



# The Focus Theory of Normative Conduct

# 7

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## Contents

<b>Basic Theory</b> .....	95
Descriptive and Injunctive Social Norms .....	96
Normative Focus .....	98
<b>Research in an Applied Context</b> .....	99
Self-Regulatory Resources .....	100
Relationship with the Norm Referent Group .....	102
Using Descriptive or Injunctive Social Norms To Instigate Behavior Change .....	102
<b>Detailed Discussion of One Study</b> .....	103
<b>Recommended Reading</b> .....	107
<b>Guiding Answers to Questions in the Chapter</b> ....	108
<b>References</b> .....	108

## Basic Theory

Human beings are social animals. They do not operate in a vacuum, but instead they are continuously influenced by others human beings. As such, an individual's emotions, attitudes, and behaviors cannot be viewed separately from the social groups they belong to. Social groups can be as small as a family or as large as a nation or religious group, and every individual belongs to different social groups. Every social group holds certain standards, expectations, and rules for what is "normal" and "appropriate" to feel, think, and do, which have an effect on all members of the group. These standards, expectations, and rules are referred to as **social norms**. A group's social norms are often unwritten; yet, they tend to be deeply institutionalized in the group and fully internalized by the group's members. That is, the social norms that exist in a given individual's relevant social group will affect that individual not only when there are other group members present (and when there is thus a direct incentive to adhere to the group's norms), but also when there are no other group members nearby.

### Definition Box

**Social norms:** These are the standards, expectations, and rules held by a social group for what is "normal" and "appropri-

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ate” to feel, think, and do. A group’s social norms are often unwritten; yet, they tend to be deeply institutionalized in the group and fully internalized by the group’s members.

The influence of social norms is ubiquitous and is generally considered in psychology to be one of the essential drivers of human behavior (e.g., Berkowitz, 1972; Birnbaum & Sagarin, 1976; Sherif, 1936), and social norm-based concepts have long been included in models and theories that aim to predict human behavior (e.g., Bandura, 1977; Fishbein & Ajzen, 1975). However, questions were also being raised about the usefulness of the concept of social norms, with several scholars pointing out the vagueness and overgeneralization of the concept, as well as the highly inconsistent predictive value of social norms (e.g., Darley & Latane, 1970; Marini, 1984; Schwartz, 1973). In response to these criticisms, a theoretical refinement of the concept of social norms, and the manner in which they impact human behavior, was introduced by Cialdini and colleagues (Cialdini, Reno, & Kallgren, 1990; Cialdini, Kallgren, & Reno, 1991; Kallgren, Reno, & Cialdini, 2000; Reno, Cialdini, & Kallgren, 1993). This resulted in the **Focus Theory of Normative Conduct** (Fig. 7.1). The Focus Theory of Normative Conduct both refines the definition of social norms by making a clear distinction between two different types of

social norms, *descriptive* and *injunctive* social norms, and introduces the concept of *normative focus* to shed light on which type of social norm will affect people’s behavior in which type of situation, and why.

**Definition Box**

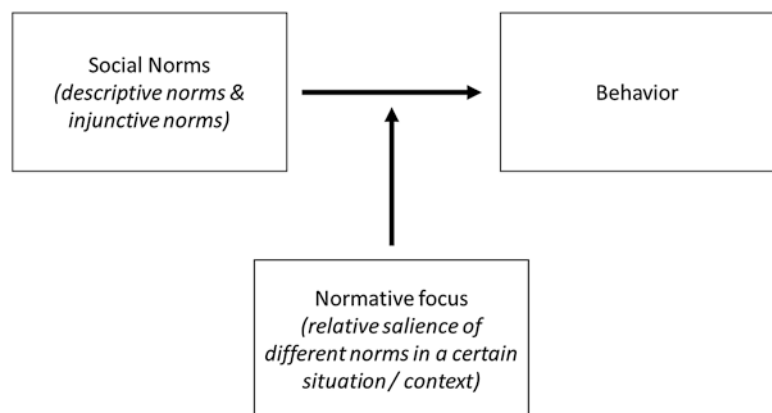
**Focus Theory of Normative Conduct:**

This theory stipulates that norms affect human behavior powerfully and systematically. In situations where several social norms are present at the same time, behavior will be dictated by the *focal* norm, that is, the norm that is made salient and that attention is focused on. The theory further distinguishes between two different kinds of social norms: *descriptive* and *injunctive* norms. The theory is described in more detail in this section.

