

NUDGE ‘WORKS’ HARDER: DECODING THE ROLE OF SOCIAL NORMS ON TASK
EXECUTION



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Abstract

The concept of ‘Nudge’ has become a topic of great interest, deliberation, and even debate after the seminal work of Thaler and Sunstein (2008). As per the recently available data, more than 200 nations and city administrations have set up “nudge units” to help influence the behavior of individuals for their own good (OECD, 2017). Understandably, ‘nudge’ finds its applications in several contexts that help individuals make better decisions: encouraging them to vote (Gerber & Rogers, 2009), assisting them in saving more (Beshears, Dai, et al., 2021; McKenzie & Liersch, 2011), and many such behaviors. Despite its beneficial outcomes, i.e., helping employees and customers make better decisions (e.g., Beshears, Choi, et al., 2021; Beshears, Dai, et al., 2021), the concept of nudge is yet to be adequately studied in the organizational context (Beshears & Kosowsky, 2020; Chapman et al., 2021; Weintraub et al., 2021). To address this gap, our research aims to assess if nudges, specifically social norm nudges, can be used to improve an essential organizational outcome, i.e., task effectiveness. Moreover, we aim to examine the impact of exaggerated social norm nudges on individuals’ task effectiveness. We draw on the focus theory of normative conduct (Cialdini et al., 1991) and the goal-setting theory (Locke & Latham, 1990) and propose that social norm nudges influence individuals’ task effectiveness. Moreover, we assert that this influence can be extended to exaggerated social norm nudges. However, exaggeration beyond an inflection point results in the loss of the effect of social norm nudges. In total, we interacted with approximately 1800 students and present the results of 13 studies to examine these relationships with the two different types of social norm nudges, namely descriptive and injunctive, and across different types of tasks, including tasks of varied difficulty levels, tasks that invoke different levels of interest among the participants, and tasks that require varied levels of creativity for the participants to be successful. In general, we have found support

for the hypothesized relationships. The present research carries significant implications for academicians as well as practitioners.

Keywords: nudge, social norms, descriptive norms, injunctive norms, task effectiveness.

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Chapter 9 – Discussion and Concluding Remarks

Research has noted that individuals possess limited cognitive resources, and as a consequence, it is common for them to depend upon heuristics for making decisions (Kahneman & Tversky, 2000). So, it is not necessary for the decisions of individuals to align with rational choice, and at times, the decisions may even go against the individuals' interests. Inconsistent time preferences and preference reversal are two common examples of this kind of behavior (Frederick et al., 2002, 2003; Lichtenstein & Slovic, 1971, 2009). Importantly, individuals' choices can be influenced based on the knowledge of biases. Scholars have proposed that as a mechanism to promote better decision-making without any alteration in the incentives, the knowledge of individuals' biases can be utilized to bring changes in the environment in which the decision is being made, also referred to as the choice architecture (Camerer et al., 2003; Thaler & Sunstein, 2003). This approach, which adheres to the principle of libertarian paternalism, emerged to be known as the concept of nudge (Thaler & Sunstein, 2008).

Over the years, nudge interventions have been increasingly utilized for changing the behavior of individuals in numerous contexts, such as enhancing organ donation, improving the repayment of court fines, increasing retirement savings, improving college enrolments, reducing energy usage, and encouraging influenza vaccinations (Allcott, 2011; Asensio & Delmas, 2015; Beshears et al., 2006; Bettinger et al., 2012; Chapman et al., 2010; Gabriel et al., 2009; Johnson & Goldstein, 2003; Kusters & Van der Heijden, 2015; Madrian & Shea, 2001; Milkman et al., 2011). Similar to the traction that they have gained in practice, nudge interventions have also received substantial scholarly attention in these years. With more than 25 articles published each year from 2013 to 2015, nudge interventions have been predominantly studied in the domains of economics, environment, finance, health, and psychology (Beshears & Kosowsky, 2020).

However, the concept of nudge has received scarce attention in the field of organizational studies (Beshears & Kosowsky, 2020; Chapman et al., 2021). It is an important oversight as owing to the low cost associated with them, nudge interventions can function as an efficient and affordable mechanism for organizations by helping them enhance the quality of decision-making and behaviors of their members (Weintraub et al., 2021). Indeed, there are a few studies that have demonstrated the application of nudges in organizations. For instance, Wu and Paluck (2021) have demonstrated that using decals in the form of gold coins nudged factory employees in China to throw the waste in trash cans rather than on the floor. Interestingly, using incentives and strict rules failed to bring about this change. In another study, goal-setting nudges have been found to increase flow at work, which in turn reduced employees' stress and improved their subjective performance and engagement (Weintraub et al., 2021). The present research builds upon this work and focuses on how a specific form of nudge, i.e., the use of social norms, can help in enhancing effectiveness while working on tasks.

