

## FULL PAPER

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### Social norms as communicative phenomena: A communication perspective on the theory of normative social behavior

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**Abstract:** Much of human behavior is influenced by social norms. Although communication represents one important mechanism through which norms are formed and disseminated, the role of communication has not yet received sufficient attention in social norms research. The present paper develops a communication perspective on normative social influences by applying the theory of normative social behavior (TNSB) as a guiding framework. Taking into account recent and significant changes in our media environment, propositions on the role of communication with referent others (online and offline) a) in the *building* of norms and b) for the *moderation* of normative social influences on behaviors are stated. We discuss the benefits and limitations of our communication perspective and raise questions that should be considered in future research.

**Keywords:** Descriptive norms, injunctive norms, social influences, interpersonal communication, media exposure, group identity, social learning

**Zusammenfassung:** Ein Großteil menschlichen Verhaltens wird durch Normen beeinflusst. Obwohl Kommunikation ein wichtiger Mechanismus ist, über den Normen geformt und verbreitet werden, wurde der Rolle der Kommunikation bisher nicht ausreichend Aufmerksamkeit in der Normenforschung geschenkt. Der vorliegende Beitrag entwickelt auf Basis der Theory of Normative Social Behavior (TNSB) eine kommunikationswissenschaftliche Perspektive auf sozial-normative Einflüsse. Unter Berücksichtigung aktueller Medienentwicklungen werden Annahmen zur Rolle von Online- und Offline-Kommunikation mit relevanten Anderen bei a) der Bildung von Normen und b) der Moderation normativer Einflüsse auf Verhalten formuliert. Wir diskutieren Leistungen und Limitationen unserer kommunikationswissenschaftlichen Perspektive und verweisen auf offene Fragen, die in zukünftiger Forschung zu berücksichtigen sind.

**Schlagwörter:** Deskriptive Normen, injunktive Normen, sozialer Einfluss, interpersonale Kommunikation, Mediennutzung, Gruppenidentität, soziales Lernen

## 1. Introduction

Social norms play a substantial role in people's behavioral decisions (Manning, 2009). By following the typical and appropriate behaviors within a social group (Cialdini, Reno, & Kallgren, 1990; Deutsch & Gerard, 1955), people try to ensure that they act efficiently and that their actions are socially approved (Cialdini et al., 1990, p. 1015). Communication represents an important mechanism through which norms are learned and disseminated in social groups (e.g., Real & Rimal, 2007). Although scholars explicitly emphasize norms as “communication phenomena” (Rimal & Lapinski, 2015, p. 393; see also Hogg & Reid, 2006; Rimal & Real, 2003), the communicative dimension of norms “has yet to receive sustained theoretical [...] attention” (Hogg & Reid, 2006, p. 8; see also Mollen, Rimal, & Lapinski, 2010; Rimal & Lapinski, 2015; Yanovitzky & Rimal, 2006). The present contribution addresses the norms' communicative dimension and develops theoretical propositions on the role of communication in normative social influences.

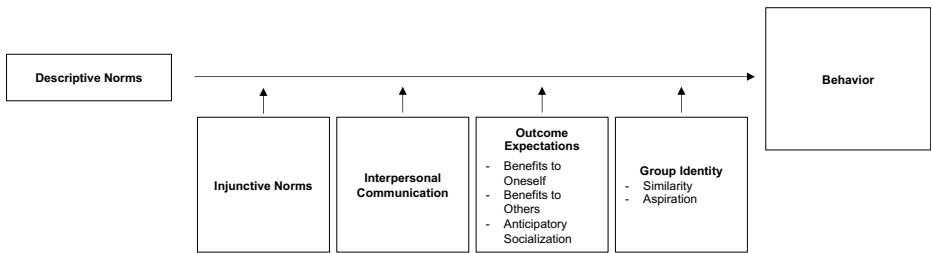
Given the significant changes in the contemporary media environment, the question concerning communication's role in normative social influences is more relevant than ever (see also Flanagin, 2017; Johnson, 2014). Social media affords numerous opportunities to make behaviors and preferences visible to others (Treem & Leonardi, 2012; see also Flanagin, 2017). Furthermore, mobile communication facilitates a permanent involvement in mediated communication (Klimmt, Hefner, Reinecke, Rieger, & Vorderer, 2018). These changes in the visibility and permanence of communication suggest that norms and the communication about norms are becoming more important in our daily lives (Johnson, 2014): Talking with referent others as well as observing their behaviors and the social approval of these behaviors is no longer limited to the offline sphere but also happens online and thus almost permanently. Normative perceptions about referent others' behaviors and their social approval are probably influenced by observations and communication on social media platforms (Litt & Stock, 2011; Walther et al., 2010), where behaviors and their approval/disapproval are constantly presented (Bazarova & Choi, 2014; Good, 2013; Liu, 2007; Uski & Lampinen, 2016). Additionally, the anticipation that one's own behavior can be observed by others might strengthen the adaptation of one's own behavior and its presentation to normative beliefs (Uski & Lampinen, 2016) to facilitate a positive self-portrayal (Walther et al., 2010).

The current paper develops a communication perspective on normative social influences that considers the implications of the current media environment and integrates communication as a factor in normative social influences. The theory of normative social behavior (TNSB; Real & Rimal, 2007; Rimal & Real, 2005) serves as a guiding framework. In a first step, this paper provides an overview of the TNSB. Second, by referring to theoretical and empirical findings of communication research, this article develops a set of propositions on communication's role a) in the formation of norms (i.e., communication's norm-building role) and b) for the moderation of the influence of norms on behaviors (i.e., communication's norm-moderating role). Third, the propositions are integrated into a model that summarizes the communication perspective on normative social influences.

This paper’s purpose is twofold. First, it indicates how communication scholars can make use of their expertise in social norms research by elaborating on communication’s role at different stages in normative social influences. Second, this article suggests how to integrate social norms into communication research, which is all the more relevant as communication behavior is largely social behavior (see also Johnson, 2014; Lee, Ho, & Lwin, 2017) and is particularly affected by the aforementioned changes in the contemporary media environment. Given the substantial behavioral effect of social norms across a variety of behaviors (for a meta-analysis, see Manning, 2009), we believe that the social norms concept might help to better explain communication behavior. Last but not least, theory development on communication’s role in normative social influence is also of practical relevance, as understanding the role of communication reveals important starting points for peer-based intervention programs (Southwell & Yzer, 2007).

2. The theory of normative social behavior

The theory of normative social behavior (TNSB; Real & Rimal, 2007; Rimal & Real, 2005; Figure 1) considers normative social factors comprehensively and in detail and undertakes first attempts to integrate communication in normative social influences (Real & Rimal, 2007). Therefore, the TNSB serves as a guiding framework for our theorizing on a communication perspective on normative social influences. In the following, we briefly present its key assumptions.



**Figure 1.** The theory of normative social behavior (TNSB). Adapted from “How behaviors are influenced by perceived norms. A test of the theory of normative social behavior,” by R. N. Rimal & K. Real, 2005, *Communication Research*, 32(2), p. 329 and “Friends talk to friends about drinking: Exploring the role of peer communication in the theory of normative social behavior,” by K. Real & R. N. Rimal, 2007, *Health Communication*, 22(2), p. 169–180.

