

Changes in Desire for Control over Time: Gender Differences in a Ten-Year Longitudinal Study¹

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Undergraduate students from a predominantly white middle class student body who were administered the Desirability of Control Scale in 1980 completed the scale again in 1990. Males scored significantly higher on the scale than females, indicating a higher desire for control, in the initial sample. The males' scores did not differ significantly over the ten-year period. However, the female subjects' scores increased over the course of the decade to a point not significantly different from that of the males. Possible explanations of this effect concern changes in gender role expectations in the 1980's and changes in the women's preference for control following school and career experiences.

For more than a decade now personality researchers have examined individual differences in desire for control, i.e., the extent to which people generally prefer to control the events in their lives. Researchers have tied desire for control to a wide range of behaviors and psychological phenomena, including social interactions, achievement, conformity, attributional activity, stress and coping strategies, health behaviors, depression and gambling behavior (Burger, 1992). People who are high in desire for control are more likely than lows to dominate a conversation, do better at achievement tasks, attempt to influence other people, engage in extensive attributional processing and become depressed over events they cannot control (Burger, 1992).

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The research reported here was designed to examine two features of the desire for control construct. First, we were interested in the stability of adult desire for control levels. Like other personality trait variables, desire for control has been described as relatively stable over time and across situations. However, even stable personality characteristics can change over a long period of time. Second, we wanted to explore gender differences in desire for control, particularly as they might change over a period of many years. Although several researchers report desire for control scores for males and females separately, virtually nothing is known about how these differences vary as a function of age or over time.

To date the stability of a person's desire for control level has been demonstrated through relatively short term test-retest correlations with the Desirability of Control Scale (Burger & Cooper, 1979). For example, Burger and Cooper (1979) reported a correlation of .75 over a six-week period for their original sample. Similarly, Burger (1980) found a correlation of .69 when comparing scores over a 12 to 14 week interval. Braukmann (1981) compared test scores over a one year period and found a correlation of .70. Taken together, these test-retest data indicate that scale scores are appropriately stable for a personality variable over a period of time of up to one year.

However, the present experiment was interested in changes in desire for control over a much longer period of time. Specifically, we examined the stability of scores from tests taken ten years apart. Demonstrating consistency in test scores over such a length of time would point to impressive stability for the desire for control construct. Moreover, because the initial testing was conducted when the subjects were young adults, a high correlation between the test scores would argue strongly that desire for control is determined largely by the time a person reaches early adulthood. On the other hand, identifying changes in desire for control over a ten-year period, particularly in one group more than another, could help identify the kinds of life experiences that lead to the development of a high or low desire for control. Although researchers have speculated about the causes of desire for control, little data are available on this question.

Researchers examining gender differences in desire for control sometimes report that males score higher on the Desirability of Control Scale than females (Burger, 1992). For example, the original norm data for the scale, collected with college undergraduates in 1978, found that male college students' desire for control scores were slightly higher than the females' scores (Burger & Cooper, 1979). The test developers suggested that this difference, although small, might reflect differences in gender role socialization patterns. That is, traditional gender roles tend to identify men as more assertive, more dominant, more independent and more achievement-oriented than females. Thus, American men might be raised to prefer control over events to a greater extent than are American women.

However, there are two reasons to temper the conclusion that American men tend to be higher in desire for control than women. First, although several researchers report a higher score for males, many studies fail to find this gender difference (Burger, 1992). Second, an examination of studies that report scores separately for men and women and the ages of the subjects suggests that gender differences might not be consistent across age groups. Studies reporting gender data on desire for control for middle-aged and older subjects find a consistent tendency for males to score higher on the Desirability of Control Scale than women. For example, Smith, Woodward, Wallston, Wallston, Rye and Zylstra (1988) found males scored higher than females when examining subjects with a mean age of 46.9 years. A similar gender difference was reported by Smith, Wallston, Wallston, Forsberg and King (1984) for each of two samples with mean ages of 49.67 years and 44.20 years. However, the little data we have on desire for control differences among adolescents paint a different picture. Schonbach (1990) found no gender difference in a sample of 15 to 16 year old German high school students. Heft et al. (1988) gave a children's version of the Desirability of Control Scale to students in the fifth, seventh and ninth grades. They found no differences between the scores of the boys and the girls at any grade level.

