

The Impact of Conformity Salience on Technical Questionnaire Completion in Male and Female College Students

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This study explored the effect of conformity salience on the technical completion of a questionnaire. Previous research has documented the motivational effects of priming on behavior, but not specifically conformity salience and questionnaire completion. Participants ($N = 71$) were randomly assigned to read a statement to prime conformity or to not prime conformity before completing a questionnaire with specific instructions of how to complete responses by filling in circles with a pencil. Participants in the conformity salient condition were hypothesized to be more likely to follow the directions of the questionnaire than participants in the conformity nonsalient condition, and women were predicted to conform more than men overall. Results confirmed the hypothesis that conformity salience increases the technical completion of a questionnaire, but women were not more likely than men to follow the instructions correctly overall. In order to increase the proper completion of important questionnaires and surveys related to psychological testing, clinical diagnoses, or health-related measures, administrators should consider the possible effect of conformity salience.

Keywords: *college students, conformity, priming, salience*

Introduction

Previous research has shown that making various aspects of a social situation salient—including identifying group beliefs (Asch, 1963; Milgram, 1964; Sherif, 1935), the sex of the group members (Robertson, 2006), and various aspects of the experimental procedure (Robertson, 2006)—can impact the conformity of the participants. Research solely focusing on conformity salience, without the interaction of a misleading group (Asch, 1963), visual effect (Sherif, 1935), or demanding experimental procedure (Milgram, 1964), has been underexplored, however. Beyond manipulating the group social setting, simply priming individuals to think on their own about conformity by reading an article about the subject may increase conformity behavior. Increasing conformity with respect to following directions may be particularly useful in the completion of important questionnaires and measures. The current study examines the impact of conformity salience on the technical completion of a questionnaire.

Previous research has uncovered many potential influences that contribute to our understanding of whether an individual will conform in social situations, including the presence of an authority figure, the presence of a fellow dissenter, the degree of group cohesiveness, and the stipulations of the

expressed group norm (Asch, 1963; Milgram, 1964; Santor, Messervey, & Kusumakar, 2000; Sherif, 1935; Wolosin, Sherman, & Mynatt, 1972; Zhou, Horrey, & Yu, 2009). Early research on conformity began with the work of Sherif (1935). Sherif explored conformity in distance judgments based on the illusory movements attributed to the autokinetic effect, in which a stationary spot of light in a dark room may eventually appear to move around. Participants' movement judgments tended to converge, although all movements were merely illusions individually perceived by the participants (Sherif, 1935). This finding explains the tendency of people to conform to group decisions in times or situations of uncertainty, as well as when the conforming individual expressed limited knowledge or expertise in the specific question's subject matter (Santor et al., 2000).

In an attempt to explore conformity in response to actual physical phenomena, Asch (1963) conducted research on the conformity of participants' line judgments when confronted with unanimous incorrect judgments by confederates. Only one in four participants were found to consistently provide the correct answer, regardless of the confederates' responses, with some participants agreeing to responses involving up to a seven-inch discrepancy (Asch, 1963). Subsequent research by Asch indicated that conformity increased in groups as small as four people, although conformity was greatly reduced by the presence of one dissenter, even if the dissenter provided an alternate incorrect response (Asch, 1963). Further research by Milgram (1964) showed that conformity and obedience could result in the theoretical physical mistreatment and death of individuals, expanding the understanding of the impact of conformity in noneducational settings. Unfortunately, researchers have also found that participants generally underestimate the rate of conformity of others, as well as themselves (Wolosin, Sherman, & Mynatt, 1972).

Applications of conformity research overlaps with more specialized areas of research, including the risky behavior of adolescents (Santor et al., 2000; Zhou et al., 2009). Among teenagers, peer pressure and peer conformity were found to be better predictors of individual conformity than individuals' desire for popularity among classmates (Santor et al., 2000). In an exploration of road-crossing behavior among Chinese citizens, researchers found that participants in general expressed a greater intent to cross roads in risky situations when they were informed that other people intended to cross (Zhou et al., 2009).