The TNSB adopts the distinction between two closely related concepts introduced by Cialdini et al. (1990): descriptive and injunctive norms. Both types of norms are linked to individuals’ reference groups, groups individuals “belong to and care about” (Tankard & Paluck, 2016, p. 184). Whereas descriptive norms refer to the prevalence of a behavior within a reference group, injunctive norms refer to the social approval of the behavior by referent others (see also Chung & Rimal, 2016; Lapinski & Rimal, 2005; Rimal & Lapinski, 2015). Thus, the two

types of norms can be thought of as norms regarding what *is done* (descriptive norms) compared to the norms of what *ought to be done* in the reference group (injunctive norms; Deutsch & Gerard, 1955; Kallgren, Reno, & Cialdini, 2000).

Within the TNSB, descriptive and injunctive norms are referred to as perceived norms, which must be distinguished from collective norms (Lapinski & Rimal, 2005; Rimal & Lapinski, 2015; see also Geber, Baumann, Czerwinski, & Klimmt, 2019). *Perceived* norms are located at the individual, psychological level (Rimal & Lapinski, 2015, p. 395). They represent the individual's perceptions of the reference group's norms (Lapinski & Rimal, 2005, p. 129), that is, the perception of the behavior (descriptive norms; Grube, Morgan, & McGree, 1986) and of the social approval for the behavior of others (injunctive norms; White, Terry, & Hogg, 1994). By contrast, *collective* norms operate at the societal or group level (see also Hogg & Reid, 2006) and refer to the actual behavior and social approval of referent others (Lapinski & Rimal, 2005, p. 129).<sup>1</sup>

Next to norms, the TNSB considers outcome expectations – the belief that engaging in a behavior will have positive outcomes (Bandura, 1986) – and group identity, which refers to the strength of affiliation within the reference group (Tajfel & Turner, 1986). The basic idea of the TNSB is that descriptive norms affect individuals' behaviors. This effect is moderated by injunctive norms, outcome expectations, and group identity. Thus, injunctive norms, outcome expectations, and group identity can heighten or lower the effect of descriptive norms on behaviors (Rimal & Real, 2003, 2005). For example, it is assumed that when people believe that the prevalence of a behavior within their reference group is high (descriptive norms) and they perceive a strong affinity with this group (group identity), they are much more likely to engage in the behavior themselves than when their group identity is weak. Rimal and Real (2005) demonstrated that their model is able to predict 63 percent of the variance in college students' intention to consume alcohol (see also Real & Rimal, 2007; Rimal, 2008).

Interpersonal communication was integrated later into the TNSB as a further moderator of the relationship between descriptive norms and behavior (Real & Rimal, 2007; see also Rimal & Real, 2003). The underlying hypothesis is that, through communication with referent others, normative information gets disseminated and thus increases the influence of descriptive norms on behavior (Real & Rimal, 2007). The results of Real and Rimal (2007) reveal that frequency of interpersonal communication is able to explain only two percent of the variance in behavior in its moderator role and thus through its interaction with descriptive norms (see also Rimal & Real, 2003). The rather limited explanatory power of communication with referent others indicates that there might be more important roles for communication in normative social influences (see also Geber, Baumann, & Klimmt, 2017).

1 Accordingly, collective norms are also referred to as "actual norms" by Berkowitz (2004) or "group norms" by Hogg (2006).

### 3. Communication's role in norm-building and norm-moderation

The theory of normative social behavior (TNSB; Real & Rimal, 2007; Rimal & Real, 2005) was formulated as a framework that invites further refinement (Rimal & Lapinski, 2015), especially with regard to the role of communication within normative social influences (Real & Rimal, 2007). Applying a communication perspective, we will discuss the role of communication a) in the building of norms and b) for the moderation of normative social influences on behavior. By communication, we mean interpersonal communication and media exposure; interpersonal communication refers to the social interaction between people that can occur offline (face-to-face) and online (computer-mediated<sup>2</sup>; Berger, 2008), and media exposure represents the “extent to which individuals encounter” messages or content (Nagler, 2017; see also Vreese & Neijens, 2016) that are produced and disseminated by institutional and professional sources. To understand the role of interpersonal communication and media exposure in the formation of norms and for the moderation of normative social influences comprehensively, we will refer to different communication theories that provide first answers to the questions concerning from where norms come and under which circumstances they are particularly influential.

#### 3.1 Descriptive and injunctive norms

Before theorizing on the role of communication in norm-building and norm-moderating processes, we first have to clarify to which norms we are referring. Following Cialdini et al. (1990) and the TNSB, we distinguish between descriptive and injunctive norms. Different roles and functions are attributed to descriptive and injunctive norms within the TNSB: Whereas descriptive norms are modeled as a direct impact factor on behavior, injunctive norms serve as a moderator of descriptive norms (Chung & Rimal, 2016; Rimal & Real, 2003). The underlying assumption is that the influence of descriptive norms on behaviors is heightened when injunctive norms are also strong, and they attenuated when injunctive norms are weak (Lapinski & Rimal, 2005; Rimal & Real, 2005). There is empirical evidence that both norm components interact with each other to influence behaviors (Lee, Geisner, Lewis, Neighbors, & Larimer, 2007; Rimal, 2008; Rimal & Real, 2003; Smith & Louis, 2008).

However, following the argument by Rimal and Lapinski (2015) that both types of norms might also have an independent influence (p. 398), we suggest conceptualizing injunctive norms as both a direct predictor of behavior and a moderator (see also Lee et al., 2007). The modeling of both norm components as factors that not only interactively but also independently influence behavior is highly plausible. It is surely most often the case that descriptive and injunctive norms are congruent. However, there might also be cases in which descriptive and injunctive norms do not overlap – when people perceive a particular behavior as

2 Computer-mediated communication can be one-to-one or one-to-some communication (e.g., via a messenger app) and one-to-many communication (e.g., via social media; Berger, 2008).

widespread, but do not link social approval with it (Cialdini et al., 1990; Lapinski & Rimal, 2005; Rimal & Real, 2003, 2005). For instance, “phubbing” – using a cell phone in the company of others (Roberts & David, 2016) – might be a common behavior within the reference group, but it is probably socially disapproved at the same time. Moreover, the underlying mechanism of descriptive and injunctive norms’ behavioral impact might be different, such that injunctive norms add to the explanation of norm-driven behavior. Thus, for a proper understanding of different normative influences, it might be important not only to distinguish between descriptive and injunctive norms conceptually (Cialdini et al., 1990) but also to analyze their impact separately (see also Chung & Rimal, 2016; Rimal & Lapinski, 2015).

This conceptualization is in line with the integrated behavior model (IBM; Fishbein & Yzer, 2003; Montaña & Kasprzyk, 2015), which stems from the theory of reasoned action (Ajzen & Fishbein, 1980) and the theory of planned behavior (Ajzen, 1991). In this tradition of behavioral theories, social norms are predictors of behavioral intentions in addition to attitudes and self-efficacy. The most recent IBM takes up the differentiation between injunctive and descriptive norms and arranges injunctive norms as independent factors next to descriptive norms. Additionally, there is empirical evidence that injunctive norms not only serve as a moderator for descriptive norms, they also have a distinct direct effect on behavior (e.g., Baumgartner, Valkenburg, & Peter, 2011; Cialdini et al., 1990; Park & Smith, 2007; Rimal, 2008; Rimal & Real, 2005).

