

An Experiment on the Influence of Information on ISU Students' Perception of Safety

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ABSTRACT

A group of 250 Idaho State University social work and sociology students were given a safety-related pretest using the modified Rape Aftermath Symptom Test (RAST), Simpson cognitive frameworks, and Risk Perception. A short factual presentation of sexual assault data (forcible rape) from ISU Security 2005 Clery Crime Statistics and 2005 FBI Uniform Crime Report was then presented to students to determine the effects factual information would have on their perceptions of safety. Post-test data indicated significant differences between male and female students on RAST scores, on Simpson cognitive frameworks (i.e. Cautious, Confident, and Neutral) and on Risk Perception. In both pre- and post-test surveys there were a higher percentage of female students whose cognitive framework (personality profile) was “Cautious” or “Confident.” For both genders post-test scores for “Cautious” were significantly higher, though the females’ post-test scores increased over four times as much as males in terms of percentage.

Key Words: University student perception, danger, safety, rape, sexual assault

University Students' Perceptions of Safety and Danger

INTRODUCTION

This study examines students' perceptions of their safety and danger on the Idaho State University campus and further attempts to ascertain whether providing objective data (information about local crime statistics) has an effect on subjective perceptions of safety. Perceptions of safety versus factual data regarding safety is a relevant issue in the wake of extreme violence at Virginia Tech campus and the recent (Pocatello, Idaho) murder of Cassie Jo Stoddard by two 16-year old high school "friends", Brian Draper and Torey Adamcik.

LITERATURE REVIEW

A student's evaluation of ambiguous situations has important implications for behaviors such as when and where to take classes, whether or not to study alone in the library at night, or if it is safe to go to the computer lab or student union alone. Harris and Miller (2000) explain that a person's evaluation of ambiguous situations could affect decisions about remaining in abusive relationships, summoning police, or even staying in school. A person's beliefs about their safety influences behavior whether or not these beliefs are based on facts. For example, research suggests that women express more fear than men about being victims of violence and crime (Haghihi & Sorenson, 1996; Vitelli & Endler, 1993). However Harris and Miller (2000, p. 846) explain that, "If people were rationally evaluating risk of violence, then men should evaluate their risk of physical assault as higher than women would, men should evaluate their risk of assault by a stranger as higher than that by a family member, and women would estimate their risk of assault by an intimate acquaintance or relative as higher than that by a stranger."

Inaccurate assessments of risk may be a result of differences in physical strength between men and women (Thompson, Bankston, & LaPierre, 1992), and the influence of gender stereotypes

(Bettancourt & Miller, N.,1996). According to Harris and Miller (2000, p. 857) “gender role stereotypes may encourage both women and men to regard females as the “weaker” gender.” Other researchers explain that perceptions of safety among women are largely shaped by fears of sexual assault (Ferraro & LaGrange, 1987; Gordon & Riger, 1989; Warr, 1984). Warnings about the risk of sexual assault is a normal part of women’s socialization (Warr, 1984). Such socialization may encourage higher rates of fear responses from females than males for similar situations.

Cognitive Frameworks and Assessment of Risk

Zerubavel (1991) explains that perceptions of safety and danger are products of social construction, collective agreement, and socialization. While objective danger exists, observation and resulting factual data regarding it tend to be inconsistent and can result in inaccurate beliefs. Simpson (1996) asserts that beliefs about danger and safety are organized in three cognitive frameworks: the Cautious, Confident, and Neutral.

The Cautious framework (Zerubavel, 1991) regards the world as dangerous, only marking isolated cases as being safe. In this framework, people identify safe situations and assume the rest of life is dangerous. People within this framework tend towards paranoia. For example, the cautious framework may be applied to all fresh vegetables, after the E. coli outbreak involving fresh spinach and iceberg lettuce in 2006. In this case, all fresh vegetables are assumed dangerous except those marked as, believed to be, safe. For our study, Cautious students would likely believe that they are at risk for sexual assault everywhere, at any time, by anyone, except in places they have marked as being safe. Of course, the identified and marked “safe” places (e.g., a small rural city like Pocatello) may not actually be safe. In fact, according to FBI Uniform Crime Report data for 2005, Pocatello, Idaho has a higher rate of forcible rape per 100,000 (67.3) than the U.S. national average (35.4), Boise, Idaho (61.5), Ogden, Utah (49.3), or even Salt Lake City, Utah (39.0), which is the nearest metropolitan area to Pocatello.