The current research explored the potential impact of conformity salience on the technical completion of a paper-and-pencil questionnaire. Our primary hypothesis predicted participants who read an article about conformity would exhibit greater conformity to questionnaire instructions by filling in the answer ovals accurately compared to the participants who did not read an article about conformity. Previous research has documented the influence of priming on behavior, but conformity salience and questionnaire completion has not been investigated. Thinking about conformity through an article prime was predicted to make participants more likely to conform by following directions on a questionnaire. Reading articles, watching videos, completing word finds, memorizing lists, seeing pictures, and other variations of using information to make concepts more accessible, and therefore influence the interpretation of new information, have been effectively utilized in previous priming research (Gilovich, Keltner, & Nisbett, 2011). Priming effects can be automatic and do not require the individual's awareness to influence him or her (Bargh & Chartrand, 1999). For example, exposure to old-age prime words (such as Florida, old, lonely, grey) caused students to walk down the hallway slower than students not exposed to these prime words (Bargh, Chen, & Burrows, 1996).

As a secondary hypothesis, we predicted women would exhibit greater conformity to questionnaire instructions by filling in the answer ovals accurately compared to men overall, consistent with previous assessments of sex differences (Patel & Gordon, 1960; Robertson, 2006; Sistrunk & McDavid, 1971).

Method

Participants

A convenience sample of 71 participants (69% women, mean age = 21.58 years, age range: 18–56 years) was recruited from the psychology department research participant pool at a medium-sized public university in the southeastern United States. The pool included students enrolled in psychology and sociology courses and qualified participants received compensation in the form of one credit towards the completion of four required research credits for their respective course. Of the participants, 14% were freshmen, 26% were sophomores, 12% were juniors, and 48% were seniors. Participants were predominately psychology majors (48%). The racial composition of the participants was predominately Caucasian (83%), but also included 14% African Americans, and 4% identified as other. All participants were treated according to the American Psychological Association (2002) guidelines for ethical treatment throughout the entire research process.

Materials

There were many ways we could have primed the concept of conformity in the current investigation. We decided an article about conformity would work the best for a student population that is familiar with reading articles and taking tests on the article content. Specifically, we selected an article about the Painted Ladies of San Francisco, a collection of identical houses built by Henry Doeleger in 1927, for the conformity salient (CS) condition. The article focuses on the conformity of the architecture of the homes. For the conformity nonsalient (CNS) condition, an article focusing on the architectural and historical components of the Painted Ladies, but not the conformity of the architecture, was selected. The short articles were similar in length and comprehension level and were obtained from the *New York Times* online (Brown, 2003; Ludwig, 1988). For the sake of uniformity across the articles, we removed all titles and dates and changed the author names so they were identical.

We adapted multiple-choice questionnaires for each article condition consisting of eight questions regarding the material discussed in the articles. Example questions included, “What is the nickname for the architectural buildings discussed in this article?”, “Which architect was responsible for the design and construction of the houses?”, as well as other context-relevant questions for each article. Participants were instructed to fill in one of the four circles corresponding to their answer choice. The correct answer choice was in the same location for each question across questionnaires, creating an identical answer key for each questionnaire. In order to be scored as a correct answer, the circle was to be filled in completely. Scores could range from 0 to 8, with 8 being a perfect score.

Each participant also completed the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), consisting of 33 true/false questions pertaining to participants' views of their own personality traits. The Marlowe-Crowne Social Desirability Scale has been found to be a reliable and valid measure of social desirability (Crowne & Marlowe, 1960; Ramanaiah & Martin, 1980). Participants were asked to identify whether or not each statement was personally relevant for them, including items such as, “I have never intensely disliked anyone” and “There have been occasions when I took advantage of someone.” Scores were calculated through the accumulation of one point per answer.

High scores on the scale indicated the need for approval or avoiding disapproval. Additionally, participants provided demographic information consisting of their age, sex, ethnicity, academic major, and year in college.