The starting point for our communication perspective is that, within the TNSB framework, both norm components are *perceived* norms and thus individual perceptions of the reference group’s behaviors (i.e., descriptive norms) and the social approval for these behaviors (i.e., injunctive norms; Lapinski & Rimal, 2005). Therefore, we assume that the following theorized communicative norm-building processes and norm-moderating factors should work essentially comparably for both norm components.

### 3.2 Norm-building processes: Communication with referent others, observation of referent others, and media exposure

The TNSB is the most prominent norm-based theory that takes into account interpersonal communication in normative social influences (Mollen et al., 2010). We take up the idea of the TNSB to consider communication’s role in normative social influences (Real & Rimal, 2007). As we seek to establish a theoretical framework on norms as communicative phenomena, we elaborate on communication’s explanatory potential with regard to the question of where normative perceptions come from (see also Geber et al., 2017). Therefore, in the following, we will develop propositions on communication with referent others (online and offline), observation of referent others (online and offline), and media exposure as norm-building processes.

We assume that communication with members of a reference group is a determinant of perceived norms, as it is a central process by which people learn about



their group's norms (Chung & Rimal, 2016; Hogg & Reid, 2006; Real & Rimal, 2007; see also Wirth, Pape, & Karnowski, 2008). Social norms "cannot exist in the absence of communication among members of the group" (Rimal & Real, 2003, p. 185); they are constructed and understood through communication (Carcioppolo & Jensen, 2012, p. 767). Although the existential importance of communication for the perception of social norms has been noted in social norms research (e.g., Rimal & Lapinski, 2015), the interplay between communication and norms has not yet received sufficient theoretical attention (Mollen et al., 2010; Rimal & Lapinski, 2015; Yanovitzky & Rimal, 2006). Hogg and Reid (2006) were among the first to theoretically elaborate on the communication's role in normative social influences (see also Hogg & Tindale, 2005). Applying a social identity perspective, they assumed that people construct and modify their normative perceptions through the information they obtain from referent others via communication. This communication can be more or less explicit: Group members can explicitly express what is and what is not normative by talking about whether the behavior conforms to group expectations. In this case, individuals can directly infer group norms. However, norms might also be presented rather indirectly, such that norms have to be gleaned indirectly from the others' narrations about their behaviors and expressed opinions (see also Fine, 2001). These considerations suggest that individuals rely on communication with referent others to understand the prevalence and acceptability of a behavior within their group. Findings from cross-sectional survey data demonstrate that interpersonal communication plays a crucial role in the formation of social norms (Geber et al., 2017; Dunlop, Kashima, & Wakefield, 2010).

Additionally, we consider observation of group members as a second communicative process leading to normative perceptions (Bandura, 1986, 2009; Chung & Rimal, 2016; Hogg & Reid, 2006; Mead, Rimal, Ferrence, & Cohen, 2014; Wirth et al., 2008). The idea that individuals learn by observing others stems from social cognitive theory (SCT; Bandura, 1986). SCT distinguishes two sub-functions in the process of behavior acquisition: Attentional processes determine what is selectively observed, and representational processes refer to the transformation and reorganization of information conveyed by modeled events into rules and conceptions for memory representations (Bandura, 1986, 2009). We assume that both functions can be directly linked to the process of norm-building. In particular, group members who serve as relevant models draw much attention and are observed, and the cognitive representations of social referents' behaviors can be conceptualized as norms. From this perspective, descriptive norms refer to the observation of social referents' behaviors, which, in sum and together with communication, results in the belief of the prevalence of a behavior within the group; injunctive norms refer to the observed reactions to the behavior by others, thus resulting in the belief of social approval or disapproval for the observed behavior. The results of the cross-sectional network analyses actually demonstrate that community members acquire the community's descriptive norms experientially, that is, by observing what their associates do (Kashima, Wilson, Lusher, Pearson, & Pearson, 2013; see also Paluck & Shepherd, 2012; Shepherd, 2017).

The integration of communication with referent others and observation of referents as norm-building processes in normative social influences allows us to consider developments regarding the media environment that are becoming more and more relevant for normative social influences. Due to technical convergence, interpersonal communication not only takes place face to face but also digitally and via mobile devices (Humphreys, Pape, & Karnowski, 2013). In parallel, in the current media landscape, referent others' actions are not only observable directly but also via social media if individuals share them (Litt & Stock, 2011; Walther et al., 2010). A study of Pempek, Yermolayeva, and Calvert (2009) shows, that although students communicate with friends on Facebook, they spend much of their time reading and viewing information about their peers, and a study by Litt and Stock (2011) demonstrates the importance of social media platforms in the formation process of norms. These theoretical arguments and empirical references lead to the propositions that communication with and observation of social referents – both online and offline – serve as norm-building processes:

*Proposition 1:* Communication with referent others (online and offline) serves as a norm-building process; it is involved in the formation of a) descriptive and b) injunctive norms.

*Proposition 2:* Observation of referent others (online and offline) serves as a norm-building process; it is involved in the formation of a) descriptive and b) injunctive norms.

From a comprehensive communication perspective, not only communication and observation among group members but also media should contribute to perceptions about the prevalence of and attitude towards a behavior by presenting individuals who are perceived as similar to oneself or members of the reference group (Bandura, 2009; Chung & Rimal, 2016; Hogg & Reid, 2006; Mead et al., 2014; Tankard & Paluck, 2016; Wirth et al., 2008). Bandura (2009) applied SCT to mass communication, stating that media might promote the social diffusion of new styles of behavior by informing, enabling, motivating, and guiding recipients. Comparably, cultivation theory (CT) also posits that long-term, frequent exposure to television encourages viewers to perceive the real world in ways that reflect the most common messages of the fictional media world (Gerbner & Gross, 1976; Morgan & Shanahan, 2010). By presenting people behaving in certain ways, media messages – no matter if fictional, non-fictional, or commercial – contribute to shaping normative perceptions. We assume that media exposure, and thus the observation of behaviors of individuals who are similar to group members in media, results in the belief that the behavior is common within the reference group and, thus, has implications for the perception of descriptive norms. Comparably, the observed reactions, that is, social approval or disapproval, in response to the behavior should affect injunctive norms.

Additionally, we can refer to the influence of presumed influence model (IPI; Chia, 2006; Gunther & Storey, 2003) to elaborate on how media exposure leads to normative perceptions. Derived from the third-person effect hypothesis (for an overview, see Perloff, 1999), the IPI suggests that individuals who have high levels of exposure to certain media messages will infer that social referents will also have high exposure levels to such messages and that those messages influence the

attitudes and behaviors of their referents, which, in turn, influence individuals' own behaviors. From a social norms perspective, the individual's assumption that media influence social referents' behaviors should affect the formation of descriptive norms, whereas the expectation that referents' attitudes are affected by media should affect perceptions of social approval and thus injunctive normative perceptions. This model was found to be well-suited to health communication issues, such as maternal health care (Gunther & Storey, 2003), smoking (Gunther, Bolt, Borzekowski, Liebhart, & Dillard, 2006; Paek, 2009), and sexual behavior (Chia, 2006), as well as to political communication contexts, for example, strategic voting (Cohen & Tsfati, 2009). Thus, SCT, CT, and IPI research has led to the proposition that media exposure influences normative perceptions:

*Proposition 3:* Media exposure serves as a norm-building process; it is involved in the formation of a) descriptive and b) injunctive norms.