The Confident framework (Zerubavel, 1991), in contrast, assumes the world is safe, only marking isolated cases as being dangerous. In effect, the Confident cognitive framework assumes, without verification, that the world is safe, since dangerous places, situations, and people have been identified. In some situations, this can be viewed as courage or faith; in other situations the Confident framework may be viewed as a person being innocent, uninformed, naïve, delusional, or having pathological confidence. For our study, Confident students would likely believe they are safe from sexual assault everywhere except in places marked as being dangerous. Of course, without factual data, the assumed safe environment (a small rural city, i.e., Pocatello...) may not be as safe as assumed.

As discussed above, both the Cautious and Confident frameworks are problematic because beliefs are formed about safety and danger in the absence of reliable, valid information. In contrast, Neutral students are impartial about their environment. For these students, the environment is neutral, allowing independent marking of entities considered safe or dangerous. For our study, Neutral students would likely believe that they are safe from sexual assault, for example, in certain marked situations such as supervised classrooms. Students may believe themselves to be unsafe in areas marked as dangerous, such as an area where a rape had recently been reported. While the Neutral framework allows for error of beliefs about safety and danger, it nevertheless, fosters an attitude of forming those beliefs on factual information.

METHODS

Three hypotheses were tested in this study. For all analyses, a type I error level (α) of 0.05 was used to determine statistical significance. This project used data collected from 250 students enrolled at Idaho State University in social work and sociology courses, spring semester 2007. Participants voluntarily agreed to complete a seven page pre-test survey that measured student fear

in various situations using the Rape Aftermath Symptom Test (RAST), the Simpson cognitive framework (personality type), Risk Perception, and demographic information. Following a 7-page pretest, students received a brief presentation of factual information regarding the forcible rape rate per 100,000, for Pocatello and Boise, Idaho, Ogden and Salt Lake City, Utah. Immediately following the presentation, students completed a post-test survey to measure changes in dependent variables.

RESULTS

Of the 250 participants, 12 students had incomplete data so were eliminated from the study. Of the remaining 238 participants, 150 (63%) were female and 88 (37%) were male. Participants were predominantly white (75%), with a mean age of 25 years. Tests for normality of the RAST and Risk Perception scores indicated non-normal distributions of data.

Hypothesis Testing

Hypothesis one states that male and female students have significant differences on RAST scores, Simpson cognitive frameworks and Risk Perception scores (see Table 1). Results of Wilcoxon Signed Ranks Test (with Bonferroni Correction) indicated significant differences between male and female RAST scores pretest to posttest ($z = 0.9212, p < 0.001$). Additionally, results of Mann-Whitney U indicated significant gender differences pretest ($p < 0.001$) and posttest as well ($p < 0.001$). Of note, however, results indicated a significant difference in female RAST scores pre/post-test ($z = -9.31, p < .0001$), but not significant difference in male RAST scores pre/post-test ($z = -0.74, p = 0.456$).

Additionally, results of chi-square analysis indicated no significant gender differences in pre-test Simpson cognitive frameworks. However post-test scores were significantly different ($X^2 = 7.85, p = 0.02$).

Finally, results of Risk Perception scores (see Table 2) indicated differences in pretest and posttest scores by gender. Females' pre/posttest scores were double that of male students. Additionally, both male and female self-reports of their risk of sexual assault increased from pretest to posttest. Results of Mann-Whitney U indicated that both pretest ($z = -9.46, p < .0001$) and posttest scores ($z = -9.86, p < 0.0001$) were significantly different between male and female students.

Hypothesis two states that factual information regarding risk of sexual assault significantly influences Simpson cognitive frameworks (i.e. Cautious, Confident, and Neutral). Results of Chi-Square indicated significant shifts for both males ($X^2 = 117.08, df = 4, p < 0.0001$) and females ($X^2 = 125.13, df = 4, p < 0.0001$) in their cognitive frameworks after receiving factual information about rates of sexual assault in Pocatello. As listed in Table 3, there was also a marked change in Simpson cognitive frameworks with female students becoming much more Cautious and less Neutral and males becoming less Confident.