Taken together, the results of these studies suggest that gender differences in desire for control may vary by age. No differences are found in pre-college samples, but males consistently score higher than females in middle-aged and older samples. Not surprisingly, most researchers have examined college undergraduate samples. When these researchers report gender data, they sometimes find that males score higher than females, and sometimes find no gender differences (Burger, 1992).

The present experiment was designed to examine changes in desire for control over time as a function of gender. We compared desire for control scores taken when subjects were undergraduates with their scores taken ten years later. We expected first to find a strong correlation between test scores over this time period. This is because desire for control, like other personality traits, should be *relatively* stable over time.

However, there also are reasons to predict that some changes might be found, particularly as a function of gender. Specifically, like many undergraduates, at the time of the initial testing nearly all of the women in our sample had entered college directly from high school. Any work experiences they might have had were limited to part-time or occasional jobs. However, virtually all of these women were career-oriented and a decade later they had experienced the challenges of school and the work place and many were facing the challenge of juggling career and family. These experiences might affect the extent to which these women appreciate and prefer to exercise control over the events in their lives, i.e., might lead to a higher desire for control.

There is another reason to suspect that the women in our sample might alter their desire for control level over the ten-year time span we examined. The decade that passed between the testing (between 1980 and 1990) saw a continuation of rapidly changing gender roles in this culture. The gender-role messages the men and women in our sample had received when they were growing up were being rewritten when they were in their twenties. The emphasis on dominance for males and dependence for females that Burger and Cooper (1979) speculated about may have been reduced considerably since these subjects went through early gender role socialization. Again, these changes might result in higher desire for control levels for women.

METHOD

Subjects

Two hundred and seventy four undergraduates completed the Desirability of Control Scale along with a battery of other personality tests in the fall of 1980. All were students at a small, private university in the southeastern United States and all were enrolled in introductory psychology courses at the time. The students were predominantly from white, middle class backgrounds. In the fall of 1990 we obtained current addresses for all but 54 of these students through the university's alumni office. All 220 remaining students were mailed the survey packet. Nine packets were returned by the post office because the subject no longer lived at the address and a forwarding address was not available. Thus, survey packets presumably were received by 211 subjects. One hundred and twenty-nine of these subjects completed and returned the survey, 61.1 percent of those receiving packets. These subjects, 59 males and 70 females, comprised the final sample. Respondents did not differ significantly on their 1980 desire for control scores from the subjects in the initial sample who did not respond or who were not located. Subjects received class credit for participating in the initial phase of the research, but participation in the second phase was completely voluntary.

Procedure

All subjects received a survey packet containing a cover letter explaining the use of code numbers to assure confidentiality, a stamped, self-addressed envelope, and the survey questionnaire. The questionnaire

Table I. Mean Desire for Control Scores

	Fall 1980	Fall 1990
Males	107.19	105.90
Females	97.57	104.27

included the Desirability of Control Scale and several additional items and scales not relevant to the study reported here. The Desirability of Control Scale is a 20-item self-report instrument that asks subjects to indicate on seven-point scales the extent to which they agree with each item (for example, "I prefer a job where I have a lot of control over what I do and when I do it"). The test has been found to have reasonable internal consistency and test-retest reliability (Burger & Cooper, 1979). Two reminder cards were mailed two and four weeks after the initial mailing to those who had not returned the survey.

RESULTS

We compared subjects' 1980 desire for control scores with their 1990 scores with a 2 (gender) by 2 (time) ANOVA, with time as a within-subject variable. The means for this analysis are shown in Table I. As seen in the table, we found a significant main effect for time, $F(1, 127) = 5.88, p < .02$. Subjects had higher Desirability of Control Scale scores in 1990 than they had at the earlier testing time. The analysis also uncovered a significant main effect for gender, $F(1, 127) = 13.26, p < .001$, with males scoring higher on the scale than females.

Most important, the analysis also revealed a significant interaction, $F(1, 127) = 12.80, p < .001$. As shown in the table, whereas males scored significantly higher than females on the Desirability of Control Scale in 1980, the females' scores increased to the point that they were not significantly different from the males' scores in 1990. The males' scores did not differ significantly from 1980 to 1990.