### 3.3 Norm-moderating factors: Anticipated communication with referent others, anticipated observation by referent others, and group identity

Next to the integration of interpersonal communication, one further merit of the TNSB is that it models circumstances under which normative social influences are more or less likely. Therefore, next to junctive norms, outcome expectations and group identity are considered to enhance the intention to follow perceived behavioral norms and thus to moderate those norms' impact (Rimal & Real, 2003, 2005; see also Chung & Rimal, 2016)<sup>3</sup>. We adopt these moderators but will interpret them more strictly from a communication perspective and will develop propositions on anticipated communication with referent others and anticipated observation by referents as well as group identity as norm-moderating factors.

Outcome expectations refer to the degree to which individuals perceive that a given action will result in the benefits that they seek (Bandura, 1977, 1986). The TNSB differentiates three sets of outcome expectations (Real & Rimal, 2007; Rimal & Real, 2005): the belief that the action will lead to individual benefits ("benefits to oneself," e.g., the belief that enacting the behavior is enjoyable), the belief that benefits accrue to those group members who perform the action ("benefits to others," e.g., the belief that enacting the behavior is enjoyable for others), and the belief that the behavior is an important social behavior within a social group and is able to enhance social life ("anticipatory socialization," e.g., the belief that enacting the behavior allows to make friends). As we seek to understand *communicative* and *social* normative processes, we focus on individuals' cognitions that refer to their social environment. More concretely, we consider only those individuals' cognitions that reflect their relation to and position within the group (i.e., *social cognitions*). Consequently, we do not incorporate benefits to oneself and benefits to others into our modeling, as they are cognitions that are unconnected to the social surrounding. However, we take up the concept of an-

3 Additionally, many further individual, behavioral, and contextual factors were proposed and tested in the TNSB research tradition (e.g., self-efficacy, involvement, privacy of the behavior, time constraints; for a summary, see Rimal and Lapinski (2015), Chung and Rimal (2016)).

tipatory socialization and the individual's belief that a behavior is a "social lubricant" (Rimal & Real, 2005, p. 394) as moderators of normative social influences. We therefore define *anticipated communication* with referent others and *anticipated observation* by referent others – that is, the individual's expectation that the behavior will result in communication with group members and will be observable by others – as relevant social outcome expectations. It is assumed that the anticipation of communication and the idea that prestigious behavior can be presented and thus observed (e.g., via social media) heighten normative influences and thus the intention to perform the behavior (see also Johnson, 2014; Krcmar & Strizhakova, 2009) because the anticipation of a social interaction enhances the likelihood that norm-compliance or norm-aberrance has a social consequence, such as appreciation or sanctions. We, thus, believe that the influence of perceived social approval (i.e., injunctive norms) of individuals' behavior will be strengthened if individuals anticipate that others will pay attention to the behavior (i.e., anticipated observation) or will be willing to talk about the behavior (i.e., anticipated communication) as the likelihood that they will receive social recognition for their norm-conformity increases. For example, if somebody perceives social approval in her referent's group for donating for social purposes, she will more likely make a donation if she believes that relevant others notice her donation behavior.

The idea that social motives, such as belongingness needs, drive human action is a fundamental premise in social psychology (e.g., Maslow, 1943). In the case of media use, the uses and gratifications approach explicitly refers to anticipated social interactions as behavioral motives (Katz, Blumler, & Gurevitch, 1973; Palmgreen, 1984; for a contemporary summary, see Krcmar & Strizhakova, 2009; Ruggiero, 2000). For example, Atkin (1972) examined communicatory utility – that is, the anticipated usefulness of media content for future informal interpersonal communication (see also Chaffee & McLeod, 1973) – and Waples, Berelson, and Bradshaw (1940) as well as Wright (1960) already reflected on the motive of social prestige for displaying media use.

Given current media developments, conceptualizing anticipated communication with referent others and observation by referent others as core parameters becomes even more relevant. Today's media environment offers many opportunities for communication and self-presentation (Livingstone, 2008; Walther et al., 2010) and thus many stages for the performance of norm-compliant behavior. In line with this argument, a study by Lee and Ma (2012) revealed that the gratification of socializing and status-seeking drive news-sharing in social media platforms, such as Facebook. Therefore, the inclusion of anticipated communication with and observation by referent others as moderators reflects our communication perspective and our focus on affordances of social and mobile media. We posit two propositions:

*Proposition 4:* Anticipated communication with referent others serves as a norm-moderating factor; it moderates the behavioral influence of a) descriptive and b) injunctive norms.

*Proposition 5:* Anticipated observation by referent others serves as a norm-moderating factor; it moderates the behavioral influence of a) descriptive and b) injunctive norms.

Next to outcome expectations, the TNSB conceptualizes group identity as a moderator of normative influence. Norms are linked to specific groups and have their effect because the group is relevant in the behavioral context and to the individual (Terry, Hogg, & White, 2000). Thus, norms do not exist independently of individuals' group identity, that is, the sense of belonging or "oneness" with the group (Deutsch & Gerard, 1955; Tajfel & Turner, 1979, 1986; for contemporary literature, see Hogg & Reid, 2006). In the TNSB, group identity has been considered a bidimensional construct (Rimal & Lapinski, 2015), which refers to the "individuals' aspiration to emulate referent others and the extent to which they perceive similarity between themselves and other referents" (Rimal & Real, 2005, p. 395). It is assumed that when people perceive a behavior as normative and they additionally perceive strong affinity with their reference group, they are much more likely to engage in that behavior themselves than when their affinity is weak. Additionally, from a communication perspective and in line with social cognitive theory (SCT; Bandura, 1977), group identity is of high relevance. SCT assumes that people are influenced by the actions of models who aspire to become and thus by communication with and observation of those relevant others. Findings support the hypothesis that group identity moderates the relationship between descriptive norms and behavioral intention (e.g., Hogg & Reid, 2006; Rimal, 2008; Rimal & Real, 2003, 2005). This reasoning yields the proposition on group identity as a further moderator of normative social influences:

*Proposition 6:* Group identity serves as a norm-moderating factor; it moderates the behavioral influence of a) descriptive and b) injunctive norms.

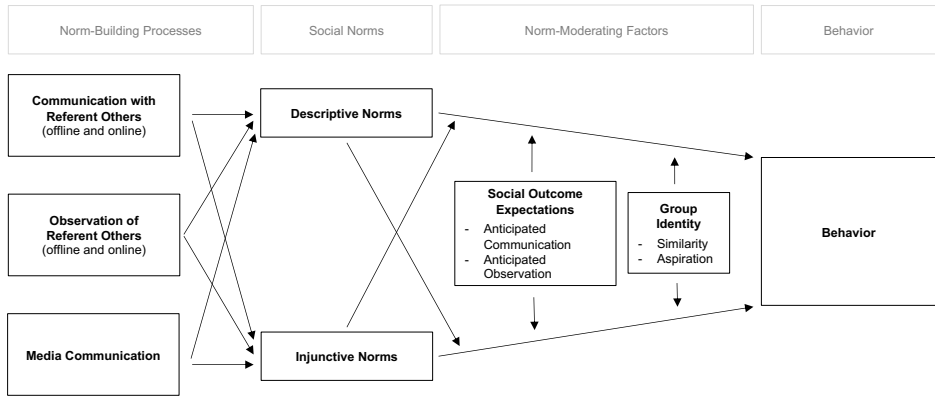
#### 4. Summary: The communication perspective on the TNSB

So far, we have developed a communication perspective on the theory of normative social behavior (TNSB; Real & Rimal, 2007; Rimal & Real, 2005), leading to six propositions on communication's role a) in the building of norms and b) for the moderation of norm's influence on behavior. Figure 2 integrates our propositions into one model.

