Gender Differences in Religiosity as a Means of Self-Enhancement: The Impact of Perceived Audience Size and Identifiability

Neal Pollock
University of Alabama
Bradley M. Okdie
The Ohio State University Newark
Rosanna E. Guadagno
University of Alabama

Research suggests that women perceive organized religion more positively then. Furthermore, self-enhancement motives may drive expressions of religiosity. This study sought to examine the extent to which men and women would include religious statements in a fictitious blog entry, depending on the extent to which they were identifiable to a potential audience and the size of that audience. To examine this, we employed a 2 (anonymity: anonymous or identifiable) × 2 (participant gender: male vs. female) × 3 (perceived audience: no audience, limited, or public) between-subjects factorial design. Participants wrote a fictitious blog entry about the typical day of a student and were randomly assigned to believe that their entry would be anonymous or identifiable and that the potential readership of their entry was non-existent, limited to other participants in the study, or the entirety of the Internet. Results indicated that identifiable men, relative to men in all other conditions, engaged in more religious disclosure only when their blog entries would not be viewed by anyone. These results suggest self-enhancement pressure may play a role in gender differences in the expression of religiosity.

The U.S. ranks above Canada, the United Kingdom, Israel, Japan, and many other countries on self-reported religiosity (Pelham & Nyiri, 2008), and specifically within America, the top ten most religious states are all located in the southern region of the U.S. (Newport, 2009). Given these statistics, it is likely that many Americans view religiosity as a positive characteristic. However, religiosity may be perceived less positively by men than women, because men participate in less religious activity, report being less devout, and identify less with being religious (Gallup, 2010; Thompson & Remmes, 2002). These gender differences in self-disclosed religiosity may be influenced by pressures to conform to traditional gender role expectations. We therefore contend that men may be more likely to express religiosity when such pressures are lifted.

Gender differences in religiosity may be partially explained by traditional gender role expecta-tions. For example, women are expected to be communal (i.e., nurturing, cooperative, and submissive), whereas men are expected to be agentic (i.e., independent, self-reliant; Barry, Bacon, & Child, 1957; D'Andrade, 1967; Eagly, 1987). Thus, being submissive to a higher power may be seen as feminine due to its call for obedience and implicit rejection of self-reliance. Women may

therefore be more likely to present themselves as religious in order to conform to gender role expectations (Batson, Schoen-rade, & Ventis, 1993). Indeed, women who adhere more strongly to gender role prescriptions are more likely to participate, support, or believe in overtly religious activities and ideology (Felty & Poloma, 1991). However, no known research has explored whether the religiosity of men may also be influenced by gender role expectations.

Given that religiosity does not fit well with traditional gender role expectations for men, we propose that self-enhancement may explain the comparatively low, self-reported ratings of religiosity in men. Self-enhancement refers to people's tendency to present themselves in ways that enhance their positive attributes while downplaying those that could be construed as negative or deviant (Alicke & Sedikides, 2009). Because men, owing to societal pressures, generally perceive feminine characteristics as less desirable than masculine ones (Eagly, 1987), men may self-enhance by downplaying traits associated with femininity while bolstering those traits associated with masculinity. Self-enhancement is employed more by men than women (Guadagno & Cialdini, 2007), and we propose that because religiosity is perceived as feminine, men may suppress their religiosity in social settings as a means of self-enhancement.

If the expression of religiosity in men is influenced by pressures to self-enhance, men may be more willing to express religiosity when such pressures are lifted. For instance, pressures to self-enhance may be alleviated when people engage in identifiable, rather than anonymous, discussion. According to the SIDE (Social Identity Model of Deindividuation Effects) model, anonymous discussion can result in deindividuation, a state in which an individual's personal sense of identity and reality are diminished, leading to decreased focus on personal standards and increased focus on group norms (e.g., gender norms) if such information is available (Guadagno et al., 2010; Postmes, Spears, & Lea, 1998). Therefore, we suggest that men may be less likely to conform to gender norms and express more religiosity when anonymity is reduced.

In addition, we propose that pressures to self-enhance are also influenced by the size of the audience to which individuals express their religiosity. Specifically, we expect that audience size and self-presentation pressures are positively correlated, because an increase in the number of individuals physically present in a given situation is likely to cause mental distress and a rise in anxiety (Fenig-stein & Vanable, 1992). Moreover, individuals are more likely to feel nervous and tense when speaking in front of large audiences (Knight & Borden, 1979; Latané & Harkins, 1976). Decreasing the size of the audience should decrease self-presentation pressures and result in increased religious self-disclosure among men.