**Descriptive and Injunctive Social Norms**

Human behavior in social situations stems from two very different motivational sources, as was shown as far back as 1955 by Deutsch and Gerard. People may be influenced by others because they consider these others a source of *informational social influence* – that is, the actual behavior of others provides information about the

**Fig. 7.1** Schematic representation of the Focus Theory of Normative Conduct



normal, usual, or correct way to behave in a certain situation. This influences people's behavior because humans are generally motivated to be accurate (Cialdini & Goldstein, 2004): They want to respond to any given situation in the most efficient way possible, and how others behave provides important cues about what might be the most efficient or adaptive way to behave. Cialdini has argued that looking to others as a source of information offers an information-processing advantage and provides a so-called decisional shortcut (Cialdini, 1988). The Focus Theory of Normative Conduct refers to social norms that describe what is the typical or usual thing to do as **descriptive norms**. Conversely, people may also be influenced by others because they consider these others a source of *normative social influence*. – the expectations of others provide information about the appropriate or desired way to behave in a certain situation. This influences people's behavior because humans are generally motivated to affiliate with others (Cialdini & Goldstein, 2004): They want to build and maintain social relationships with those around them, to be liked and approved by others, and to avoid social exclusion. What other people expect provides important cues about which behaviors will allow one to meet these affiliation goals. The Focus Theory of Normative Conduct refers to social norms that describe what ought to be done as **injunctive norms**.

#### Definition Box

**Descriptive norms:** Social norms that describe what is the typical or usual thing to do within a certain social groups.

**Injunctive norms:** Social norms that describe what other group members think ought to be done.

In many situations, descriptive and injunctive norms will be aligned. In these cases, what a social group believes *ought* to be done is also indeed what is *being* done by the group members (e.g., when library visitors turn silent upon

entering the library, Aarts & Dijksterhuis, 2003). However, the underlying motive for being silent in the library may still differ from one person to the other, and the fundamental differences between the two major sources of motivation are highly relevant both theoretically and practically, as we will demonstrate in the following sections. Important to note already here is that the informational source of social influence is more directly related to the behavioral decision at hand: People simply wish to behave in the most adaptive way possible and use other people's behavior as a cue to inform them about that most adaptive way (see also Manning, 2009). The normative source of social influence, conversely, is at best indirectly related to the behavioral decision at hand: People are not so much looking for the best solution to the behavioral decision itself, but rather are looking to attain a more distant goal, namely to gain social approval and avoid social sanctions (even if this may lead to a suboptimal behavioral decision). This is corroborated by results from a priming study (Jacobson, Mortensen, & Cialdini, 2011 Study 1): Priming people with descriptive norm-related words (e.g., "typical," "usual") led to faster responses on target words related to the goal of accuracy (e.g., "accurate," "efficient") compared to comparison non-words, whereas priming people with injunctive norm-related words (e.g., "ought," "duty") led to faster response times on target words related to the goal of social approval (e.g., "approval," "team").

The crucial relevance of this distinction has been very aptly demonstrated in Asch's conformity experiments (1951), in which participants had to perform a very simple task in a group setting – each group member in turn had to publicly provide their solution of the task. Unknowing to the participants, all other members of the group were confederates to the experiment, who would purposely provide a wrong answer to the simple task. Post hoc interviews with the true participants convincingly showed that participants could have very different reasons for going along with people providing a faulty answer on a very simple task. Participants with low self-esteem, for example, were genuinely confused when

others provided a wrong answer and became unsure of their own judgment. These participants reported going along with others' answer simply because they no longer trust their own judgment and considered that multiple others simply could not be wrong – thus using the other people as a source of *informational* social influence (see also Wylie, 1961; Ziller, Hagey, Smith, & Long, 1969). Other participants, however, indicated being very much aware of the fact that the answer that was provided by the other people was wrong, but stated that they simply did not want to be the one to diverge and stand out from the group. For these participants, the others became a source of *normative* social influence. Giving a correct answer was no longer their main priority; rather, maintaining a sense of belonging to the group became the main priority (Cialdini & Goldstein, 2004).

### Box 7.1 Zooming In: A Closer Look at Asch's Conformity Experiments

Many variations of the Asch's conformity experiments have been performed. One interesting variation is the inclusion of one "accomplice" (one other person who also diverges from the group opinion). This has dramatic effects on the answers people provide. Interestingly, this is especially true for those motivated by *informational social influence*. Videos of the Asch's conformity experiments, as well as more information on such variations of the experiment, can be found on YouTube by searching for "Asch conformity." Heroic Imagination TV, for example, has created a highly informational video.

## Normative Focus

In normal day-to-day situations, multiple social norms are typically present at the same time. While these may be congruent, many times they will also be in conflict with each other. A good social norms theory then, in order to have any

practical use, should be able to make some sort of prediction as to which norm will affect behavior under which conditions. The Focus Theory of Normative Conduct aims to do so by introducing the concept of normative focus. Normative focus refers to the idea that any given social norm will only influence behavior when it is activated at the moment of the behavioral decision, that is, when that specific norm is made salient or when an individual's attention is focused on that specific norm while choosing their path of action.