Scholars have highlighted that developing a better understanding of how workplace behavior is steered by social norms is essential for creating effective norm-based behavioral organizational interventions (Jacobson et al., 2020). Moreover, the limited studies that have examined social norms in organizational contexts have provided evidence of the influence of these norms on important workplace behavior, including absenteeism, faking during interviews, counterproductive work behaviors, organizational misbehavior, tardiness, time theft intentions and behavior, and organizational citizenship behavior (Becker et al., 1995; Gellatly, 1995; Henle et al., 2010; Jacobson et al., 2015, 2020; Sinclair, 2023; Sinclair & Agerstrom, 2021; Vardi & Weitz, 2002). While these limited studies have been crucial in advancing the understanding of social norms' influence on workplace behaviors, the majority of these studies are based on the

employees' perceptions of social norms and not the actual social norms (Sinclair, 2023). Also, they have rarely focused on task effectiveness, an important organizational outcome. Hence, the objective of the current research is to assess the impact of social norm nudges in improving task effectiveness.

To achieve this objective, we draw on two theories, namely the focus theory of normative conduct (Cialdini et al., 1990) and the goal-setting theory, and hypothesize that the social norm nudges will have an influence on task effectiveness and this effect will improve with exaggeration in the social norm nudges but will wane as the exaggeration is increased further. To test the proposed relationships, we have conducted 13 experimental studies. The results from these studies provide support for the hypothesized relationships. Furthermore, we also found that the relationships are supported even when we change the type of social norm nudge from descriptive to injunctive and when the type of task is varied. Moreover, it was observed that the effect of nudge vanished when the task had a penalizing nature. The results of all the studies have been summarised in Table 9.1 below.

In doing so, the present research makes four significant contributions. One, the present research empirically establishes the utility of nudges for an important organizational outcome, i.e., task effectiveness. For decades, researchers and practitioners alike in the field of organizational studies have invested considerable efforts to better understand the factors that shape individuals' behavior in organizations, particularly the factors that can bring improvement in the effectiveness of individuals on tasks (Drory, 1982; Kim et al., 2009; Kwasnitschka et al., 2022; Lin, 2010; Nemiroff & Ford, 1976). Behavioral interventions have also been recognized as effective measures for enhancing task effectiveness of individuals (Friedland et al., 2023; Reijula et al., 2021). However, nudge is different from the interventions that are typically implemented

in the organizations (Bastini et al., 2023). First, the existing behavioral interventions majorly rely on the facilitation of deliberative and conscious processes for decision-making by fostering active cognitive reflection (Hertwig, 2017; Hertwig & Grüne-Yanoff, 2017). In other words, their target is often System 2 or the reflective mode of thinking (Bastini et al., 2023), which is more analytical, effortful, slow, and controlled and requires a higher degree of awareness from the individuals (Kahneman, 2011; Thaler & Sunstein, 2008). The nudge intervention that we have considered in our study, in contrast, are unique as they target the System 1 or automatic mode of thinking (Friedland et al., 2023). Second, as they adhere to the principle of libertarian paternalism and do not involve any penalty or incentives, nudge interventions can serve as an efficient and affordable option for organizations to enhance the task effectiveness of their members (Weintraub et al., 2021). Our research is a notable addition as it extends the literature on the utilization of nudge-based interventions in organizations by elucidating how organizations can harness the biases of their members in an affordable manner to improve their task effectiveness. Importantly, it also establishes that both types of social norm nudges, namely descriptive and injunctive, are effective in enhancing individuals' task performance irrespective of the nature of the task, including non-challenging (low-difficulty), challenging (high-difficulty), monotonous, interesting, and creative.

Two, the present research also contributes to the nudge literature as it demonstrates the effects of using manipulation in the form of exaggeration in nudges. As discussed, previously, nudges have gained popularity and widespread acceptance among practitioners and academicians alike (Allcott, 2011; Asensio & Delmas, 2015; Beshears et al., 2006; Bettinger et al., 2012; Chapman et al., 2010; Gabriel et al., 2009; Johnson & Goldstein, 2003; Kusters & Van der Heijden, 2015; Madrian & Shea, 2001; Milkman et al., 2011). At the same time, it has also