The present study sought to examine whether reducing normative pressures to self-enhance would increase religious self-disclosure in men. Participants wrote a fictitious blog (i.e., online journal; Guadagno, Eno, & Okdie, 2009) entry. Anonymity and audience size were manipulated in order to examine whether religious self-disclosure was influenced by normative pressures to self-enhance. The number of religious words in participants' blog entries served as our measure of religious self-disclosure.

Due to a perceived need to self-enhance and appear masculine, we predicted that men who were identifiable (and therefore not deindividuated) and did not expect anyone to read their blog entry would express more religiosity than would men in any other condition. We expected that this particular context would reduce the pressure for men to engage in gender-role related self-enhancement. We did not predict any differences in religious self-disclosure among women.

METHOD

Participants. Participants were 274 students (174 male, 100 female) at a large southeastern university who received partial course credit for participation in this study. Participants ranged from 18 to 40 years of age (M_{age}=19.50, SD=2.26) and were predominantly Caucasian.

Procedure. Participants were randomly assigned to conditions in a 2 (Identifiability: Anonymous vs. Identifiable) × 3 (Perceived Audience: No Audience, Limited Audience, Public Audience) between-subjects factorial design and informed that they would ostensibly be testing a program that a local Internet service provider was thinking of implementing. This program, which resembles currently available blogging software (e.g., Facebook, MySpace, blogger, Wordpress), was created specifically for this study. Participants were asked to use this program to create a blog entry that would be displayed in one of three ways (corresponding to the three perceived audience conditions): to only

the participant, to all participants in the study, or on the Internet. Participants were only aware of the condition that they were in, as they were briefed individually about their blogs and the size of the audience that would be viewing them.

Following the description of the audience, participants composed a blog entry using the blogging software developed for this study. They were asked to describe a typical day in the life of a college student. This prompt was selected to ensure variability in participants' responses, as we wanted to examine the extent to which participants talked about themselves relative to typical college students. Participants were given a screen name that would be associated with their blog entry. To manipulate the extent to which participants felt they could be identified by their blog entries, the screen name consisted of one of two levels of identifying information. Specifically, in the identifiable condition, the assigned screen names contained the students first and last name separated by a period (e.g., Tom.Smith). In the anonymous condition, the screen name "green" (i.e., an anonymous name) was assigned to all participants.

The Linguistic Inquiry and Word Count (LIWC; Pennebaker, Francis, & Booth, 2001) was used to assess religious self-disclosure. This computer program analyzes text data on a word-by-word basis against a dictionary of over 2,000 words. Each of the 2,000 words is divided into 74 categories, such as articles (e.g., a, an, the), emotion words (e.g., happy, joy), and pronouns (e.g., I, my, we, us). Additionally, the LIWC includes a religion category containing 159 religious words (e.g., altar, church, and mosque). The number of religious words expressed by participants in their blog entries was assessed via LIWC and operationalized as religious self-disclosure.

RESULTS

Manipulation Checks. A one-way analysis of variance (ANOVA) confirmed that the manipulation of perceived audience was successful, $F(2, 238) = 150.20$, $p < .001$, $\eta_p^2 = .55$. Fisher LSD post hoc tests indicated that all conditions were significantly different from one another in the predicted directions, $ps < .001$. Thus, participants in the No Audience condition ($M = 1.26$, $SD = .06$) believed fewer people would see their blog than those in the Limited Audience condition ($M = 5.44$, $SD = 2.25$), and those in the Limited Audience condition believed fewer people would see their blogs than those in the Public condition ($M = 6.46$, $SD = 2.59$).

An independent samples t-test confirmed that the manipulation of anonymity was also successful. Participants in the anonymous ($M = 6.57$, $SD = 2.32$) condition felt significantly more anonymous than participants in the identifiable condition ($M = 2.49$, $SD = 1.94$), $t(239) = -14.76$, $p < .001$.