For example, multiple early studies by Cialdini and colleagues showed that a descriptive anti-littering norm (i.e., a clean environment) always led to less littering than a descriptive pro-littering norm (i.e., a littered environment), but that this effect became much more pronounced when the descriptive norm was made *focal* (i.e., when people's attention was specifically drawn toward the norm; Cialdini et al., 1990, Study 1; Reno et al., 1993, Study 1). Similarly, focusing people on an injunctive social norm not to litter led to lower littering than focusing people on a no-norm control message (Cialdini et al., 1990, Study 5). The same study also showed that focusing participants on an injunctive social norm close to an anti-littering norm, namely a recycling norm, led to lower littering than focusing them on an injunctive social norm that is far away from an injunctive anti-littering norm, such as a voting norm – but littering following the voting norm was still lower than following a no-norm control message. This is in line with the idea of spreading activation of neural networks (e.g., Anderson, 1983; Harvey & Enzle, 1981).

What the Focus Theory of Normative Conduct added to the field was a more profound understanding of when and why social norms would affect behavior, and also under which conditions social norms would *not* affect behavior. Indeed, in one article, Cialdini and colleagues concluded that "[o]ur data indicate that under naturally occurring conditions, if there is no salience, behavior will be largely unguided by normative considerations. [...] It is misguided to expect that because norms are constantly in place within a person or culture, they are constantly in force" (Kallgren et al., 2000, p. 1010–1011). This

increased insight allowed the field to move forward in terms of systematic hypothesis testing, which in turn opened up possibilities for applying the concept of social norms to public behavior change.

An important limitation of the Focus Theory of Normative Conduct is that the processes through which a norm can become focal are not described sufficiently in the original theory and accompanying early studies of the theory. These studies mainly focused on quite artificial norm shift manipulations in highly specific and oversimplified settings. In real life, however, the contexts in which behavioral decisions are made are hardly ever so simple. Consider the example of eating behavior: Over 200 eating-related decisions are made each day (Wansink & Sobal, 2007), and this is done in an environment filled with multiple eating-related norms, which not only often conflict each other (think of thin, fit people advertising extremely unhealthy food types), but also often are ambiguous, vague, or outdated (De Ridder, De Vet, Stok, Adriaanse, & De Wit, 2013). It is not easy to ascertain how in such complex environments, one social norm becomes focal over many others using the knowledge from the type of studies described earlier. Moreover, the exact procedures employed to make social norms focal in these early studies of the Focus Theory of Normative Conduct have been criticized for not always being empirically and theoretically convincing. While these issues limit the conclusions that can be drawn from these early studies on its own, a large body of subsequent research exists to back up the idea of the importance of normative focus. It is to several of such studies that we now turn our attention.

### Box 7.2 Zooming In: Criticism of the Procedures to Make Social Norms Focal

The exact procedures employed to make social norms focal in these early studies of the Focus Theory of Normative Conduct can be criticized (as Cialdini and his colleagues indeed point out themselves,

e.g., Kallgren et al., 2000) for not always being empirically and theoretically convincing. As an illustration, consider the example of a norm focus manipulation discussed in this chapter, the case of a confederate walking through a clean area and then either littering or not littering. This manipulation may be interpreted by the average reader in a different manner than by Cialdini and colleagues. Their interpretation is that in a littered environment, a littering confederate makes a descriptive pro-littering norm more salient than a non-littering confederate, but in clean environment, a littering confederate in fact makes a descriptive anti-littering norm more salient (because it so obviously goes against the anti-littering norm stipulated by the clean environment). Theoretical underpinnings for this assumption are weak at best. There is no convincing argumentation as to (a) why the same behavior of one confederate can apparently make opposite norms salient, (b) why littering of one person in a clean environment would underscore anti-littering rather than pro-littering, and (c) why the one-time behavior of one single person would constitute a powerful norm shift manipulation in the first place (generally, social norms are thought to have to stem from a group of people).

## Research in an Applied Context

Social norms have been used to promote desired behavior in a large number of applied settings, such as consumer behavior, health behavior (most notably alcohol consumption in college students, but also many other types of health behavior), and sustainable behavior. For example, the so-called social norms approach (Perkins & Berkowitz, 1986) became popular in the 1990s off the back of a seminal study showing that college students highly overestimated their peers' alcohol abuse and acceptance of alcohol abuse,

and that these misperceptions influenced college students' own drinking attitudes and behavior approximate to the perceived norm (Perkins & Berkowitz, 1986). Such misperceptions (labeled as “pluralistic ignorance”; Toch & Klofas, 1984) occur both in relation to problem behaviors (which are usually overestimated) and protective behaviors (which are usually underestimated).