Procedure

Participants signed up for the study through an online experimental management program that kept track of study options and experimental credits. The system provided students with choices for the time and place of their single meeting experimental group session. Participants completed informed consent forms and were randomly given either the CS or the CNS packet. Participants were directed to read the article and fill out the questionnaire honestly and completely. Once they finished, the researcher distributed copies of the debriefing and read it aloud to the participants, explaining the true intent of the study to determine the impact of conformity salience on the completion of the questionnaire. Participants in each condition received the same treatment, with the only difference between conditions being the content of the article provided.

Results

The analyses focused on participants' computed questionnaire completion scores as the dependent variable and the independent variables of condition salience and participant sex. Each participant's questionnaire completion score was computed as the total number of responses indicated with marks congruent with the directions. Any mark that was not a completely and correctly filled-in circle was not congruent with directions and was therefore not given a point. Additionally, each participant's social desirability score was calculated according to the conventions of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

The data were analyzed using a 2 (Salience: CS or CNS) \times 2 (Participant Sex: Women or Men) factorial ANOVA. There was a significant main effect for Salience: $F(1, 71) = 11.63, p = .001, \eta^2 = .15$ (Figure 1). Participants in the CS condition were found to have significantly higher questionnaire completion scores ($M = 6.79, SD = 2.80$) than participants in the CNS condition ($M = 4.70, SD = 3.54$). There was a nonsignificant main effect for Participant Sex, $F(1, 71) = .003, p > .05, \eta^2 = .01$. Women, regardless of condition, were not found to have significantly higher questionnaire completion scores ($M = 5.88, SD = 3.31$) than men ($M = 5.67, SD = 3.40$). Finally, there was a significant Salience \times Participant Sex interaction, $F(1, 71) = 4.31, p = .042, \eta^2 = .06$. While women scored similarly in the CS condition ($M = 6.36, SD = 3.17$) and the CNS condition ($M = 5.27, SD = 3.47$), the men showed significantly higher questionnaire completion in the CS condition ($M = 8.00, SD = .00$) than in the CNS condition ($M = 3.55, SD = 3.56$).

When participants' scores on the Marlowe-Crowne Social Desirability Scale were entered as a covariate in the analysis, no significant difference was found between the CS and CNS conditions. Similarly, a t test showed no significant difference between the conditions on the Marlowe-Crowne Social Desirability Scale, $t(70) = .33, p = .75$. Participants in the CS condition ($M = 14.89, SD = 5.47$) did not score significantly different than participants in the CNS condition ($M = 14.48, SD = 5.06$) on social desirability.

Discussion

The study intended to show the impact of conformity salience on the completion of a questionnaire, with higher questionnaire completion predicted in the CS condition as well as among women. The data supported our primary hypothesis, indicating priming conformity leads to more accurate

