Situation Features in Milgram’s Experiment That Kept His Participants Shocking

Jerry M. Burger*
Santa Clara University

Although people are often astonished by the high rates of obedience in Milgram’s famous studies, research on social influence processes in other settings provides considerable insight into why so many of Milgram’s participants continued to press the shock levers all the way to 450 volts. That research suggests that four situational features Milgram built into his experimental procedure contributed to the high levels of obedience. The four features are the incremental nature of the task, the novelty of the situation and the kind of normative information made available, the opportunity to deny or diffuse responsibility, and the limited opportunity to ponder decisions. When looked at in this light, Milgram’s research can be seen as a dramatic example of some well-documented psychological effects.

For half a century, the findings from Stanley Milgram’s obedience studies have been among the most intriguing and widely discussed data ever to come out of a psychology lab. Yet throughout all these years, scholars inside and outside the discipline have not stopped speculating about why so many of Milgram’s participants continued to press the shock levers all the way to the end of the shock generator. It is difficult to study Milgram’s work without formulating a hypothesis or two about the high rates of obedience. However, the ability to test many of these ideas has been stifled by ethical restrictions that appropriately limit our ability to replicate much of Milgram’s procedure, a state of affairs that makes the development of an agreed-upon explanation all the more challenging.

Accounting for Milgram’s results has been a problem from the start. Milgram himself was more interested in demonstrating the phenomenon than in developing a comprehensive theory of obedience, an approach that initially made it difficult for him to publish his findings in the best academic journals (Blass, 2004). The lengthy

*Correspondence concerning this article should be addressed to Jerry M. Burger, Department of Psychology, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053-0333 [e-mail: jburger@scu.edu].
gap between Milgram’s first article on obedience in 1963 and the publication of his book *Obedience to Authority* in 1974 was due in part to the difficulty Milgram had developing a theory to go along with his intriguing data (Elms, 1995). In that book, Milgram (1974) introduced the notion of an “agentic state” to account for the participants’ obedient behavior. Similar to concepts psychologists invoked during that era to explain hypnosis, participants in the obedience studies were said to fall into an altered state of mind. Participants in this agentic state focus their attention on the experimenter “with maximal receptivity to the emissions of the authority, whereas the learner’s signals are muted and psychologically remote” (p. 144). As a result of this transformation, participants are no longer torn between concern for the learner and the demands of the experimenter. Rather, decisions about right and wrong are relinquished to the experimenter’s judgment and “(p)unishment of the learner shrinks to an insignificant part of the total experience” (p. 143).

Unfortunately, Milgram’s after-the-fact interpretation of his findings has not held up well to scrutiny (Reicher & Haslam, 2011). Even at first glance, the description of participants paying attention only to the experimenter and virtually ignoring the learner is inconsistent with the filmed images we have of Milgram’s participants. Those participants clearly paid attention to and were quite responsive to the learner’s plight. Even the obedient participants who continued to press shock levers all the way to 450 volts had a strong emotional reaction to the screams and protests they heard through the wall. The participants were not, as Milgram (1974) put it, “indifferent to those below” them in the power hierarchy (p. 107). Today few researchers rely on the notion of an agentic state when trying to explain Milgram’s findings. In short, Milgram left us a fascinating set of studies that produced intriguing findings with extremely important implications but no viable explanation for his results.

This is not to say that psychologists have made no progress on this question or that we have no idea why Milgram’s participants acted the way they did. On the contrary, I argue that decades of research on basic social influence processes provide a great deal of insight into the behavior of Milgram’s participants. Indeed, when looked at in the right light, Milgram’s results are perhaps not as astonishing as they first appear and, in fact, fit nicely with the findings from related areas of research.