The idea of the social norms approach was that, by presenting more accurate descriptive norms through campaigns, these misperceptions would be corrected and alcohol abuse (or other problematic behaviors) would be reduced. Such interventions are easy to implement and inexpensive, and it is therefore not surprising that the basic concept was quickly adopted in many other policy domains as well. However, the popularity of social norm-based interventions is not supported by a strong and consistent record of efficacy. With regard to college students' alcohol consumption, for example, positive effects (Turner, Perkins, & Bauerle, 2008), no effects (Granfield, 2005), and even counterproductive effects of social norms interventions have been reported (Campo & Cameron, 2006; Clapp, Lange, Russel, Shillington, & Voas, 2003).

One of the reasons for this might be that many of these social norm-based interventions moved away from the original approach of correcting misperceived norms toward the use of manipulated, made-up norms to affect behavior. In any case, the substantial variation in effectivity suggests that social norm interventions are not a “quick-and-dirty” panacea for all who wish to instigate behavior change – rather, attention should be paid to how and when social norms can instigate behavior change, and what are important moderators of the effect of social norms (Burchell, Rettie, & Patel, 2013; Rimal & Real, 2003). We will discuss two important moderators in detail below in the following text.

### Box 7.3 Question for Elaboration

You have been assigned to design a strategy for less alcohol consumption on campus. What would you prefer: using a descriptive norm or an injunctive norm?

## Self-Regulatory Resources

A first crucial moderator of social norm effects is the extent to which people have access to **self-regulatory resources** when they are exposed to a norm (Jacobson et al., 2011). It has been suggested that the availability of self-regulatory resources when exposed to social norms plays a crucial role in determining whether these social norms become focal, and thus affect one's behavior, or not (Jacobson et al., 2011). As already discussed earlier, descriptive norms provide informational social influence that is directly related to the behavioral decision at hand, whereas injunctive norms provide normative social influence that is directly related to the more distant goal of social affiliation, and only indirectly related to the behavioral decision at hand. It has been shown that self-regulatory capacity interacts very differently with these two underlying motives.

### Definition Box

**Self-regulatory resources:** The capacity that people have to exert effortful control over their inner states and external behaviors (Vohs & Baumeister, 2016; Baumeister, Vohs, & Tice, 2007; see also Gieseler, Loschelder, & Friese, Chap. 1 this volume). This capacity has been shown to be limited, that is, people do not always have ample self-regulatory capacity available at any given moment.

Under conditions of low self-regulatory capacity (or similar “fast” types of processing; cf. Kahneman, 2011), people's decision-making tends to be less well thought-through and more automatic. In such instances, quick heuristics that help make effective, adaptive decisions are highly helpful, and this is exactly what descriptive social norms offer (remember that Cialdini has referred to descriptive social norms as “decisional shortcuts”). When self-regulatory capacity is higher (or when people have the opportunity

and the motivation for “slow” thinking; cf. Kahneman, 2011), people might rely more on other factors, such as their own values and goals, to come to a behavioral decision, and descriptive norms may thus play a less crucial role. These ideas have been corroborated by various studies in multiple domains.

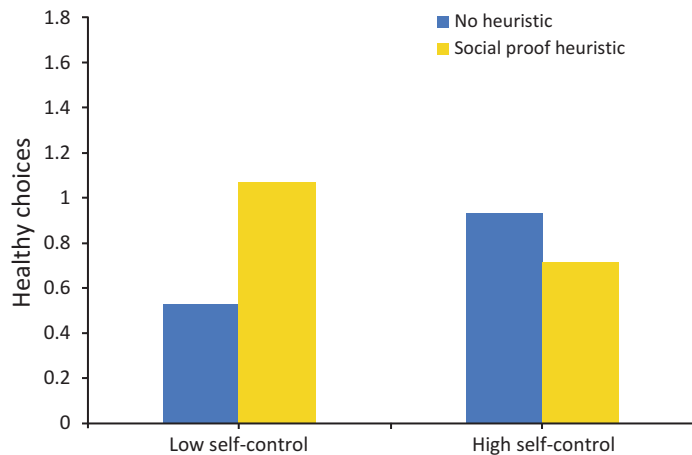
**Box 7.4 Zooming In: Human Cognitive Processing**

Human cognitive processes are guided by two parallel systems. System 1, the “fast system”, provides quick, intuitive, and automatic reactions and guides our decision-making most of the time. System-1 decisions do not require much cognitive effort; they are guided by habits and heuristics. System 2, the “slow system”, is activated less often and requires substantial cognitive effort. This system provides deliberate, reasoned reactions.