Primary Results. To examine gender differences in the effects of anonymity and perceived audience on religious self-disclosure, we conducted a 2 (Gender: Male vs. Female) × 2 (Identifiability: Anonymous vs. Identifiable) × 3 (Perceived audience: No audience, Limited audience, Public Audience) between-subjects analysis of variance.
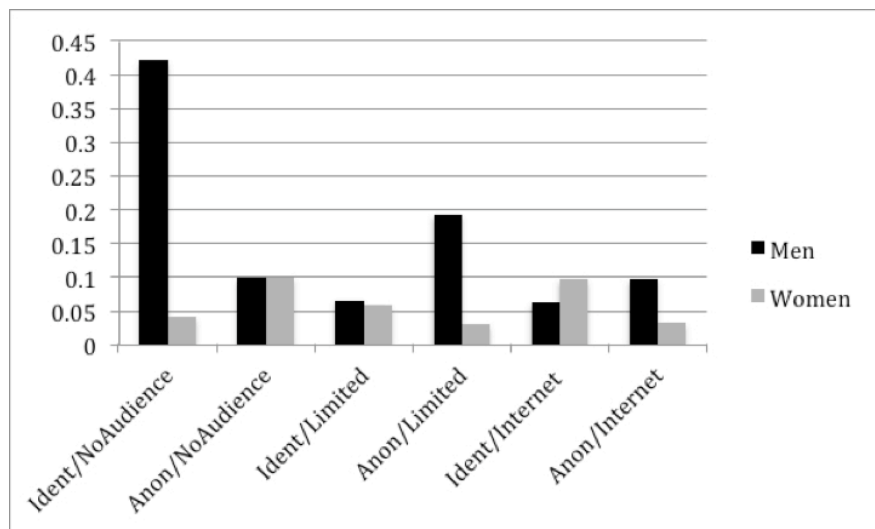

FIGURE 1. Mean Religious Words as a Function of Gender, Audience Size, and Identifiability.

This analysis revealed a main effect of gender, $F(1, 229) = 4.24$, $p = .04$, $\eta_p^2 = .01$. The main effects for perceived audience and identifiability were not statistically significant. Additionally, an Anonymity × Perceived Audience interaction emerged, $F(2, 229) = 3.08$, $p = .04$, $\eta_p^2 = .02$. Suggesting that this two way interaction was likely driven by participant gender, the two way interaction was qualified by a Gender × Anonymity × Perceived Audience interaction (see Figure 1) on participants' use of religion words in their blogs entries, $F(2, 229) = 6.64$, $p = .002$, $\eta_p^2 = .05$. Specifically, a planned comparison revealed that men in the no audience identifiable condition ($M = .42$, $SD = .91$) took part in significantly more religious self-disclosure than did men in all other conditions ($M = .06$, $SD = .15$), $p = .01$. Moreover, simple effects revealed women did not differ across conditions in the extent that they used religious words in their blogs, $ps > .05$. No other simple effects were significant.

DISCUSSION

The current study examined the hypothesis that, because religiosity is associated with femininity (Batson, Schoenrade, & Ventis, 1993; Felty & Poloma, 1991; Thompson & Remmes, 2002; Gallup 2010), men would engage in more religious self-disclosure when pressures to self-enhance, and to conform to gender role expectations, were lifted. As predicted, men who were identifiable (and therefore not deindividuated) and expected no audience were more likely to use religious words in a blog entry than men in the other conditions. This finding supports the idea that self-enhancement involves the suppression of attributes that are perceived as negative (Alice & Sedikides, 2009), such as feminine traits in men. These results also reinforce the link between gender role traditionality and religiosity (Felty & Poloma, 1991). Moreover, the current findings support Eagly's social-role theory (1987), which suggests that men tend to not display religiosity in an effort to preserve their masculinity. Furthermore, the finding that identifiable men in the no audience condition exhibited the most religious self-disclosure indicates that these participants were not deindividuated and experienced fewer pressures to self-enhance. This corresponds with past research on the effects of deindividuation (Zimbardo, 1969) and the adherence to group norms predicted by the SIDE model (Postmes, Spears, & Leah, 1998).

Most prior research examining the relationship between religious self-disclose and self-enhancement has employed traditional survey methodology. A strength of the present study is that we examined the relationship between these variables by analyzing participant-generated text. This method avoids priming the participant with the topic of interest. For instance, instead of utilizing overtly religious items, which may provide the participant with insight into the study's purpose, researchers analyzing participant-generated text can ask a broad set of questions without specifying the study's purpose. However, one limitation of the present study is that the religious words utilized by the LIWC are primarily consistent with Christianity, making it difficult to generalize our results to other religions.

Another limitation is that despite our assertion that religiosity is perceived as part of female gender roles, the empirical evidence supporting this contention is sparse. However, previous data on women and religion indicate that women engage in more religious behavior than men such as devoutness, identifying as religious, and church attendance (Thompson & Remmes, 2002; Gallop 2010). Thus, religiosity may be viewed as a traditionally feminine characteristic and be ascribed to the feminine gender role. Therefore, owing to the theoretical framework laid out by social role theory (Eagly, 1987), women may be expected to conform to normative expectations prescribed by their gender role and thereby engage in more overtly religious activities. Future research should more directly examine the relationship between prescribed gender roles and self-presentation, as it may further add to our understanding of different self-presentational strategies. It may be the case that other attitudes and behavior endorsed more by one gender are due to self-presentational concerns as opposed to chronic dispositional characteristics.