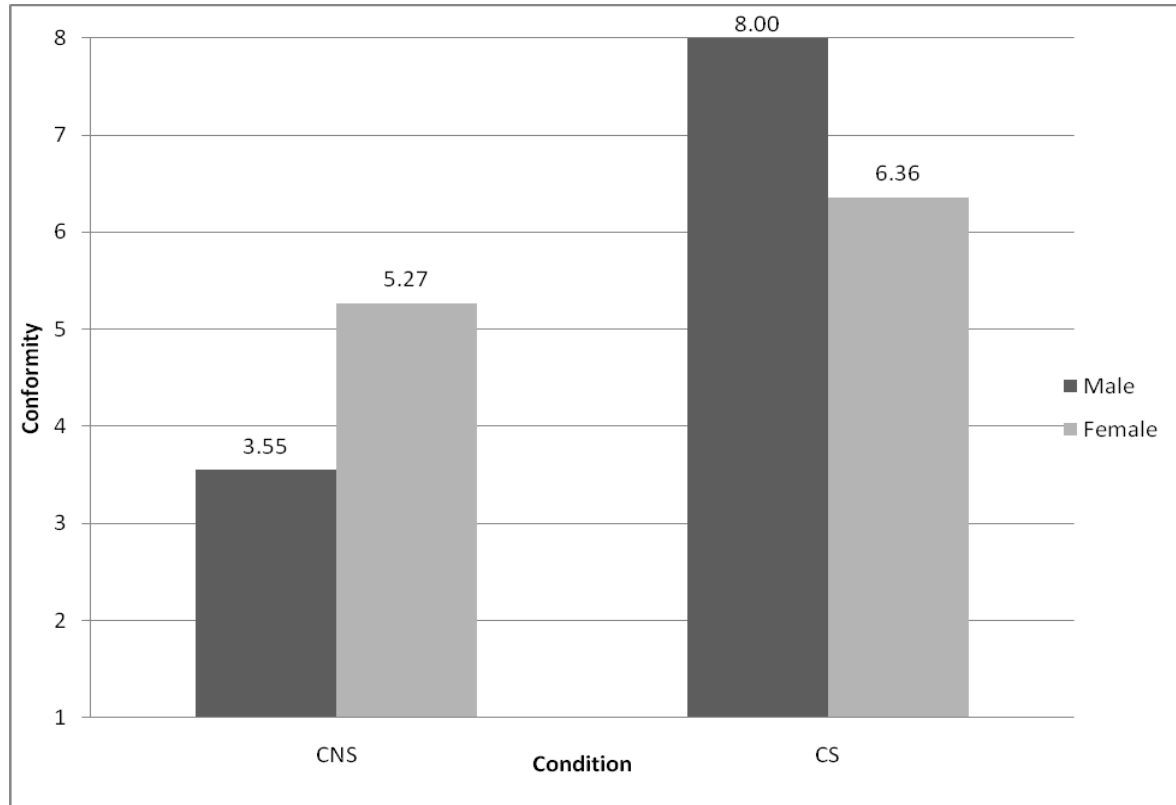


Figure 1: Mean Conformity Score by Salience Condition and Participant Sex; CNS = Conformity Nonsalient; CS = Conformity Salient

questionnaire completion. When evaluating our secondary hypothesis, however, men and women scored similarly overall on questionnaire completion and men were significantly more likely to complete the questionnaire accurately in the CS condition. This study provides evidence of the impact of the conformity salience as a function of situational conditions.

Although the majority of previous research indicated a higher tendency to conform among women compared to men (Wolosin et al., 1972; Zhou et al., 2009), other researchers have found that the sex-stereotyped pattern of conformity is actually the result of a combination of personality, task, and situational factors (Sistrunk & McDavid, 1971). Sistrunk and McDavid argued that explaining differences in conformity on cultural biases of sex masked other, potentially more important, influences (Sistrunk & McDavid, 1971). One possible explanation for the Condition \times Participant Sex interaction in the current study was the potential tendency for men to conform more when conformity cues were salient, while women showed a more stable pattern of conformity (Patel & Gordon, 1960; Sistrunk & McDavid, 1971).

Social desirability scores were not found to vary significantly between conditions, prohibiting the exploration of the impact of social desirability scores on conformity behaviors. Social desirability could be analyzed as a more stable personality factor; however, the similarity between conditions in our sample indicated the general balance between conditions on that aspect of personality. Results

cannot, therefore, be contributed to differences in personality but to the variations in conformity salience.

The generalized implications of the current research in theoretical, clinical, and practical circumstances are important to consider. If patients or participants were purposely or accidentally primed for conformity prior to completing measures, all of the data may then be impacted. Conformity can have negative impacts on the classification of certain disorders or eliminate the possibility of identifying an issue, such as with the diagnosis of posttraumatic stress disorder among veterans returning from tours in Operation Enduring Freedom and Operation Iraqi Freedom (Hoge, Auchterlonie, & Milliken, 2006). Hoge and colleagues (2006) found that when soldiers were motivated to conform out of fear of stigma, disapproval, signs of weakness, impairment of promotion, and other aspects, the soldiers were more likely to answer questions so as to conform to models of appropriate mental health (Hoge et al., 2006). Conformity out of fear of stigmatization and other consequences has not been considered to be unique to war veterans; similar levels of conformity have been found in such areas as sexual orientation, outward appearance, and other factors (Santor et al., 2000).