System 1	System 2
Fast	Slow
Unconscious	Conscious
Automatic	Effortful
Simple decisions	Complex decisions
Error-prone	Reliable
High capacity	Low capacity

For example, it has been shown (Jacobson et al., 2011, Studies 3 and 4) that, under conditions of low self-regulatory capacity, college students were more likely to comply to a time-consuming request when that request was framed as a descriptive norm (along the lines of “most other students in past instances have chosen to comply with this request”). On the other hand, when self-regulatory capacity was high, college students were more likely to comply with the request when it was framed as an injunctive norm (along the lines of “most students felt that people should comply with this request”). Similarly, in the health domain, students who were made cognitively busy (and who thus had limited effortful processing capacity available) were more likely to express intent to join an early-morning physical activity program when this program was advertised as a popular program that many students were signing up for. Conversely, students who were provided more effortful processing capacity were more likely to express intent to join the program when it was advertised as a program that others thought reflected important values and important personal qualities (Kredentser, Fabrigar, Smith, & Fulton, 2012). Salmon, Fennis, De Ridder, Adriaanse, and De Vet (2014) showed that people were more likely to pick a healthy type of food promoted by a descriptive social norm only when these people had low self-regulatory capacity available – when the decision had to be made quite fast (Fig. 7.2).

**Fig. 7.2** Self-regulatory capacity affects food choice after exposure to a social norm. The choice for healthy products that were advertised by a descriptive social norm (the “social proof heuristic”) was affected by available self-regulatory capacity in the study by Salmon et al. (2014, p. 107)



Jacobson, Mortensen, Jacobson, and Cialdini (2015) brilliantly completed this picture by showing that the effectiveness of injunctive norms on people's behavior was moderated by the trait of impulse restraint; that is, less impulsive people were more likely to be affected by injunctive norm messages.

### Relationship with the Norm Referent Group

The relationship that an individual has with the social group from which a given social norm stems, the norm referent group, also plays an important role in determining whether a social norm becomes focal and will affect behavioral decisions. Social identity theory and self-categorization theory (e.g., Turner, 1999; Scheepers & Ellemers, Chap. 9 this volume) stipulate that one's self-concept consists of multiple identities, reflecting different roles that people take on in different social groups. Performing the behaviors that are congruent with a given social group validates one's sense of belonging to that group, and in that sense boosts self-identity.

Building upon these premises, the referent informational influence model (Terry & Hogg, 1996) stipulates that a social group's behaviors and expectations will affect an individual only to the extent that an individual identifies with that social group. If this condition is not met, what people stemming from that group do themselves, or expect others to do, should have a much less significant influence on people's behavior. It is important to note that identification with a group is not the same as belonging to the group *per se*: All people are part of in-groups which they do not feel particularly strongly connected to (e.g., "humankind"; "people with blonde hair"), but it is unlikely that they also identify with these groups extremely strongly, and therefore, it is unlikely that a norm stemming from such groups will affect people's behavior significantly.

The importance of identification with the norm referent group has been established primarily for the effect of descriptive social norms.

Recycling intentions (Terry, Hogg, & White, 1999), intentions to use sun protection (Terry & Hogg, 1996), binge drinking (Johnston & White, 2003), and eating behavior (Stok, De Ridder, De Vet, & De Wit, 2012) were all affected by descriptive social norms stemming from an in-group – but only when the participants identified strongly with that in-group. For injunctive social norms, less research is available that investigates the role of identification, but Yun and Silk (2011) showed that the role of identification was less relevant for injunctive social norms than for descriptive social norm effects.

#### Box 7.5 Question for Elaboration

The railway station wants people to litter less while they are waiting for trains on the platform. In what way, would it help the waiting passengers to identify with a social group?

### Using Descriptive or Injunctive Social Norms To Instigate Behavior Change

Cialdini and colleagues posit that of the two types of social norms, *injunctive* social norms are most useful for those wishing to promote behavior change in others (e.g., Cialdini et al., 1991; Reno et al., 1993). Their position is based on the idea that making a descriptive norm salient is only beneficial when the behavior of most other people is in the desired direction. For example, when wishing to promote fruit consumption among the general public, focusing them on the reigning descriptive norm would be useful only if most of the public already consume a lot of fruit. After all, if this is not the case, the descriptive norm would actually be to not eat that much fruit, and this might have detrimental rather than health-promotive effects (that this is indeed possible is shown by, for example, Sieverding, Decker, & Zimmerman, 2010, and Stok et al., 2012). They further stipulate that an injunctive norm, on the other hand, can be put to use in any given situation, because the socially driven motivations that



underlie injunctive norm effects play a role regardless of what others are actually doing. However, recent theorizing and empirical evidence challenge the idea that injunctive norms are by definition more useful in multiple ways.