Future research should continue to examine identifiability and perceived audience as influences on religious self-disclosure, because the results of the current study suggest that these variables may affect individuals' propensity to use self-enhancement strategies. Accounting for identifiability and audience size within research of gender roles, religiosity, or self-presentation may lead to a better understanding of all of these areas of study. Finally, although we found no significant differences in religious self-disclosure among women, future research may benefit from exploring whether women's religious self-disclosure is also influenced by pressures to self-enhance. Overall, these results

add to our understanding of the factors resulting in religious self-disclosure as a means of self-enhancement.

References

Alicke, M., & Sedikides, C. (2009). Self-enhan-cement and self-protection: What they are and what they do. *European Review of Social Psychology*, 20, 1-48

Batson, C., Schoenrade, P., & Ventis, L. (1993). Religion and the Individual: A Social Psychological Perspective. NY: Oxford University Press.

Barry, H., Bacon, M.D., & Child, I. L. (1957). A cross-cultural study of sex differences in socialization. *Journal of Abnormal and Social Psychology*. 55, 327-332. [37]

Eagly, A. H. (1987). Sex differences in social behavior: A social-role interpretation. Hillsdale, NJ: Erlbaum.

Felty, K. M., Poloma, M. M. (1991). From Sex Differences to Gender Role Beliefs: Exploring the Effects on the Six Dimensions of Religiosity. *Sex Roles*, 25, 181-193.

Fenigstein, A., & Vanable, P. A. (1992). Paranoia and self-consciousness. Journal of Personality and Social Psychology, 62, 129–138.

Feingold, A. (1994). Gender Differences in Personality: A Meta-Analysis. *Psychological Bulletin*, 116, 429-456.

Francis, L. J., Wilcox, C. (1998). Religiosity and Femininity: Do Women Really Hold a More Positive Attitude Toward Christianity? *Journal for the Scientific Study of Religion*, 37, 462-469.

Guadagno, R. E., Cialdini, R. B. (2007). Gender Differences in Impression Management in organizations: A Qualitative Review. *Sex Roles*, 56, 483-494.

Guadagno, R. E., Lankford, A., Muscanell, N. L., Okdie, B. M., & McCallum, D. M. (2010). Social Influence in the Online Recruitment of Terrorists and Terrorist Sympathizers: Implications for Social Psychology Re-search. *International Review of Social Psychology*, 23, 25-55.

Guadagno, R.E., Muscanell, N.L., Okdie, B.M., Burke, N.M., & Ward, T. B. (2011). Even in Virtual Environments Women Shop and Men Build: Gender Differences in Second Life. *Computers in Human Behavior*, 27, 304-308.

Knight, M. L., & Borden, R. J. (1979). Autonomic and affective reactions of high and low socially-anxious individuals awaiting public performance. *Psychophysiology*, 16, 209-213.

Latané, B., & Harkins, S. (1976). Cross-modality matches suggest anticipated stage fright as multiplicative function of audience size and status. *Perception and Psychophysics*, 20, 482 488.

Newport, F. (2009). State of the States: Importance of Religion. Retrieved October 14th, 2010, from http://gallup.com/poll/114022/State-States-Importance-Religion.aspx

Pelham, B., & Nyiri, Z. (2008). In More Religious Countries, Lower Suicide Rates. Retrieved October 14th, 2010, from http://gallup.com/po-ll/108625/More-Religious-Countries-Lower-Suicide-Rates.aspx

Postmes, T., Spears, R., & Lea, M. (1998). Breaching or Building Social Boundaries: Side-Effects of Computer Mediated Communication. *Communication Research*, 25 689-715.

Thompson, E. H. Jr., Remmes, K. R. (2002). Does Masculinity Thwart Being Religious? An Examination of Older Men's Religiousness. *Journal for the Scientific Study of Religion*, 41, 521-532.

Zimbardo, P. G. (1969). The Human Choice: Individuation, Reason, and Order vs. Deindividuation, Impulse and Chaos. In W.J. Arnold & D. Levine (Eds.), Nebraska Symposium on Motivation (pp. 237-307). Lincoln, NE: University of Nebraska Press.