Possible limitations of the current study stem from a slightly disproportionate representation of women, Caucasians, and the sampling of an exclusively college student population. A replication of this study, with a more random selection of participants, could further validate the conclusions expressed in this study. Future research should further explore the impact of the conformity salience in nongroup settings using a greater variety of conformity primes and questionnaires. For example, a study could use alternative conformity articles or words as primes, manipulate the clothing of the experimenter to express a conformity theme, or explore the impact of playing a conformity-themed song in the background while running the study. A greater understanding of the impact of each individual's personality factors on the process of conformity would further expand the understanding of the topic and possibly unearth more areas of study. Additionally, research on the salience of instructions on conformity may yield interesting results. For example, a study could explore the impact of conformity cues on the completion of questionnaires with and without explicit directions.

In summary, the current study provides insight into the effect of conformity salience on the actions of participants when completing a questionnaire. The study's implications spread into all areas of life, from clinical diagnoses to everyday activities. Further research in that vein could only increase the understanding of the process of salience and the phenomenon of conformity.

References

- American Psychological Association (2002). Ethical principles of psychologists and code of conduct. *American Psychologist*, *57*, 1060–1073.
- Asch, S. E. (1963). Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership and men* (pp.177–190), New York: Russel & Russel.
- Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, *54*, 462–479. doi:10.1037//0003-066X.54.7.462
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype activation on action. *Journal of Personality and Social Psychology*, *71*, 230–244. doi:10.1037//0022-3514.71.2.230
- Brown, P. L. (2003, January 29). Praising San Francisco's champions of conformity. *The New York Times*. Retrieved from <http://www.nytimes.com>

- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 349–354. doi:10.1037/h0047358
- Gilovich, T., Keltner, D., & Nisbett, R. E. (2011). *Social psychology* (2nd ed.). New York: W. W. Norton & Company.
- Hoge, C. W., Auchterlonie, J. S., & Milliken, C. S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Journal of American Medical Association, 295*, 1023–1032. doi:10.1001/jama.295.9.1023
- Ludwig, A. K. (1988, February 14). The classic Victorians of San Francisco. *The New York Times*. Retrieved from <http://www.nytimes.com>
- Milgram, S. (1964). Group pressure and action against a person. *Journal of Abnormal and Social Psychology, 69*, 137–143. doi:10.1037/h0047759
- Patel, A. S., & Gordon, J. E. (1960). Some personal and situational determinants of yielding to influence. *Journal of Abnormal and Social Psychology, 61*, 411–418. doi:10.1037/h0047668
- Ramanaiah, N. V., & Martin, H. J. (1980). On the two-dimensional nature of the Marlowe-Crowne social desirability scale. *Journal of Personal Assessment, 44*, 507–514. doi:10.1207/s15327752jpa4405_11
- Robertson, T. (2006). Dissonance effects as conformity to consistency norms: The effect of anonymity and identity salience. *British Journal of Social Psychology, 45*, 683–699. doi:10.1348/014466605X82855
- Santor, D. A., Messervey, D., & Kusumakar, V. (2000). Measuring peer pressure, popularity, and conformity in adolescent boys and girls: Predicting school performance, sexual attitudes, and substance abuse. *Journal of Youth and Adolescence, 29*, 163–182. doi:10.1023/A:1005152515264
- Sherif, M. (1935). A study of some social factors in perception. *Archives of Psychology, 187*, 23–46.
- Sistrunk, F., & McDavid, J. W. (1971). Sex variable in conforming behavior. *Journal of Personality and Social Psychology, 17*, 200–207. doi:10.1037/h0030382
- Wolosin, R., Sherman, S. J., & Mynatt, C. R. (1972). Perceived social influence in a conformity situation. *Journal of Personality and Social Psychology, 23*, 184–191. doi:10.1037/h0033041
- Zhou, R., Horrey, W. J., & Yu, R. (2009). The effect of conformity tendency on pedestrians' road-crossing intentions in China: An application of the theory of planned behavior. *Accident Analysis and Prevention, 41*, 491–497. doi:10.1016/j.aap.2009.01.007

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