### Box 7.6 Zooming In: Why Descriptive Social Norms Should Be Communicated with Care

Many desired behaviors (such as recycling, being physically active, and adhering to speed limits) are performed less often than we as a society would hope. Similarly, many undesired behaviors (such as aggression, overeating, and crossing red traffic lights) are performed too often. A common, and understandable, response of policy makers is to alert the public to these figures with the intention of instigating behavior change, thus communicating that, for example, cancer screen attendance is too low, or that a large majority of children are consuming too many soft drinks. Unfortunately, however, there are strong indications that such communications do not lead to behavior change in the desired direction. From the perspective of the Focus Theory of Normative Conduct, this is actually understandable: When it is communicated, for example, that only few people wear sunscreen when going outside, the average person may simply conclude that it is thus “normal” not to wear sunscreen and that they can simply continue doing so. Even more detrimental effects might occur in the few people who were initially applying sunscreen correctly: They might actually stop doing so, to conform to the group’s standards. Such effects have been shown for intentions to attend cancer screening (Sieverding and colleagues, 2010) as well as for fruit consumption (Stok, De Ridder, De Vet, & De Wit, 2014). When the current behavior is not up to the desired standards, therefore, these “normative facts” should be communicated with great care!

### Box 7.7 Question for Elaboration

The Netherlands Nutrition Centre has previously launched a healthy eating campaign with the slogan “80% knows [about healthy food], 20% eats it.” Is this a good campaign strategy?

For example, recent insights indicate that when the majority of people are not yet showing the desired behavior, descriptive norms can be formed instead around what most people would like to do (Sunstein, 1996) or around the fact that the number of people performing the desired behavior is increasing (called “trending norms”; Mortensen et al., *in press*). Moreover, there may be situations where injunctive norms actually lead to less optimal outcomes. Injunctive social norms do have a pushy component, wherein they tell people what they should be doing. The risk with such norms, especially when the socially approved option does not align with what the individual might personally value, is that it creates a feeling of resistance or reactance (Brehm, 1966; see Mühlberger & Jonas, Chap. 6 this volume) in the individual. There is research suggesting that injunctive social norms do hold this risk (e.g., Bosson, Parrott, Swan, Kuchynka, & Schramm, 2015; Stok, De Vet, De Wit, Renner, & De Ridder, 2015) and that this may, under certain circumstances, cause injunctive social norms to be less effective than descriptive social norms or to even be counterproductive (e.g., Stok et al., 2014).

### Detailed Discussion of One Study

One of the most-cited articles (well over 1500 citations) that describes effects of social norms on people’s behavior is the one in which two studies on towel reuse by hotel guests are described by Goldstein, Cialdini, and Griskevicius (2008). Having hotel guests use their towel more than once saves energy and water, reduces the amount of polluting detergent released into the environment, and as such is important from an

environmental perspective. In addition, it helps hotels save money and portray themselves as environmentally friendly. The two studies conducted by Goldstein et al. (2008) investigate the effectiveness of a descriptive norm-based message, as compared to the more traditional “help save the environment” message that is the standard message used by hotels, to encourage towel reuse by its guests. The second study additionally investigates how the use of different norm referent groups moderates the effect of the descriptive norm message. A strong suit of the two studies is that they were conducted in the field, that is, in a real hotel with regular hotel guests as the (unknowing) participants.

The first study employed a between-subjects design. Over the course of 80 days, one of two messages was displayed on a towel rack hanger placed in the bathrooms of hotel rooms of a “midsized, midpriced hotel in the Southwest that was part of a national chain” (Goldstein et al., 2008, p. 473). The hotel had 190 rooms, which were randomly assigned to a descriptive norm-based message or a standard pro-environmental message (Table 7.1). The towel rack hangers (see Fig. 7.3) also provided detailed instructions for guests about how to indicate their willingness to reuse their towel (i.e., by hanging them on the towel rack or over the shower curtain rod). On the back of the hanger, information was provided on the benefits of towel reuse for the environment (e.g., saving water and preventing the release of detergent into the environment). Hotel room attendants were trained to record hotel guests’ towel reuse behavior through repeated instruction and provision of pictures showing the different types of towel placement that should be considered as towel reuse. The behavior of guests staying in the hotel for a minimum of two nights was analyzed. For guests staying for more than two nights, only their towel reuse behavior of the first eligible day was analyzed, so as to ensure that each guest participated in the study only once. Crucially, a higher percentage of hotel guests staying in a room with a descriptive norm message on the towel rack hanger reused at least one towel (44.1%) than of guests in a room where the standard pro-environmental message was displayed (35.1%). The difference between these

percentages was statistically significant as proven by a chi-square test.