Hypothesis three predicts factual information regarding risk of sexual assault significantly influences student Risk Perception. Students estimated their risk of being sexually assaulted with 1 = Very low risk to 5 = Very High Risk. As a group, Risk Perception increased from a pre-test mean of 1.99 (slight concern) to a post-test mean of 2.65 (moderate concern). Results of Wilcoxon Signed Ranks Test ($z = -9.07, p < .0001$), suggest that receiving factual information about sexual assault rates in Pocatello significantly increased students' estimate of risk for being sexually assaulted. Independently (see table 2), Risk Perception increased slightly, yet significantly for male students from 1.22 to 1.54 ($z = -3.40, p < .001$) and also increased significantly ($z = -8.59, p < .0001$) for female students as well, from 2.44, elevated from slight concern, to 3.32 a score that indicates a perception of moderate to high risk.

DISCUSSION

Accurate assessment of safety or danger is an important skill in light of recent and continuing threats to students' safety. This study demonstrated that students' beliefs about their safety do not necessarily match the FBI and Cleary Crime Report statistics of their environment. Students, females in particular, responded to receiving statistical crime data about their environment by an increase in fear (RAST scores), changes in their Risk Perception and shifts in their Simpson cognitive frameworks. Further research is needed to measure if these changes persist over time and what actions students take as a result of statistical crime data.

LITERATURE CITED

- Bettancourt, B.A., and Miller, N. 1996. Gender differences in aggression as a function of provocation: A meta-analysis. *Psychological Bulletin*, 119: 422-447.
- Federal Bureau of Investigation. Uniform Crime Report 2005. Retrieved 19 June, 2007 from http://www.fbi.gov/ucr/05cius/data/table_08_id.html.
- Ferraro, K. and LaGrange, R. 1987. The measurement of fear of crime. *Sociological Inquiry*, 57: 70-101
- Gordon, M. and Riger, S. 1989. *The female fear*. New York: Free Press.
- Haghihi, B. and Sorenson, J. 1996. America's fear of crime. In T. J. Flanagan and D.R. Longmire (Eds.) *Americans view of crime and justice: A national public opinion survey* (pp. 16-30). Thousands Oaks: Sage Publications.
- Harris, M.B., and Miller, K.C. 2000. Gender and perceptions of danger. *Sex Roles*, 43: 843-864.
- Simpson, R. (1996). Neither clear nor present: The social construction of safety and danger. *Sociological Forum*, 11: 549-562.
- Thompson, C.Y., Bankston, W.B., and LaPierre, R.L. 1992. Parity and disparity among three measures of fear of crime: A research note. *Deviant Behavior: An Interdisciplinary Journal*, 13: 373-389.
- Vitelli, R., and Endler, N.S. 1993. Psychological determinants of fear of crime: A comparison of general and situational prediction models. *Personality and Individual Differences*, 14: 77-85
- Warr, M. 1984. Fear of victimization: Why are women and the elderly more afraid? *Social Science Quarterly*, 65: 681-702.
- Zerubavel, E. (1991). *The fine line: Making distinctions in everyday life*. New York: The Free Press.

	Male pretest RAST	Female pretest RAST	RAST male posttest	RAST female posttest
Valid N	92	152	88	150
Mean	10.2391	22.1382	11.3409	35.1267
Median	6.0000	20.5000	5.0000	34.0000
Mode	.00	8.00	.00	.00
Std. Deviation	13.76839	14.14075	16.15221	20.59755

Table 1: RAST Scores by Gender

	Risks of sexual assault male pretest	Risks of sexual assault female pretest	Risks of sexual assault male posttest	Risks of sexual assault female posttest
Valid N	92	152	85	146
Mean	1.2174	2.4408	1.5412	3.3151
Median	1.0000	2.0000	1.0000	3.0000
Mode	1.00	2.00(a)	1.00	3.00
Std. Deviation	.58977	1.00814	1.00656	1.06838

Table 2: Risk of Sexual Assault Pre/Post by Gender

	Male Pretest %	Male Posttest %	% Change	Female Pretest %	Female Posttest %	% Change
Cautious	20.0	22.8	+14.0	25.2	40.8	+ 61.9
Confident	8.9	6.3	- 29.2	6.6	6.8	+ 3.0
Neutral	71.1	70.9	- 0.28	68.2	52.4	- 23.1

Table 3: Shifts in Simpson Cognitive Frameworks

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