The starting point of our communication perspective is that descriptive and injunctive components are *perceived* norms; they are perceptions of the reference group's behaviors (i.e., descriptive norms) and the social approval for behaviors of referent others (i.e., injunctive norms). Drawing from this point, our model suggests that both norm components are built through communication with referent others (Proposition 1), observation of referent others (Proposition 2), and media exposure (Proposition 3). By talking with group members, observing their social referents' behavior – both online and offline – and exposure to media, individuals learn about their referents' behaviors and behavior-related approval and, thus, develop perceptions of descriptive and injunctive norms.

Moreover, we assume that the anticipation of communication with referent others (Proposition 4) and observation by referent others (Proposition 5) are im-

portant moderators of the relationship between norms and behavior. The anticipation of communication and the idea that prestigious behavior can be presented and thus be observed (e.g., via social media) heighten normative influences and thus the intention to perform the behavior. Additionally, group identity serves as a moderator of normative social influences (Proposition 6). When people perceive strong affinity with their reference group, they are much more likely to engage in the group behavior than when their affinity is weak.



**Figure 2.** A communication perspective on the theory of normative social behavior. Readjustments of the TNSB from a communication perspective.

The communication perspective on the TNSB mainly strengthens two aspects of the understanding of normative social influences: First, we are able to understand more precisely how descriptive and injunctive norms are formed through online and offline communication with and observation of referent others and media exposure. Second, we understand more exactly the motives for performing a normative social behavior in the current media environment, where (digital) communication with and observation by referent others has become easier and more common.

## 5. Discussion

This paper's aim was to address the question of which role communication plays in normative social influences. Taking into account the media environment's changes in the visibility and permanence of communication, we theorized on the role of online and offline interpersonal communication and media communication a) in the building of norms and b) for the moderation of normative social influences on behaviors.

## 5.1 Benefits and limitations

The first benefit of our theoretical framework on norms as communicative phenomena is the integration of communication with referent others, observation of referent others, and media exposure as norm-building processes. In this way, we are able to understand more precisely how descriptive and injunctive norms are formed. Moreover, the conceptualization of communication and observation as determinants of individuals' perceptions helps to build a conceptual bridge from the individual to his or her reference group (see also Shulman & Levine, 2012; Yanovitzky & Rimal, 2006) and, thus, adds "considerable value" to research on normative social influences (Mollen et al., 2010, p. 546). More concretely, communication with referent others and observation of referent others can connect the idea of "collective norms" (Lapinski & Rimal, 2005; Rimal & Lapinski, 2015; see also Geber et al., 2019) that operate at the level of the social system and perceived norms located at the individual, psychological level, which might help to reflect on possible discrepancies between the actual social reality and the individual's perception of this reality as well as on the effects of communication, observation, and media exposure on such discrepancies (Berkowitz, 2004).

Second, our communication perspective on the TNSB helps to specifically understand communicative circumstances under which normative social influences on behaviors become likely by theorizing on norm-moderating factors. When reflecting on such norm-moderating factors, we focused on *social* cognitive factors—factors that reflect individuals' relation to and position within the group (i.e., social outcome expectations and group identity) in contrast to pure personal cognitions (e.g., benefits to oneself, involvement; cf. Lapinski, Zhuang, Koh, & Shi, 2017; Rimal, 2008) that are independent from the group and one's own approval of group members. This limitation on social cognitive moderating factors is in line with the principle of parsimony in theory building (Epstein, 1984). This paper's aim was to develop a communication perspective and to focus on such factors that are interrelated with communication. Consequently, personal moderators that are not related to the social environment are beyond the scope of the current contribution and were removed in the present model to develop a parsimonious communication perspective on normative social influences.

For analytical reasons, we differentiated between communicative processes that refer to interpersonal communication – such as communication with and observation of referent others – and exposure to media content and messages. We are aware that our source-based differentiation between interpersonal communication and media exposure has limitations (Chaffee & Metzger, 2001; Flanagin, 2017), as, due to the integration of Internet-based tools in people's communication repertoires, institutional and personal sources are often entangled. For example, institutional and professional sources, such as traditional news media or television broadcast stations, are integrated into social media (e.g., Facebook), where their content can be further disseminated by a private person and occasionally reframed by comments and annotations. In addition, there are platforms where more or less professional content can be produced and disseminated by private persons as well as by journalists from institutional sources. These new



forms of communication resulting from the technological convergence should be considered in future research addressing norm-building and norm-moderating processes in social media. However, as a first step, the distinction between interpersonal communication and media exposure serves this paper's aim to develop a communication perspective on normative social influences, as it allows us to analytically differentiate between communication stemming directly from members of the reference group and media content presenting individuals who are only similar to group members.

## 5.2 Outlook

Next to these benefits and limitations of our communication perspective on the TNSB, we left two questions unanswered to this point. First, we did not specify the behavior that is supposed to be explained by our communication perspective on normative social influences. In line with the attribute-centered approach (ACA; Rimal, Lapinski, Turner, & Smith, 2011), we posit that our theoretical propositions are applicable to behavior in general and that their fit does not depend on the behavior's thematic focus (e.g., media use, health and risk behavior, and political behavior) but rather on certain behavioral attributes. In their attribute-centered approach, Rimal et al. (2011) introduce three criteria of behaviors that seem to influence the power of social norms and thus the fruitfulness of the TNSB: the privacy of, addiction to, and cost of the behavior. For example, they suggest that if people perceive high descriptive norms regarding a particular behavior, these norms' impact might be limited if the behavior is private in nature and thus cannot be observed by others because the individual does not have to expect any social sanctions or rewards. Interestingly, the ACA underlines the relevance to attend to communication's role in normative social influences given the changes of the contemporary media environment. As social media affords visibility (Treem & Leonardi, 2012; see also Flanagin, 2017) by constituting a new platform to present one's own behavior to others (e.g., by sharing, liking, and commenting media content; Ellison & boyd, 2013), originally private behavior can easily be made public. Consequently, privacy is no longer an inherent attribute of the behavior; rather it is up to the users whether to make their behaviors public. It is assumed that users will only make prestigious behaviors public, for example, on social media, and remain silent about less prestigious media use (Johnson, 2014). The greater variability of privacy also has implications for the formation of social norms: If behavior is enacted in private settings, other people can hardly observe it, which restricts observational learning in face-to-face interactions and thus makes norm-building processes more difficult. The discussion of the privacy of a behavior illustrates that behavioral attributes can be crucial regarding normative social influences and that media changes have implications on the discussion of such behavioral attributes. However, considering the characteristics of these behaviors might allow future research to test hypotheses that are based on the interplay between normative social influences and such attributes of behaviors (Rimal et al., 2011).