The second study, which was conducted in the same hotel, dived deeper into the question of whose norms people are most likely to follow. As we have detailed earlier, identification with the norm referent group is an important moderator of the effect of social norms, especially of descriptive social norms. Most often, the extent of identification is based on personal characteristics (age, gender, ethnicity, interests). Goldstein et al. (2008) sought to investigate whether more random, contextual characteristics could also play a role in identification, and whether contextual similarity to the referent group would have a larger or smaller effect than personal similarity to the referent group. To that end, in addition to the two messages used in Study 1, three additional messages were designed, leading to a total of five different experimental conditions (Table 7.1). Contextual similarity was highlighted by using as norm referent group people who stayed in the same hotel room. Two other messages highlighted personal similarity by using as norm referent groups either fellow men and women or fellow citizens. Hotel rooms were, again, assigned to an experimental condition at random. Over 53 days, towel reuse was shown to be higher in all social norm-based message conditions than in the pro-environmental message condition. Furthermore, the norm stemming from the contextual similarity referent group, comprising people who had stayed in the same room, yielded higher towel reuse (49.3%) than the descriptive norms (42.8% on average) (see Fig. 7.4).

The two studies thus showed that a descriptive social norm message increases towel reuse behavior in hotel guests as compared to a standard pro-environmental message. As a point of criticism with regard to Study 2, it should be noted that the two personal similarity conditions were by design less likely to affect behavior than the contextual similarity condition, as they were less tailored to the participant: While in the contextual similarity condition, there was a clear, one-to-one connection between the referent group and the participant, namely, that they all stayed in the same exact room, the two personal similarity conditions did

**Table 7.1** The messages used in the towel reuse studies

Messages used in Study 1		Additional messages used in Study 2	
<i>Standard pro-environmental message</i>	<i>Generic descriptive norm-based message</i>	<i>Descriptive norm-based message highlighting contextual similarity to referent group (room number)</i>	<i>Descriptive norm-based message highlighting personal similarity to referent group (gender)</i>
<p>“HELP SAVE THE ENVIRONMENT. You can show your respect for nature and help save the environment by reusing your towels during your stay.”</p>	<p>“JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT. Almost 75% of guests who are asked to participate in our new resource savings program do help by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay.”</p>	<p>“JOIN YOUR FELLOW GUESTS IN HELPING TO SAVE THE ENVIRONMENT. In a study conducted in Fall 2003, 75% of the guests who stayed in this room (# xxx) participated in our new resource savings program by using their towels more than once. You can join your fellow guests in this program to help save the environment by reusing your towels during your stay.”<sup>a</sup></p>	<p>“JOIN YOUR FELLOW CITIZENS IN HELPING TO SAVE THE ENVIRONMENT. In a study conducted in Fall 2003, 75% of the guests participated in our new resource savings program by using their towels more than once. You can join your fellow citizens in this program to help save the environment by reusing your towels during your stay.”</p>

Note: Texts taken from the information on Study 1 and Study 2 of Goldstein et al. (2008 pages 473–476) “The “xxx” was always replaced with the respective hotel room’s number

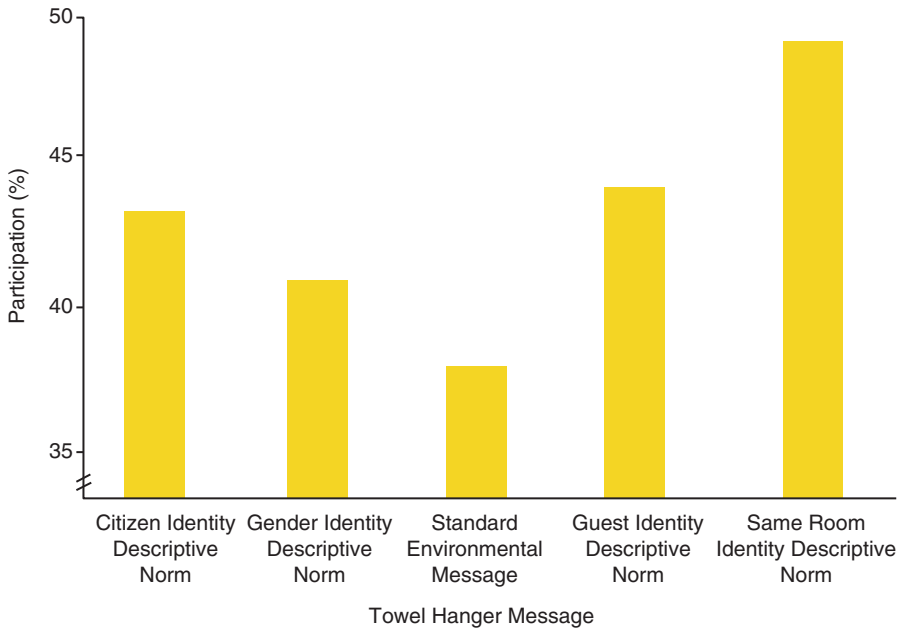


**Fig. 7.3** The standard pro-environmental message used in the first towel reuse study. (Note: image replicated from Goldstein et al., 2008, p. 474)

