, 70, 424–438. doi:10.1111/j.1536-7150.2011.00778.x
- Jourard, S. M. (1971). *The transparent self*. New York, NY: Van Nostrand Reinhold.
- Kemper, T. D. (1968). Reference groups, socialization and achievement. *American Sociological Review*, 33, 31–45.
- Koch, W., & Frees, B. (2017). ARD/ZDF-Onlinestudie 2017: Neun von zehn Deutschen online [ARD/ZDF online study: Nine of ten Germans online]. *Media Perspektiven*, 9, 434–446.
- Lambert, A. (2016). Intimacy and social capital on Facebook: Beyond the psychological perspective. *New Media & Society*, 18, 2559–2575. doi:10.1177/1461444815588902
- Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15, 127–147. doi:10.1111/j.1468-2885.2005.tb00329.x

- Leiner, D. J., Kobilke, L., Rueß, C., & Brosius, H.-B. (2018). Functional domains of social media platforms: Structuring the uses of Facebook to better understand its gratifications. *Computers in Human Behavior*, 83, 194–203. doi:10.1016/j.chb.2018.01.042
- Marwick, A. E., & boyd, d. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13, 114–133. doi:10.1177/146144810365313
- Marwick, A. E., & boyd, d. (2014). Networked privacy: How teenagers negotiate context in social media. *New Media & Society*, 16, 1051–1067. doi:10.1177/1461444814543995
- McLaughlin, C., & Vitak, J. (2011). Norm evolution and violation on Facebook. *New Media & Society*, 14, 299–315. doi:10.1177/1461444811412712
- Mead, G. H. (1934). *Mind, self, and society*. Chicago, IL: University of Chicago Press.
- Mesch, G. S., & Beker, G. (2010). Are norms of disclosure of online and offline personal information associated with the disclosure of personal information online? *Human Communication Research*, 36, 570–592. doi:10.1111/j.1468-2958.2010.01389.x
- Mollen, S., Rimal, R. N., Ruiter, R. A. C., & Kok, G. (2013). Healthy and unhealthy social norms and food selection: Findings from a field-experiment. *Appetite*, 65, 83–89. doi:10.1016/j.appet.2013.01.020
- Park, H. S., & Smith, S. W. (2007). Distinctiveness and influence of subjective norms, personal and descriptive injunctive norms, and societal descriptive and injunctive norms on behavioral intent: A case of two behaviors critical to organ donation. *Human Communication Research*, 33, 194–218. doi:10.1111/j.1468-2958.2007.00296.x
- Petronio, S. S. (2002). *Boundaries of privacy: Dialectics of disclosure*. Albany, NY: State University of New York Press.
- Postmes, T., Spears, R., & Lea, M. (2000). The formation of group norms in computer-mediated communication. *Human Communication Research*, 26, 341–371. doi:10.1111/j.1468-2958.2000.tb00761.x
- Preece, J. (2004). Etiquette online: From nice to necessary. *Communications of the ACM*, 47(4), 56–61.
- Rimal, R. N., & Lapinski, M. K. (2015). A re-explication of social norms, ten years later. *Communication Theory*, 25, 393–409. doi:10.1111/comt.12080
- Rimal, R. N., & Real, K. (2003). Understanding the influence of perceived norms on behaviors. *Communication Theory*, 13, 184–203. doi:10.1111/j.1468-2885.2003.tb00288.x

- Rimal, R. N., & Real, K. (2005). How behaviors are influenced by perceived norms: A test of the theory of normative social behavior. *Communication Research*, 32, 389–414. doi:10.1177/0093650205275385
- Smith, A., & Anderson, M. (2018). *Social media use in 2018: A majority of Americans use Facebook and YouTube, but young adults are especially heavy users of Snapchat and Instagram*. Washington, DC: Pew Research Center. Retrieved from <http://www.pewinternet.org/2018/03/01/social-media-use-in-2018/>
- Statistisches Bundesamt. (2019). Ausländische Bevölkerung 2005, 2010 und 2014 bis 2018 nach ausgewählten Staatsangehörigkeiten [Foreign population 2005, 2010 and 2014–2018 by land]. Retrieved from <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Migration-Integration/Tabellen/auslaendische-bevoelkerung-staatsangehoerigkeit-jahre.html>
- Taddicken, M. (2014). The “privacy paradox” in the social Web: The impact of privacy concerns, individual characteristics, and perceived social relevance on different forms of self-disclosure. *Journal of Computer-Mediated Communication*, 19, 248–273. doi:10.1111/jcc4.12052
- Taddicken, M., & Jers, C. (2011). The uses of privacy online—Trading a loss of privacy for social Web gratifications? In S. Trepte & L. Reinecke (Eds.), *Privacy online: Perspectives on privacy and self-disclosure in the social Web* (pp. 143–158). Berlin, Germany: Springer.
- Trepte, S., & Masur, P. K. (2016). *Cultural differences in social media use, privacy, and self-disclosure: Research report on a multicultural study*. Stuttgart, Germany: University of Hohenheim. Retrieved from <http://opus.uni-hohenheim.de/volltexte/2016/1218/>
- Tufekci, Z. (2008). Can you see me now? Audience and disclosure regulation in online social network sites. *Bulletin of Science, Technology & Society*, 28, 20–36. doi:10.1177/0270467607311484
- Uski, S., & Lampinen, A. (2016). Social norms and self-presentation on social network sites: Profile work in action. *New Media & Society*, 18, 447–464. doi:10.1177/1461444814543164
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media*, 56, 451–470. doi:10.1080/08838151.2012.732140
- Vitak, J., Blasiola, S., Patil, S., & Litt, E. (2015). Balancing audience and privacy tensions on social network sites. *International Journal of Communication*, 9, 1485–1504.
- Vitak, J., & Ellison, N. B. (2012). “There’s a network out there you might as well tap”: Exploring the benefits and barriers to exchanging informational and support-based resources on Facebook. *New Media & Society*, 15, 243–259. doi:10.1177/1461444812451566

- Walther, J. B. (2011). Introduction to privacy online. In S. Trepte & L. Reinecke (Eds.), *Privacy online: Perspectives on privacy and self-disclosure in the social Web* (pp. 3–8). Berlin, Germany: Springer.
- Waterloo, S. F., Baumgartner, S. E., Peter, J., & Valkenburg, P. M. (2018). Norms of online expressions of emotion: Comparing Facebook, Twitter, Instagram and WhatsApp. *New Media & Society*, 20, 1813–1831. doi:10.1177/1461444817707349
- Wheeless, L. R., & Grotz, J. (1976). Conceptualization and measurement of reported self-disclosure. *Human Communication Research*, 2, 338–346. doi:10.1111/j.1468-2958.1976.tb00494.x