Another indicator of the stability of desire for control scores over the decade is the test-retest correlation for the two sets of scores. We found a high correlation between the 1980 and 1990 desire for control scores for the male subjects, $r = .63$. However, female subjects' 1980 scores were poor predictors of their 1990 score, $r = .11$.

DISCUSSION

Clearly, on average the females in our sample increased their desire for control scores dramatically between 1980 and 1990. How can we account for this finding? The nature of longitudinal research necessarily tangles two possible sources for this effect. The first interpretation of the effect is that the increase in the women's desire for control scores may be a function of societal changes in the 1980's. It is possible that the women reacted to some of the messages they encountered during the past decade and reassessed themselves and their behavior in terms of gender role changes. The women may have made efforts to become more assertive and less dependent as times and social standards changed. Alternately, one could interpret the change in the women's desire for control uncovered here as a reflection of some of the experiences the women encountered when growing from approximately 20 to 30 years of age. Perhaps leaving home and taking on the responsibilities of a young adult allowed these women to catch up to the men in terms of their need to be independent and in control. In addition, virtually all of the women in the sample were career-oriented and went on to work with and compete with men in their chosen fields following graduation. Career-related experiences requiring self-reliance and assertiveness may have contributed to a general increase in these women's preferences to control the events in their lives. Of course, more research is needed to tease apart these two interpretations of the findings. We suggest that the most reasonable explanation of the results probably is that both of these processes were operating and affected the women in our sample.

At first glance the results of the present study would seem to contradict the cross-sectional data reviewed earlier. That research finds an increase in the difference between men and women's desire for control levels over the life span, with little or no gender difference in adolescence and the most consistent differences found among middle-age subjects. However, the data reported here show a clear narrowing of the gender gap as subjects age. How can we account for these different patterns? One explanation ties back to the notion that the increase in desire for control we found among the women in our sample reflects societal changes. Middle-aged and older women, who went through most of their gender socialization many years ago, might not be expected to show as high a desire for control as the men their age. Adolescent females, who have been exposed only to the most recent developments in gender role expectations, have desire for control levels that are no different from those of their male counterparts. The women in our sample may fall somewhere in between these two groups, old

enough to reflect the societal standards they were raised with, but young enough to change their desire for control levels as those standards change. Although speculative, this interpretation also suggests that as gender roles continue to change, gender differences in desire for control might slowly disappear altogether.

Beyond the question of gender differences, the findings also provide information relevant to the broader question of what factors affect the development and change in a person's desire for control level. The strength of longitudinal research is that it conclusively demonstrates change over time. Although desire for control is a relatively stable personality variable, our findings suggest that it also can be altered in young adults, albeit over a long period of time, with changing circumstances. The women in our sample increased their desire for control scores considerably when they encountered situations — brought on either by changes in society or changes in their personal circumstances — that led them to be more motivated to control the events in their lives. This finding suggests that people might develop a higher or lower desire for control as they experience challenges to their efforts at control or see the value of exercising more control over the events in their lives.

These observations lead to a final speculation. If these kinds of experiences can alter desire for control levels in adults, might a similar process work with children? That is, what kind of developmental experiences might lead to a high or low desire for control? Extrapolating from the data with young adults, it may be that parents who encourage and allow children to exercise control over significant events in the child's life will foster a high desire for control in their children. Consistent with this reasoning, Eccles, Buchanan, Flanagan, Fuligni, Midgley and Yee (1991) found that encouraging autonomy may be particularly beneficial for adolescents. Junior high students in their study had higher levels of intrinsic motivation for school work when their parents allowed them to make many of their own decisions at home. However, the relationship between home environment and desire for control no doubt is a complex one. For example, Rothbaum and Weisz (1989) have argued that children's efforts to express their need for control sometimes results in problem behaviors, such as aggressiveness or rebellion. Although much more work needs to be done identifying the events and situations that affect a person's desire for control level, the results of the present investigation demonstrate that, at least for females in their twenties, changes in desire for control level are possible and sometimes occur.

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