not specify this connection on a one-to-one basis. The citizen-based message was a general message, that is, it was not tailored to the participant's specific city, and the gender-based message reported the behavior of both genders, from which participants then had to "self-select" the relevant norm. The main take-away messages from these two studies are thus (1) the increase in towel reuse after providing hotel guests with a descriptive norm-based message compared to a standard pro-environmental message, and (2) the larger effectivity of a descriptive norm based on a more contextually similar referent group, that of people

who previously stayed in the exact same room, compared to a less similar group, that of people who previously stayed in the same hotel. Important to note here is that the comparison condition against which the descriptive norms were compared was not a no-message control condition: The comparison was against an environment-protection message that itself also has a clear intention to influence behavior and that, as such, constitutes a very strict comparison condition.

Goldstein et al.' (2008) towel reuse study has been replicated multiple times, and results were not always consistent. Some studies replicated the enhanced effect of social norm-based messages compared to other types of messages (Reese, Loew, & Steffgen, 2014; Schultz, Khazian, & Zaleski, 2008; Terrier & Marfaing, 2015), whereas others did not (Bohner & Schlüter, 2014; Mair & Bergin-Seers, 2010). Crucially, two different syntheses of the body of literature on this topic have provided evidence for a small but consistent positive effect of descriptive norm-based messages (regardless of level of identification). A Bayesian evidence synthesis (Scheibehenne, Jamil, & Wagenmakers, 2016) showed that the studies, taken together, provide strong support for the effect of social norms on towel reuse. While this evidence synthesis has been criticized for not taking into account random effects (Carlsson, Schimmack, Williams, & Bürkner, 2017, who themselves report smaller, but largely still supportive, effects using Bayesian multilevel framework analyses with varying assumptions about between-study variation), a small but highly consistent effect was also reported in a more traditional meta-analysis that allowed for between-study heterogeneity (Nisa, Varum, & Botelho, 2017). Furthermore, a random-effects meta-analysis of social influence effects on more general resource conservation (including but not limited to towel reuse) also found a small but consistent and significant effect of social norm-based messages compared to control messages (Abrahamse & Steg, 2013). Taking this body of evidence together, it seems fair to conclude that social norm-based messages have been proven to affect towel reuse behavior, although the effect is not overwhelmingly large compared to strict control conditions.



**Fig. 7.4** Percentage of people reusing at least one towel per experimental condition in the second towel reuse study. (Note: Image replicated from Goldstein et al., 2008, p. 478)

### Summary

- People's behavior is guided by social norms, the often-unwritten rules of conduct that tend to be deeply institutionalized in a social group.
- Social norms that describe what is the typical or usual thing to do within a certain social group are called descriptive norms.
- Social norms that describe what other group members think ought to be done are called injunctive norms.
- Whether people's behavior is guided by social norms depends on their self-regulatory resources, that is, whether they have the capacity to attend to social norms.
- Effectiveness of social norms also depends on the extent that people identify with a social group.
- Both descriptive and injunctive social norms can be employed to design interventions for behavioral change.

### Recommended Reading

- 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.
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## Guiding Answers to Questions in the Chapter

1. Box 7.3 Q: You have been assigned to design a strategy for less alcohol consumption on campus. What would you prefer: using a descriptive norm or an injunctive norm?

A: In this case a descriptive norm, informing students about how much students actually drink will probably be more effective. Alcohol intake is not a topic of discussion among students and this will probably lead to false ideas about how much others drink (“pluralistic ignorance”). Correcting these inaccurate ideas by providing a descriptive norm could help reduce alcohol consumption.

2. Box 7.5 Q: The railway station wants people to litter less while they are waiting for trains on the platform. In what way would it help for the waiting passengers to identify with a social group?

A: People are more inclined to use social norms as a decisional shortcut when they can identify with the group that advocates these norms. Emphasizing that railway passengers are responsible people who do not litter is therefore a good campaign strategy.

3. Box 7.7 Q: The Netherlands Nutrition Centre has previously launched a healthy eating campaign with the slogan “80% knows [about

healthy food], 20% eats it.” Is this a good campaign strategy?

A: This campaign rests on the notion that a playful reminder of people not acting on their intentions will encourage them to eat more healthily. In fact, the campaign will probably not be effective because it emphasizes the minority norm that eating more healthily often fails. The Netherlands Nutrition Centre has since discontinued this campaign.

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