**Four Situational Features**

To begin, it is helpful to think of Milgram’s results as a dramatic example of a phenomenon widely accepted by social psychologists, namely, that our actions are influenced by the situation we find ourselves in far more than most of us recognize. Although individual characteristics like personality and personal values often come into play, it is easy to overstate their role and to understate the role situational features play in determining our behavior. Milgram would not have
disagreed with this general observation. In fact, he promoted this perspective and used it effectively to alter the way psychologists explain events like the Holocaust. In the first decade or so following World War II, psychologists interested in the Holocaust typically focused on the characteristics of the perpetrators, in particular, the so-called “authoritarian personality” (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Consistent with the spirit of the times, the idea was to identify the kind of person who was likely to become a fascist sympathizer and to perhaps identify and change the child-rearing practices that lead to these personalities. But Milgram’s findings pointed the discipline in the opposite direction. Unless we want to conclude that the typical American citizen is brutal and sadistic, we are forced to acknowledge that something about the experimental setting Milgram created was responsible for causing otherwise good people to engage in some unsettling behavior. Moreover, this observation forces us to recognize that, under the right circumstances, any of us may be capable of acting in some very disturbing ways.

What kind of situation leads ordinary citizens to sometimes engage in deplorable acts? Although not an exhaustive list, I identify four features Milgram built into his experiment that made it difficult for his participants to do anything but continue to press the shock levers. These four features are: (a) the incremental nature of the task; (b) the novelty of the situation and the kind of normative information made available; (c) the opportunity to deny or diffuse responsibility; and (d) the limited opportunity to ponder decisions. Each of these situational variables has been examined in extensive empirical research, albeit not in obedience settings, since Milgram conducted his studies. Although Milgram often maintained that he was surprised by the extent to which participants obeyed the experimenter’s instructions, it is doubtful that he would have created such an elaborate set of procedures without some inclination that high rates of obedience were possible. It is perhaps a tribute to Milgram’s genius that he seemed to have intuitively understood how to structure the experimental situation to produce his otherwise surprising results.

Small Increments

A great deal of research finds that getting people to perform a small, seemingly inconsequential task can be an effective strategy for changing subsequent attitudes and behaviors (Burger, 1999). For example, individuals who sign a petition in favor of environmental issues are more likely to later donate time or money to environmental causes than are individuals not asked to sign the petition, a result known as the foot-in-the-door effect. Researchers have identified two psychological processes that underlie this effect. First, the tactic seems to work in part because of consistency needs (Cialdini, Trost, & Newsom, 1995). After publicly stating that one is pro-environment, the desire to be and to appear consistent makes it difficult to say no when later asked to participate in a pro-environment
demonstration. Second, performing the small task can lead to a change in attitude and behavior as a result of a self-perception process (Burger & Caldwell, 2003). People who agree to sign the petition begin to think of themselves as the sort of person who supports these kinds of causes.

Milgram took advantage of this effect by asking his participants to start the learner’s punishment by pressing the 15-volt lever, a relatively mild and seemingly harmless act. However, participants were instructed to respond to each subsequent wrong answer with a slightly stronger shock, a process that continued in 15-volt increments all the way to 450 volts. Participants in the basic version of Milgram’s procedure did not even hear the learner until after they pressed the 75-volt lever, the fifth shock they had delivered. At that point participants heard a muffled sound—what Milgram described as *Ugh!*—through the wall. By the time they heard the learner demand to be released following the 150-volt shock, participants had already pressed the shock lever 10 times. Because of consistency needs and self-perception processes, each lever press made it easier for participants to press the next lever.

We can find support for this small increment notion by examining where in the procedures Milgram’s disobedient participants decided to call it quits. As it turns out, these stopping points were not spread evenly throughout the procedures. Rather, if participants were going to stop, the most likely point would have been after first hearing the learner’s protests and demands to be released following the 150-volt administration (Burger, 2009; Gilbert, 1981). We can also identify a few less frequent stopping points, namely, when the learner refused to answer any more questions and when the learner’s reaction to the shock could no longer be heard through the wall (suggesting he was no longer physically able to respond). At each of these stopping points, pressing the lever could be seen by the participant as qualitatively different—as compared to being different only in degree—from the previous lever press (Gilbert, 1981). That is, pressing the shock lever after hearing the learner demand to be freed is a different act than pressing the shock lever before hearing his protests. The need to behave consistently and the perception that one is the kind of person who acts this way do not apply when people are asked to perform a different act. Reflecting on this pattern, Packer (2008) suggested that upon first hearing the learner’s protests at 150 volts, participants had to decide whether the learner’s right to end the study trumped the experimenter’s right to see the study continue. Once the participant decided that the learner’s rights did not take precedent over the experimenter’s, each subsequent act of obeying the experimenter’s instructions was simply a matter of being consistent with the participant’s earlier decision.