Second, we defined the reference group as a group an individual belongs to and cares about (Tankard & Paluck, 2016, p. 184); however, we did not specify which type of social groups might serve as reference groups. Actually, social norms research has shown that proximal groups (such as close friends, family, or romantic partners) exert stronger normative influence than less proximal referent others (such as schoolmates, peers, or colleagues; Woolf, Rimal, & Sripad, 2014) and that the normative influence depends on perceived proximity to (Paek, 2009) and identification with the social group (Neighbors et al., 2010). However, rather distal groups also function as reference groups and exert normative influences (Woolf et al., 2014). Lynch, Coley, Sims, Lombardi, and Mahalik (2015) even demonstrated that multiple sources (parents, friends, schoolmates) might have normative social influences simultaneously and interactively. Consequently, we do not want to restrict the scope of our communication perspective on normative social influences to a certain social group and want to emphasize that proximal referents as well as distal acquaintances might exert normative social influences. This notion underlines the role of social media platforms – such as Facebook or Instagram – in the context of normative social influences. On social media platforms, individuals cannot only observe and be observed by close peers but also (by) rather distal acquaintances. It is clear that the definition of “friend” is stretched in Facebook (Hampton, Goulet, Marlow, & Rainie, 2012), where the number of friends exceeds the 10 to 20 close relationships people normally sustain in traditional relationships (Parks, 2007). However, among Facebook friends are both the most important relevant others (Walther et al., 2010) and the less important others that might serve as models and exert normative influence (e.g., Litt & Stock, 2011).

## 6. Conclusion

Our communication perspective on normative social influences theorizes on different forms of communication as norm-building processes and norm-moderating factors. It suggests that norms are built through communication with referent others (online and offline), observation of referent others (online and offline), and media exposure. Moreover, the anticipation of communication with referent others and the anticipation of observation by group members are modeled as important moderators of the relationship between norms and behavior. Given the changes in the visibility and permanence of communication in the contemporary media environment, norms and communication about norms are gaining importance in daily life. Therefore, our theoretical framework on norms as communicative phenomena provides an important and fruitful basis for future research on normative social influences and their interrelations with communication. In the next step, empirical work that tests the described theoretical assumptions is needed. In this way, the theory will be refined and potentially adjusted to different behaviors. Furthermore, empirical results will provide starting points for communication strategies that promote socially desirable behaviors.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, N.J.: Prentice-Hall.
- Atkin, C. K. (1972). Anticipated communication and mass media information-seeking. *Public Opinion Quarterly*, 36, 188. <https://doi.org/10.1086/267991>
- Bandura, A. (1977). *Social learning theory*. *Prentice-Hall Series in Social Learning Theory*. Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. *Prentice-Hall Series in Social Learning Theory*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bandura, A. (2009). A social cognitive theory of mass communication. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3<sup>rd</sup> ed., pp. 94–124). New York, NY: Routledge.
- 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. <https://doi.org/10.1089/cyber.2010.0510>
- 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, 635–657. <https://doi.org/10.1111/jcom.12106>
- Berger, C. R. (2008). Interpersonal communication. In W. Donsbach (Ed.), *The international encyclopedia of communication* (pp. 2473–2486). Malden, MA: Blackwell.
- Berkowitz, A. D. (2004). *The social norms approach: Theory, research, and annotated bibliography*. Retrieved from [http://www.alanberkowitz.com/articles/social\\_norms.pdf](http://www.alanberkowitz.com/articles/social_norms.pdf)
- Carcioppolo, N., & Jensen, J. D. (2012). Perceived historical drinking norms and current drinking behavior: Using the theory of normative social behavior as a framework for assessment. *Health Communication*, 27, 766–775. <https://doi.org/10.1080/10410236.2011.640973>
- Chaffee, S. H., & McLeod, J. M. (1973). Individual vs. social predictors of information seeking. *Journalism & Mass Communication Quarterly*, 50, 237–245. <https://doi.org/10.1177/107769907305000204>
- Chaffee, S. H., & Metzger, M. J. (2001). The end of mass communication? *Mass Communication and Society*, 4, 365–379. [https://doi.org/10.1207/S15327825MCS0404\\_3](https://doi.org/10.1207/S15327825MCS0404_3)
- Chia, S. C. (2006). How peers mediate media influence on adolescents' sexual attitudes and sexual behavior. *Journal of Communication*, 56, 585–606. <https://doi.org/10.1111/j.1460-2466.2006.00302.x>
- Chung, A., & Rimal, R. N. (2016). Social norms: A review. *Review of Communication Research*, 2016, 1–28. <https://doi.org/10.12840/issn.2255-4165.2016.04.01.008>
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58, 1015–1026.
- Cohen, J., & Tsfati, Y. (2009). The influence of presumed media influence on strategic voting. *Communication Research*, 36, 359–378. <https://doi.org/10.1177/0093650209333026>

- Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influences upon individual judgment. *Journal of Abnormal and Social Psychology*, 51, 629–636.
- Dunlop, S. M., Kashima, Y., & Wakefield, M. (2010). Predictors and consequences of conversations about health promoting media messages. *Communication Monographs*, 77, 518–539. <https://doi.org/10.1080/03637751.2010.502537>
- Ellison, N. B., & Boyd, D. M. (2013). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford handbook of Internet studies* (1st ed., 151–172). Oxford: Oxford Univ. Press.
- Epstein, R. (1984). The principle of parsimony and some applications in psychology. *Journal of Mind and Behavior*, 5, 119–130.
- Fine, G. A. (2001). Enacting norms: Mushrooming and the culture of expectations and explanations. In M. Hechter & K.-D. Opp (Eds.), *Social norms* (pp. 139–164). New York: Russell Sage Foundation.
- Fishbein, M., & Yzer, M. C. (2003). Using theory to design effective health behavior interventions. *Communication Theory*, 13, 164–183. <https://doi.org/10.1111/j.1468-2885.2003.tb00287.x>
- Flanagin, A. J. (2017). Online social influence and the convergence of mass and interpersonal communication. *Human Communication Research*, 43, 450–463. <https://doi.org/10.1111/hcre.12116>
- Geber, S., Baumann, E., Czerwinski, F. & Klimmt, C. (2019). The effects of social norms among peer groups on risk behavior: A multilevel approach to differentiate perceived and collective norms. *Communication Research*. Advance online publication. <https://doi.org/10.1177/0093650218824213>
- Geber, S., Baumann, E. & Klimmt, C. (2017). Where do norms come from? Peer communication as a factor in normative social influences on risk behavior. *Communication Research*. Advance online publication. <https://doi.org/10.1177/0093650217718656>
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication*, 26, 172–194. <https://doi.org/10.1111/j.1460-2466.1976.tb01397.x>
- Good, K. D. (2013). From scrapbook to Facebook: A history of personal media assemblage and archives. *New Media & Society*, 15, 557–573. <https://doi.org/10.1177/1461444812458432>
- Grube, J. W., Morgan, M., & McGree, S. T. (1986). Attitudes and normative beliefs as predictors of smoking intentions and behaviours: A test of three models. *British Journal of Social Psychology*, 25, 81–93. <https://doi.org/10.1111/j.2044-8309.1986.tb00707.x>
- Gunther, A. C., Bolt, D., Borzekowski, D. L. G., Liebhart, J. L., & Dillard, J. P. (2006). Presumed influence on peer norms: How mass media indirectly affect adolescent smoking. *Journal of Communication*, 56, 52–68. <https://doi.org/10.1111/j.1460-2466.2006.00002.x>
- Gunther, A. C., & Storey, J. D. (2003). The Influence of presumed influence. *Journal of Communication*, 53, 199–215. <https://doi.org/10.1111/j.1460-2466.2003.tb02586.x>
- Hampton, K. N., Goulet, L. S., Marlow, C., & Rainie, L. (2012). *Why most Facebook users get more than they give: The effect of Facebook 'power users' on everybody else*. Retrieved from Pew Research Center's Internet & American Life Project website: <http://www.pewinternet.org/2012/02/03/why-most-facebook-users-get-more-than-they-give/>
- Hogg, M. A. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary social psychological theories* (pp. 111–136). Stanford, CA: Stanford Social Sciences.

- Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication Theory*, 16, 7–30. <https://doi.org/10.1111/j.1468-2885.2006.00003.x>
- Hogg, M. A., & Tindale, R. S. (2005). Social identity, influence, and communication in small groups. In J. Harwood & H. Giles (Eds.), *Language as social action. Intergroup communication. Multiple perspectives* (pp. 141–164). New York: Peter Lang.
- Humphreys, L., Pape, T. von, & Karnowski, V. (2013). Evolving mobile media: Uses and conceptualizations of the mobile Internet. *Journal of Computer-Mediated Communication*, 18, 491–507. <https://doi.org/10.1111/jcc4.12019>
- Johnson, B. K. (2014). *Selective exposure to prestigious and popular media. Anticipated taste performances and social influences on media choice* (PhD Thesis). Ohio State University. Retrieved from [https://etd.ohiolink.edu/etd.send\\_file?accession=osu1397734249&disposition=inline](https://etd.ohiolink.edu/etd.send_file?accession=osu1397734249&disposition=inline)
- Kallgren, C. A., Reno, R. R., & Cialdini, R. B. (2000). A focus theory of normative conduct: When norms do and do not affect behavior. *Personality and Social Psychology Bulletin*, 26, 1002–1012. <https://doi.org/10.1177/01461672002610009>
- Kashima, Y., Wilson, S., Lusher, D., Pearson, L. J., & Pearson, C. (2013). The acquisition of perceived descriptive norms as social category learning in social networks. *Social Networks*, 35, 711–719. <https://doi.org/10.1016/j.socnet.2013.06.002>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, 37, 509–523.
- Klimmt, C., Hefner, D., Reinecke, L., Rieger, D., & Vorderer, P. (2018). The permanently online and permanently connected mind: Mapping the cognitive structures behind mobile internet use. In P. Vorderer, D. Hefner, L. Reinecke, & C. Klimmt (Eds.), *Permanently online, permanently connected. Living and communicating in a POPC world* (pp. 18–28). New York, NY: Routledge.
- Krcmar, M., & Strizhakova, Y. (2009). Uses and gratifications as media choice. In T. Hartmann (Ed.), *Media choice. A theoretical and empirical overview* (pp. 53–69). New York, NY: Routledge.
- Lapinski, M. K., & Rimal, R. N. (2005). An explication of social norms. *Communication Theory*, 15, 127–147. <https://doi.org/10.1093/ct/15.2.127>
- Lapinski, M. K., Zhuang, J., Koh, H., & Shi, J. (2017). Descriptive norms and involvement in health and environmental behaviors. *Communication Research*, 44, 367–387. <https://doi.org/10.1177/0093650215605153>
- Lee, C. M., Geisner, I. M., Lewis, M. A., Neighbors, C., & Larimer, M. E. (2007). Social motives and the interaction between descriptive and injunctive norms in college student drinking. *Journal of Studies on Alcohol and Drugs*, 68, 714–721. <https://doi.org/10.15288/jsad.2007.68.714>
- Lee, C. S., & Ma, L. (2012). News sharing in social media: The effect of gratifications and prior experience. *Computers in Human Behavior*, 28, 331–339. <https://doi.org/10.1016/j.chb.2011.10.002>
- Lee, E. W. J., Ho, S. S., & Lwin, M. O. (2017). Explicating problematic social network sites use: A review of concepts, theoretical frameworks, and future directions for communication theorizing. *New Media & Society*, 19, 308–326. <https://doi.org/10.1177/1461444816671891>

- Litt, D. M., & Stock, M. L. (2011). Adolescent alcohol-related risk cognitions: The roles of social norms and social networking sites. *Psychology of Addictive Behaviors*, 25, 708–713. <https://doi.org/10.1037/a0024226>
- Liu, H. (2007). Social network profiles as taste performances. *Journal of Computer-Mediated Communication*, 13, 252–275. <https://doi.org/10.1111/j.1083-6101.2007.00395.x>
- Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society*, 10, 393–411. <https://doi.org/10.1177/1461444808089415>
- Lynch, A. D., Coley, R. L., Sims, J., Lombardi, C. M., & Mahalik, J. R. (2015). Direct and interactive effects of parent, friend and schoolmate drinking on alcohol use trajectories. *Psychology & Health*, 30, 1183–1205. <https://doi.org/10.1080/08870446.2015.1040017>
- Manning, M. (2009). The effects of subjective norms on behaviour in the theory of planned behaviour: A meta-analysis. *The British Journal of Social Psychology*, 48, 649–705. <https://doi.org/10.1348/014466608X393136>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50, 370–396.
- Mead, E. L., Rimal, R. N., Ferrence, R., & Cohen, J. E. (2014). Understanding the sources of normative influence on behavior: The example of tobacco. *Social Science & Medicine* (1982), 115, 139–143. <https://doi.org/10.1016/j.socscimed.2014.05.030>
- Mollen, S., Rimal, R. N., & Lapinski, M. K. (2010). What is normative in health communication research on norms? A review and recommendations for future scholarship. *Health Communication*, 25, 544–547. <https://doi.org/10.1080/10410236.2010.496704>
- Montaño, D. E., & Kasprzyk, D. (2015). Theory of reasoned action, theory of planned behavior, and the integrated behavioral model. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health behavior. Theory, research, and practice* (pp. 95–124). San Francisco, CA: Jossey-Bass, a Wiley Brand.
- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54, 337–355. <https://doi.org/10.1080/08838151003735018>
- Nagler, R. H. (2017). Measurement of media exposure. In J. Matthes (Ed.), *The Wiley Blackwell-ICA international encyclopedias of communication. The international encyclopedia of communication research methods* (Vol. 2, pp. 1–21). Hoboken, NJ: John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118901731.iecrm0144>
- Neighbors, C., LaBrie, J. W., Hummer, J. F., Lewis, M. A., Lee, C. M., Desai, S., Kilmer, J. R. & Larimer, M. E. (2010). Group identification as a moderator of the relationship between perceived social norms and alcohol consumption. *Psychology of Addictive Behaviors*, 24, 522–528. <https://doi.org/10.1037/a0019944>
- Paek, H.-J. (2009). Differential effects of different peers: Further evidence of the peer proximity thesis in perceived peer influence on college students' smoking. *Journal of Communication*, 59, 434–455. <https://doi.org/10.1111/j.1460-2466.2009.01423.x>
- Palmgreen, P. (1984). Uses and gratifications: A theoretical perspective. *Annals of the International Communication Association*, 8, 20–55. <https://doi.org/10.1080/23808985.1984.11678570>
- Paluck, E. L., & Shepherd, H. (2012). The salience of social referents: A field experiment on collective norms and harassment behavior in a school social network. *Journal of Personality and Social Psychology*, 103, 899–915. <https://doi.org/10.1037/a0030015>
- Park, H. S., & Smith, S. W. (2007). Distinctiveness and influence of subjective norms, personal descriptive and injunctive norms, and societal descriptive and injunctive norms on