become a subject of controversy with scholars across fields, including public policy, philosophy, politics, law, and economics, raising concerns regarding the ethics of nudging (Kuyer & Gordijn, 2023). Its critics have argued that libertarian paternalism, or the principle in which nudge is rooted, is an oxymoron and that the doctrine of nudge is paternalistic in disguise (G. Mitchell, 2005; Rebonato, 2012). Others have claimed that if nudges are made transparent, their influence will disappear (Hansen & Jespersen, 2013) and that nudge-based interventions pose a risk of abuse of power (Shalizi & Farrell, 2011). A central and pertinent argument raised by its critics is that nudging involves the manipulation of individuals' choices (Bovens, 2008). While the discussion between the protagonists and adversaries of nudges continues (Kuyer & Gordijn, 2023), an important question that remains unanswered in this discussion is that if manipulation is indeed introduced as a part of nudges, then what impact it has on individuals' behavior. Our study addresses this question empirically and concludes that while the manipulation may work initially (as in the case when slight exaggeration in social norm nudges improved the task effectiveness of individuals), its effect disappears when the manipulation is increased further.

Three, the present research showcases that manipulation in nudges beyond the inflection point may backfire and lead to negative outcomes, as it occurs when social norm nudges are exaggerated at a higher level. In this case, one of the determinants of task effectiveness is found to be significantly different between the control group and the nudge group but in the negative direction. This backlash that is seen in the outcome can be explained with the help of the discouragement effect (Konrad & Kovenock, 2009). According to the discouragement effect, when one individual has a disadvantage as compared to others on the basis of previous performance, the individual is less likely to exert effort and, in turn, more likely to reduce performance and lose in the following stages (Iqbal & Krumer, 2019). It is not uncommon to

witness this effect in job promotions, political campaigns, research and development contests, and sports competitions (Harris & Vickers, 1987; Klumpp & Polborn, 2006; Malueg & Yates, 2010; Tsoulouhas et al., 2007). Klumpp and Polborn (2006), for instance, provided theoretical evidence that in a scenario where two candidates are running consecutive elections, the loser in the first district would be less motivated to expend expensive effort in the second district, increasing the likelihood that the winner in the first district would win again. In a tennis match between players of equal talent, Malueg and Yates (2010) discovered that the victor of the first set had a higher probability of winning the second set. Gill and Prowse (2012) demonstrated how the second mover responded poorly to the first mover's effort in an experimental sequential tournament, thereby documenting the discouraging effect. In an investment versus consumption task-based experiment, Hoover and Kimbrough (2016) found that those who are relatively poor suffer from the discouragement effect due to social comparisons, which leads them to make suboptimal investment decisions. Similarly, in our study, when participants receive normative information exaggerated to an unattainable level, they succumb to the discouragement effect, and their effectiveness falls instead of increasing. The present research extends the literature on nudges by suggesting that the manipulation of nudges does not have a simple and straightforward influence on the outcomes. It is especially crucial for organizations and managers to understand that while it may be tempting for them to exaggerate the social norm nudges for enhancing the performance and effectiveness of employees, but may not necessarily lead to positive outcomes always.

The last and final contribution of the present research is that it demonstrates how nudges are rendered ineffective in a penalizing environment. In particular, our study shows that when individuals are in an environment where they encounter a penalty for their mistake (such as in

the form of negative marking in our study 5), the impact of nudges on their task effectiveness disappears. In doing so, the present research augments the literature not only by highlighting a boundary condition pertaining to the functioning of nudges but also by underscoring the significance of psychological safety in organizations. Psychological safety is described as “feeling able to show and employ one’s self without fear of negative consequences to self-image, status, or career” (Kahn, 1990, p. 708). An environment with high psychological safety is the one that “encourages provisional tries and which tolerates failure without retaliation, renunciation, or guilt” (Schein & Bennis, 1965, p. 45). The adverse ramifications associated with making mistakes get minimized in the presence of psychological safety (Frazier et al., 2017). In contrast, individuals experience fear of negative consequences when they do not feel psychologically safe. In the past, scholars have associated the absence of psychological safety with key organizational outcomes, including reduced performance, organizational citizenship behavior, engagement, creativity, learning behavior, information sharing, satisfaction, and commitment (Frazier et al., 2017). The present research augments the extant literature by suggesting that creating a penalizing environment, i.e., one that is low on psychological safety, negatively impacts the organizations by also hampering the effectiveness of behavioral interventions, such as nudges, that aim to improve the effectiveness of workers on tasks.