Thinking of Milgram’s procedures as a series of small incremental tasks helps us understand why each generation of students is astonished to learn that most participants went all the way to 450 volts and why each of us believes we would have been one of the disobedient participants. We may all be guilty of focusing
on the last step in the sequence and ignoring all the steps that led up to the final outrageous act. Although merely speculation, my guess is that most, if not all, of Milgram’s participants would have refused to press any levers if the experimenter had asked them to start with 450 volts.

The Novelty of the Situation and Normative Information

People who find themselves in new situations with few preconceived ideas about how they are supposed to act typically respond by looking for information about what they are supposed to do. Psychologists say these individuals are seeking out normative information (Cialdini, Reno, & Kallgren, 1990). That is, most of us most of the time are motivated to do what society deems “the right thing.” Doing what we are supposed to do helps us avoid the embarrassment and punishment that result from violating societal standards and allows us to accrue the rewards that come from acting appropriately.

This need for normative information typically leads us to one of two sources. First, we can turn to an expert. There may be an individual nearby who has been in the situation before or who has knowledge from training or experience that we might benefit from. In most cases, relying on this person’s judgment is a sound strategy. We typically turn to physicians, financial advisors, concierges and others with expertise that we lack. Second, because experts often are not around when we need one, people frequently rely on what researchers call descriptive norms. That is, we can get an idea of how we are supposed to act by quickly discerning how other people in the situation are acting. Relying on descriptive norms is not the same as giving in to peer pressure or mindlessly following the crowd. Rather, there is often value in collective knowledge. If all the drivers ahead of you are pulling over to the side of the road, there is likely a good reason for you to do the same. Researchers find that we often use descriptive norms to guide our behavior. People are more likely to throw a useless piece of paper on the ground when they are in a littered environment but are less likely to do so when they see no evidence that other people litter in this situation (Cialdini et al., 1990). How much a college student believes the typical student drinks is a strong predictor of how much alcohol that student will consume (Neighbors et al., 2011). And individuals are more likely to choose healthy foods to eat when led to believe that other people like them have selected the healthy option (Burger et al., 2010).

It is a fair assumption that none of Milgram’s participants had ever imagined themselves in the kind of dilemma they encountered in the study. They most likely were not sure how they were supposed to respond when, on the one hand, the learner was pleading with them to stop while, on the other hand, the experimenter was telling them to continue. We might expect people in this situation to seek out an expert to help them figure out what they are supposed to do. As it turns out, Milgram conveniently provided an expert for his participants—the experimenter.
The experimenter presumably knew all about the study and had no doubt seen many other participants in this situation. Because he was telling participants that the appropriate course of action was to continue, we should not be surprised that most participants relied on this information when deciding whether to proceed.

When looked at this way, we might say that Milgram’s participants went along with the experimenter’s instructions not because they were following orders from an authority figure, but because they were relying on a reasonable strategy to determine how they were supposed to act in this novel situation. The experimenter’s influence came not from his position of authority, but because of his expertise. As Morelli (1983) put it, it is the difference between being in authority and being an authority. We should note that, although he emphasized the former more than the latter, Milgram (1983) acknowledged that in most situations the authority figure is both a person in a powerful position and a person with expertise.