- behavioral intention: A case of two behaviors critical to organ donation. *Human Communication Research*, 33, 194–218. <https://doi.org/10.1111/j.1468-2958.2007.00296.x>
- Parks, M. R. (2007). *Personal relationships and personal networks*. LEA's Series on Personal Relationships. Mahwah, N.J.: Erlbaum.
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30, 227–238. <https://doi.org/10.1016/j.appdev.2008.12.010>
- Perloff, R. M. (1999). The third person effect: A critical review and synthesis. *Media Psychology*, 1, 353–378. [https://doi.org/10.1207/s1532785xmep0104\\_4](https://doi.org/10.1207/s1532785xmep0104_4)
- Real, K., & Rimal, R. N. (2007). Friends talk to friends about drinking: Exploring the role of peer communication in the theory of normative social behavior. *Health Communication*, 22, 169–180. <https://doi.org/10.1080/10410230701454254>
- Rimal, R. N. (2008). Modeling the relationship between descriptive norms and behaviors: A test and extension of the theory of normative social behavior (TNSB). *Health Communication*, 23, 103–116. <https://doi.org/10.1080/10410230801967791>
- Rimal, R. N., & Lapinski, M. K. (2015). A re-explication of social norms, ten years later. *Communication Theory*, 25, 393–409. <https://doi.org/10.1111/comt.12080>
- Rimal, R. N., Lapinski, M. K., Turner, M. M., & Smith, K. C. (2011). The attribute-centered approach for understanding health behaviors: Initial ideas and future research directions. *Studies in Communication Sciences*, 11, 15–34.
- Rimal, R. N., & Real, K. (2003). Understanding the influence of perceived norms on behaviors. *Communication Theory*, 13, 184–203. <https://doi.org/10.1093/ct/13.2.184>
- 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. <https://doi.org/10.1177/0093650205275385>
- Roberts, J. A., & David, M. E. (2016). My life has become a major distraction from my cell phone: Partner phubbing and relationship satisfaction among romantic partners. *Computers in Human Behavior*, 54, 134–141. <https://doi.org/10.1016/j.chb.2015.07.058>
- Ruggiero, T. E. (2000). Uses and gratifications theory in the 21<sup>st</sup> century. *Mass Communication and Society*, 3, 3–37. [https://doi.org/10.1207/S15327825MCS0301\\_02](https://doi.org/10.1207/S15327825MCS0301_02)
- Shepherd, H. R. (2017). The structure of perception: How networks shape ideas of norms. *Sociological Forum*, 32, 72–93. <https://doi.org/10.1111/socf.12317>
- Shulman, H. C., & Levine, T. R. (2012). Exploring social norms as a group-level phenomenon: Do political participation norms exist and influence political participation on college campuses? *Journal of Communication*, 62, 532–552. <https://doi.org/10.1111/j.1460-2466.2012.01642.x>
- Smith, J. R., & Louis, W. R. (2008). Do as we say and as we do: The interplay of descriptive and injunctive group norms in the attitude-behaviour relationship. *The British Journal of Social Psychology*, 47, 647–666. <https://doi.org/10.1348/014466607X269748>
- Southwell, B. G., & Yzer, M. C. (2007). The roles of interpersonal communication in mass media campaigns. *Communication Yearbook*, 31, 419–462.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks/Cole Pub. Co.



- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In W. G. Austin & S. Worchel (Eds.), *Psychology of intergroup relations* (2<sup>nd</sup> ed., pp. 7–24). Chicago, IL: Nelson-Hall Publishers.
- Tankard, M. E., & Paluck, E. L. (2016). Norm perception as a vehicle for social change. *Social Issues and Policy Review*, 10, 181–211. <https://doi.org/10.1111/sipr.12022>
- Terry, D. J., Hogg, M. A., & White, K. M. (2000). Attitude-behavior relations: Social identity and group membership. In D. J. Terry & M. A. Hogg (Eds.), *Applied social research. Attitudes, behavior, and social context. The role of norms and group membership* (2<sup>nd</sup> ed., pp. 67–94). Mahwah, N.J.: Erlbaum.
- Treem, J. W., & Leonardi, P. M. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Communication Yearbook*, 36, 143–189. <https://doi.org/10.2139/ssrn.2129853>
- Uski, S., & Lampinen, A. (2016). Social norms and self-presentation on social network sites: Profile work in action. *New Media & Society*, 18, 447–464. <https://doi.org/10.1177/1461444814543164>
- Vreese, C. H. de, & Neijens, P. (2016). Measuring media exposure in a changing communications environment. *Communication Methods and Measures*, 10, 69–80. <https://doi.org/10.1080/19312458.2016.1150441>
- Walther, J. B., Carr, C. T., Choi, S., DeAndrea, D. C., Kim, J., Tong, S. T., & van der Heide, B. (2010). Interaction of interpersonal, peer, and media influence sources online: A research agenda for technology convergence. In Z. Papacharissi (Ed.), *A networked self. Identity, community and culture on social network sites* (pp. 17–38). New York, NY: Routledge.
- Waples, D., Berelson, B., & Bradshaw, F. R. (1940). *What reading does to people: A summary of evidence on the social effects of reading and a statement of problems for research*. Chicago, IL: University of Chicago Press.
- White, K. M., Terry, D. J., & Hogg, M. A. (1994). Safer sex behavior: The role of attitudes, norms, and control factors. *Journal of Applied Social Psychology*, 24, 2164–2192. <https://doi.org/10.1111/j.1559-1816.1994.tb02378.x>
- Wirth, W., Pape, T. von, & Karnowski, V. (2008). An integrative model of mobile phone appropriation. *Journal of Computer-Mediated Communication*, 13, 593–617. <https://doi.org/10.1111/j.1083-6101.2008.00412.x>
- Wolf, J., Rimal, R. N., & Sripad, P. (2014). Understanding the influence of proximal networks on high school athletes' intentions to use androgenic anabolic steroids. *Journal of Sport Management*, 28, 8–20. <https://doi.org/10.1123/jsm.2013-0046>
- Wright, C. R. (1960). Functional analysis and mass communication. *Public Opinion Quarterly*, 24, 605–620. <https://doi.org/10.1086/266976>
- Yanovitzky, I., & Rimal, R. N. (2006). Communication and normative influence: An introduction to the special issue. *Communication Theory*, 16, 1–6. <https://doi.org/10.1111/j.1468-2885.2006.00002.x>