The present research carries significant implications for practice. First, it provides an effective, and cost-sensitive way of enabling employees to improve their effectiveness while working on tasks. It is important to note that like most individuals in day-to-day lives, even employees tend to consistently compare their work, pay, manager’s behavior, or the way they are being treated with that of others in their organization. Therefore, giving them a nudge by making them aware of their peers’ performance or authority figures’ expectations through official

channels might be a better way to improve their effectiveness on tasks. Second, such an intervention also highlights the pitfalls of manipulation and deception. While low levels of manipulation or deception might make employees improve their effectiveness on a task, if organizations try to overstep their boundaries, it might make employees demotivated, such that they might reduce their effort and, in turn, impact their effectiveness while working on a task. Scholars in the future can try to decipher other possible consequences of such actions of organizations. Lastly, such a nudge intervention holds particular importance for practice as it is effective irrespective of the type of task that the employees might be doing. Given that employees have varied responsibilities and might be involved in tasks of varied nature on any given day, such an intervention can reduce dependence on motivational interventions directed at each of these.

The present research has a couple of limitations which are as follows. First, the present research is based on experiments conducted in a laboratory. Conducting experiments in a laboratory enables the experimenter to manipulate the independent variable(s) in a controlled setting and establish internal validity of the results (Koschate-Fischer & Schandelmeier, 2014). When it comes to deciding the research environment, the achievability of good internal validity is of paramount importance (Tunnell, 1977). Scholars also suggest that establishing the external validity of experiments' results is fruitful only when the internal validity has been attained (Cook & Campbell, 1979). "*Internal validity* is the basic minimum without which any experiment is uninterpretable" (Campbell & Stanley, 1963, p. 5). Accordingly, we also opted for laboratory experiments for the present research. While it is essential for establishing internal validity, conducting experiments in a laboratory setting limits the external validity of our results. So, scholars in future studies can examine the influence of social norm nudges in the field or the real

environment, as it will enhance the external validity of their results and make it possible for them to draw generalizable conclusions regarding diverse situations, contexts, and people (Cook & Campbell, 1979). Second, the present research has been conducted with a student sample. There are two major reasons why the student sample was considered appropriate for the present research. One, in a single experiment, it is impossible to consider every potentially important individual difference variable or to look at how these factors interact with the independent variable(s) (Calder et al., 1982; Hutchinson et al., 2000; Lynch, 1982). Hence, a homogeneous sample like the students is useful in experiments as it weakens the impact of confounding variable(s), namely the individual differences (Koschate-Fischer & Schandelmeier, 2014). Moreover, the error variance can also be reduced with the help of the homogeneity that is present in the student sample (Lynch, 1982). Two, although these students are currently pursuing their undergraduate degree, they are soon going to be part of organizations as either interns or full-time employees. These two factors prompted us to consider a student sample for the present research. However, scholars have recognized that the use of a student sample can limit the generalizability of the findings as these participants are different from the intended targets of the research (Ferber, 1977; Sears, 1986; Wells, 1993). Hence, scholars in the future can consider including working professionals as the sample for their studies while examining the impact of social norm nudges on task effectiveness.

| Table 9.1 Overview of Studies | | | |
|--------------------------------------|---|-----------------------------------|--------------------|
| Study | Description of the Experiment | Purpose of the Experiment | Conclusion |
| Study 1 | Low Difficulty and Creativity Task; Descriptive Norm | No Exaggeration or Baseline Level | No Impact Observed |
| Study 2(A) | Low Difficulty and Creativity Task; Descriptive Norm | 20% Exaggeration | Impact Observed |
| Study 2(B) | Low Difficulty and Creativity Task; Descriptive Norm | 40% Exaggeration | No Impact Observed |
| Study 2(C) | Low Difficulty and Creativity Task; Descriptive Norm | 60% Exaggeration | No Impact Observed |
| Study 3(A) | Low Difficulty and Creativity Task; Injunctive Norm | No Exaggeration or Baseline | No Impact Observed |
| Study 3(B) | Low Difficulty and Creativity Task; Injunctive Norm | 20% Exaggeration | Impact Observed |

| | | | |
|------------|--|----------------------------------|---|
| Study 3(C) | Low Difficulty and Creativity Task; Injunctive Norm | 40% Exaggeration | No Impact Observed |
| Study 3(D) | Low Difficulty and Creativity Task; Injunctive Norm | 60% Exaggeration | Impact Observed with Backlash Effect |
| Study 4(A) | High Difficulty Task; Descriptive Norm | 20% Exaggeration | Impact Observed |
| Study 4(B) | High Interest Task; Descriptive Norm | 20% Exaggeration | Impact Observed |
| Study 4(C) | Low Interest Task; Descriptive Norm | 20% Exaggeration | Impact Observed |
| Study 4(D) | High Creativity Task; Descriptive Norm | 20% Exaggeration | Impact Observed |
| Study 5 | Low Difficulty and Creativity Task; Descriptive Norm | 20% Exaggeration with Penalty | No Impact Observed |

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