Thinking of Milgram’s participants as people trying to figure out what they are supposed to do is consistent with the findings from a couple of Milgram’s (1974) variations of the basic procedure. In Experiment 15, two experimenters of seemingly equal status conducted the study. When the learner cried out to be released at the 150-volt mark, one experimenter gave the usual instructions to proceed, but the other experimenter instructed the participant to stop. Thus, participants in this study were given reason to question whether continuing the study was normal and appropriate. Of the 20 participants in this variation, one had stopped before reaching the 150-volt point and 18 refused to press any more levers after hearing the two experimenters disagree. The one participant who continued pressed only one more lever before ending the procedure.

We also can speculate that obedience rates would have dropped significantly if Milgram’s participants had believed that the typical participant did not continue after hearing the learner’s protests. In most variations of the basic procedure, Milgram’s participants had no opportunity to see how other participants reacted when forced to choose between the learner’s pleas and the experimenter’s instructions. However, this was not the case in Experiment 17, in which two additional confederates posed as participants. The rigged drawing in this variation assigned the two new “participants” to the roles of Teacher 1 (who read the word pairs) and Teacher 2 (who announced whether the answer was correct). The real participant was always Teacher 3 (who pressed the shock levers). After hearing the learner’s response to 150 volts, Teacher 1 refused to continue. Teacher 2 refused to participate any further after reaching 210 volts. Moreover, both confederates expressed their disapproval rather emphatically (e.g., “I’m not willing to shock that man against his will. I’ll have no part of it.”) and moved to the other side of the room. Only 10% of the participants in this version of the study continued to the end of the shock generator. The most common point for refusing to continue was immediately after the second teacher’s protest.
Although relying on a very small sample, participants in this variation were aware that two out of two people in this situation refused to follow the experimenter’s instructions. It is likely that this information effectively undercut the experimenter’s implied judgment that continuing with the procedures was the normal course of action. In fact, Milgram (1974) made this point himself. He explained, “(t)he lone subject in previous experiments had no way of knowing whether, if he defies the experimenter, he is performing in a bizarre manner or whether this action is a common occurrence in the laboratory. The two examples of disobedience he sees suggest that defiance is a natural reaction to the situation” (p. 120). Of course, there were other features in this variation that might also have contributed to the drop in obedience, such as potential disapproval from the other two participants. But it is difficult to imagine that the norm information conveyed by the confederates’ refusal to participate did not play a role in the participant’s decision about whether to continue.

Opportunity to Deny or Diffuse Responsibility

Researchers find that people are more likely to engage in harmful activities when they feel little or no responsibility for the consequences of their actions (Bandura, 1999). To demonstrate this phenomenon, experimenters often create conditions in which participants feel they are anonymous, so that whatever they do cannot be traced back to them. Other investigators examine naturally occurring instances of behavior when people believe no one knows who they are, such as when part of a crowd. These studies consistently find that individuals who believe they are anonymous are more likely to lie, cheat, and act aggressively than people who believe they can be identified (Mullen, 1986; Zhong, Bohns, & Gino, 2010). Researchers also find that people are often motivated to deny or downplay their personal responsibility and thereby relieve themselves of the burden that comes with being held accountable for one’s actions. Perhaps most noteworthy of these demonstrations are the classic bystander intervention studies in which participants in a crowd were less likely to accept responsibility to help someone in need than were participants who believed they were the only ones who knew about the emergency (Latane & Darley, 1970).

Milgram created a situation in which his participants could easily deny or diffuse responsibility for hurting the learner. Instead of taking responsibility for the consequences of the electric shocks, participants could tell themselves that the experimenter, the principal investigator, the university, or even the learner himself was to blame for any harm that resulted from the electric shocks. Indeed, if participants asked during the session who was responsible for any harm that came to the learner, the experimenter answered that he—the experimenter—was responsible. Moreover, the learner’s demands to be set free were directed at the experimenter (“Experimenter, get me out of here!”), which reinforced the notion
that ending or continuing the experiment was the experimenter’s decision, not the teacher’s.

I examined the role perceived responsibility played in Milgram’s experimental setting by looking at comments participants made during a partial replication of Milgram’s procedures. The replication matched the methods used in Milgram’s basic procedure as closely as possible, with the important exception of stopping the experiment immediately after noting whether participants continued the procedures after hearing the learner’s reaction to the 150-volt shock (Burger, 2009). To get an idea of what participants were thinking as they went through the procedure, we coded the spontaneous comments participants made during the experimental sessions (Burger, Girgis, & Manning, 2011). Among other measures, we noted whether the participant said anything during the session to indicate that he or she felt responsible for what happened to the learner. We then compared participants who had followed the experimenter’s instructions to the end of the procedure with those who had ended the procedure early. Among those who had followed the instructions to the end, only 12.2% gave any indication that they felt some responsibility for the learner’s fate. In contrast, 66.7% of those who had ended the procedure early expressed a sense of personal responsibility for what was happening to the learner. Participants who said they felt responsible also received more prods to continue from the experimenter and received their first prod earlier in the sequence than did participants who expressed no sense of personal responsibility.

Little Opportunity to Reflect

Researchers find that people are more likely to be influenced by salient situational features when they are unable to engage in elaborate thinking. For a number of reasons—cognitive overload, time limitations, alcohol consumption—individuals may not have the ability or opportunity to ponder the arguments for and against taking a particular action. In these circumstances, people are unlikely to consider all of their options or ask themselves whether what they are doing is consistent with their values and character. As a result, they more likely to rely on situational cues and less on reasoned arguments or personal standards to guide their behavior, and regrettable actions can follow (Gino, Schweitzer, Mead, & Ariely, 2011; Steele & Joseph, 1990). Laboratory participants placed in these kinds of situations are more likely to act dishonestly, and the association between alcohol consumption and violence is widely documented (Exum, 2006).

In a similar manner, Milgram’s participants had little time to consider the arguments for and against going along with the experimenter’s instructions. The teacher’s job was not a simple one. Participants were required to perform a series of tasks that demanded their attention—administer the test item, check the answer, announce whether the answer is correct, announce the shock level for a wrong answer, deliver the punishment. They were instructed from the outset to work
“at a brisk pace,” and upon any sign of hesitation they were instantly prompted by the experimenter to proceed (e.g., “The next item is . . .”). Thus, participants were denied an opportunity to fully consider their options or the consequences of their actions. This arrangement may have made them especially susceptible to the salient features in the setting that encouraged them to continue. The fast pace of the study also left participants with little time to consider whether administering more shocks was consistent with their own values and principles. We can only imagine how participants would have acted if the experimenter had responded to their initial reluctance by saying, “Before we go on, why don’t you take 10 minutes to think about what you want to do?” It seems unlikely many would have opted to continue.

**Chasing Red Herrings**

Although most people are astonished when first encountering Milgram’s research, when we look at some of the situational features Milgram built into his experimental procedure, we can begin to understand why so many participants continued to press the levers all the way to the end of the shock generator. Yet many researchers and scholars continue to search for a more comprehensive or more convincing explanation for Milgram’s findings. Why? It may be the case that these individuals are guilty of chasing one or more red herrings. That is, there may be aspects of Milgram’s research that catch the eye but which may not play a key role—or perhaps any role—in determining the participants’ behavior. I can suggest two possibilities.

The first potential red herring is the experimenter. Because the experimenter plays a salient role in the setting and because many people believe he represents the brutal perpetrators of the Holocaust, it is easy to assume that the relationship between the experimenter and the teacher is paramount to understanding the participant’s behavior. Milgram certainly thought it was. His agentic state explanation focuses on the teacher’s psychological subordination to the experimenter and the subsequent process through which the teacher relinquishes decisions about right and wrong to the man in the gray lab coat.

But is the experimenter even necessary to obtain the effect? There may be other ways to convey information about norms, diffuse the teacher’s sense of responsibility, etc. without an experimenter. However, if we conclude that an experimenter is necessary to produce Milgram’s findings, we need to ask whether the relationship between the experimenter and the teacher is the key to understanding the teacher’s behavior. When looked at from the outside, the experimenter–teacher relationship may seem critical, but that may not be the perception from the participants’ perspective. My own impression from interviewing each participant in my replication of Milgram’s research is that participants actually gave little thought to the man sitting behind them except to the extent that he was a source of
information or that he accepted responsibility for any harm that came to the learner. Their attention during the session was focused on carrying out all the steps they were required to perform “at a brisk pace” and on what they imagined was happening to the man on the other side of the wall.

The second potential red herring concerns the connection between Milgram’s research and the Holocaust. The extent to which Milgram’s studies tell us something about the Holocaust has been the subject of much debate (Miller, 2004, 2014; Overy, 2014). Nonetheless, the research is often presented within the context of the Holocaust and similar atrocities. Virtually every textbook description of Milgram’s studies ties the work to the Holocaust and is frequently accompanied by photographs of Hitler, Nazis, or concentration camps. Milgram definitely promoted this idea. Although he occasionally exercised caution in drawing parallels between his work and Nazi Germany (Blass, 2004), starting with the first paragraph in the first article he published about the research, Milgram often suggested that the obedience studies could help us understand the behavior of those who went along with the inhumanity that defined the Holocaust.

As a consequence of this connection, scholars attempting to explain Milgram’s results often feel their explanation must also account for the behavior of those who supported the genocide in Nazi Germany. Some researchers even point to the actions taken by the perpetrators of the Holocaust as evidence in support of their interpretation of Milgram’s experiments (e.g., Reicher, Haslam, & Smith, 2012). Although it may be a plus to explain both the Holocaust and Milgram’s findings with one theory, it is not necessary. There is no logical reason why an explanation for a psychology experiment must also account for a complex phenomenon like the Holocaust.

Conclusions and Relevance for Social Issues

Milgram’s famous studies demonstrate that under the right circumstances average citizens can be made to administer what they believe to be excruciating if not lethal electric shocks to another human being. This unexpected and disturbing image ignited a 50-year quest to understand how such an experimental outcome is possible. However, the high rates of obedience in Milgram’s research are less surprising when we consider the features Milgram built into the experimental setting and the psychological processes they set into motion. The combined impact of these processes may have made it difficult for Milgram’s participants to do anything other than continuing to press the shock levers.

Regardless of whether we accept the notion that Milgram’s research tells us something about the Holocaust, identifying situational features that contribute to unsettling acts has implications for policies designed to prevent or minimize problem behavior in relation to a large number of social issues. If small transgressions open the door for more severe misdeeds, we should be vigilant about identifying
and reacting to events before they cascade out of control. For example, bullying often begins with relatively mild teasing or taunting. School administrators who intervene at the first sign of inappropriate behavior may be able to prevent an escalation to more severe tormenting. If people respond to novel situations by relying on potentially misleading cues in the setting, we should do what we can to prepare individuals in certain roles for moments of decision. For example, training police, military personnel and business leaders, among others, to consider options and implications for hypothetical conflicts should increase the likelihood that they will make ethically correct choices when facing similar real-world decisions. And whenever possible, we should structure organizations and implement policies that force individuals to take responsibility for their actions. Tasks should be assigned in a way that makes it difficult to pass blame for wrongdoing up or down a hierarchy. A successful application of this principle can be seen in the Sarbanes-Oxley Act, which requires senior executives of publicly held American companies—usually the chief executive officer and the chief financial officer—to personally certify the accuracy of all corporate financial records and reports.

References


JERRY M. BURGER is a Professor of Psychology at Santa Clara University. His primary research interests are in the area of social influence, especially processes related to obedience, compliance, and social norms. He also has conducted research on the perception of and motivation for personal control, attribution processes, preference for solitude, and attachment to childhood homes. His books include *Desire for Control: Personality, Social and Clinical Perspectives* (Plenum), *Returning Home: Reconnecting with Our Childhood* (Rowman & Littlefield), and *Personality* (Wadsworth/Cengage), a textbook now in its ninth edition.