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## Locus of Control, Knowledge of Ethics, and Perceived Ethicality as Influenced by an Authority Figure

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Locus of Control, Knowledge of  
Ethics, and Perceived Ethicality  
as Influenced by  
an Authority Figure

Overall,  
a good job - !

Bob,!  
- you need work on  
writing alla' APA  
style → (see comments within)

-  
However,  
- it sounds like you had some  
fun writing this up -  
- I'm glad you did -

Fabian M. Mihelic  
William G. Connolly  
Psychology 399  
Dr. Kathy Carlson  
May 3, 1978

In the beginning God created...  
and man made little witty  
papers like this one, and  
so we begin our task...

Thanks to Dr. Kathy Carlson and Dr. John Edwards,  
both of Loyola University of Chicago, for techni-  
cal advice. Also, a special thanks to typist  
Judy Anderson.

## Abstract

The present study investigated the relationship between a subject's locus of control, knowledge of psychological ethical research principles, and perceived ethicality of a psychological research proposal as influenced by an authority figure. Subjects were asked to judge the ethicality of a research proposal, which half were led to believe had been previously deemed unethical by an authority figure. No mention was made of the authority figure's viewpoint to the other subjects. [The major finding was that the variability in ratings of ethicality of the research proposal tended to diminish from the no mention to the rejection manipulation in those of all levels of knowledge of ethics and in those of relatively external locus of control, while those of relatively internal locus of control showed virtually no change in the variability of their ratings of ethicality between the no mention and rejection categories.] Some suggestions were made for future research in this area.

*This sentence needs to be cut-down. Hard to follow - otherwise, a good abstract*

Locus of Control, Knowledge of  
Ethics, and Perceived Ethicality as Influenced by  
an Authority Figure

In Stanley Milgram's dramatic research of 1963,<sup>1</sup> it was found that many people blindly obeyed an authority figure when instructed to give harmful electric shock to others. This research team became interested in the reasons for such obedience to an authority figure, and relevance to such obedience of subjects locus of control and his knowledge of ethical principles.

Chosen as subjects for the research were a group of students from Loyola University in a psychological research methods class. These students had recently studied the ethics of psychological research and had been exposed to the American Psychological Association's "Ethical principles in the conduct of research with human participants".<sup>2</sup> Their knowledge of these American Psychological Association guidelines was used to measure their knowledge of ethics in the field of psychological research. Another factor possibly involved in the effect of an authority figure's ethical judgement would be a subject's locus of control, or whether he perceived himself as having more control over his own destiny, or having outside influences having more control over his own destiny.

Being investigated were the subjects' subjective (1-10) ratings of the ethicality of a somewhat dubious psychological

needs  
more  
expression  
(1) factors  
of obedience  
compliance  
(2) how  
Milgram's  
research  
relates to  
ethical  
principles

*(Should start sentences differently - e.g. "The subjects for the present research...")*

*Why  
subject  
resisted  
from the  
past?*

research proposal, as influenced by the knowledge of an authority figure's supposed previous rejection, as opposed to no mention of an authority figure's judgement of the ethicality of the research proposal. It was postulated that a subject's knowledge of ethics and locus of control would also be factors in determining that subject's subjective ratings of the ethicality of that research proposal. The researchers believed that those relatively low in their knowledge of ethics would be more affected (i.e. would rate the proposed research lower subjectively in ethicality) by the authority figure's rejection of the research proposal, because they would have relatively less knowledge (of psychological research ethics) to base their decision on and therefore would be more apt to accept another's decision who was assumed to know more and be more experienced in the subject of psychological research ethics. Consequently a subject high in his knowledge of the principles concerning ethical research with human participants would be swayed less by knowledge of an authority figure's judgements since he would have more knowledge to base his own decision on.

It was believed that those relatively<sup>3</sup> external in their locus of control, because they are more influenced by sources outside of themselves, they would be more easily swayed in their subjective ratings of the ethicality of the research proposal. Consequently those relatively internal in their locus of control would be swayed less by the knowledge of an authority figure's judgement of the ethicality of the research

*stylistically;  
your  
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improvement  
more  
rationale  
for present  
research  
is  
needed.*

proposal.

*above* (Because an authority figure would have more influence on those relatively external in their locus of control and those relatively low in their knowledge of ethics in psychological research.) It was postulated that when these two groups were informed of an authority figure's rejection of a research proposal, there would be less within group variability in their subsequent subjective ratings of the ethicality of that research proposal, since their scores would be "focused" by what the authority figure said. When no mention was made of the authority figure's judgement greater variance in the subjective ratings of ethicality were expected within the groups of relatively external locus of control. Because those relatively internal in their locus of control and relatively high in their knowledge of psychological research ethics were postulated to be less affected by the knowledge of an authority figure's judgement of the ethicality of a research proposal, their subjective ratings of the ethicality of a research proposal would retain the same level of within group variability whether or not they were informed of the authority figure's judgement.

Method

Subjects

Chosen as subjects for this research were college undergraduates enrolled in a psychological research class. All subjects had been previously exposed to the American Psychological Association's "Ethical Principles in the Conduct of



Research with Human Participants". Included in this sample of forty<sup>4</sup> were twenty males and twenty females.

### Materials

Two handouts were distributed to the subjects. The first handout began with a cover sheet which asked the subject to read the following research proposal and then to subjectively evaluate the ethicality of the proposed research. Subjects were led to believe by the cover sheet that this data would be used in the review of this research by the ethics review board of another university. Half of the subjects were given cover sheets indicating that the following research proposal had previously been submitted to the ethics review board for approval and had been rejected by that board. In the cover sheets of the other twenty subjects no mention was made as to any previous decisions by the above board. (See appendix) Following the cover sheet was a research proposal which was to be evaluated by the subjects, It involved stress induced in human participants by a mild electrical shock (See appendix). Following the research proposal the subjects were asked to subjectively rate it on a one (very unethical) to ten (very ethical) scale. Also, subjects were asked if they were to agree (yes or no) to conduct this research. (See appendix) Next included was a self report locus of control evaluation (short version -- See appendix). The final page of the first handout asked the subjects to list the "Ethical Principles in the Conduct of Research with Human Participants", prescribed by the American Psychological Association, in essay

form (See appendix).

The second handout was an objective evaluation of the subject's knowledge of the ethical principles prescribed by the American Psychological Association, which included ten multiple choice and ten true and false questions (See appendix).

Procedure

This non-reactive research was conducted during regular class time. The instructor<sup>6</sup> informed the students that they were being asked to help the psychological research ethics review board of another institution<sup>7</sup> to evaluate the research proposal contained in the first handout. The handouts were distributed without any of the subjects being informed of the conditions or true purpose of their evaluations. After all subjects had completed the first handout they were given the second handout to complete.

*It's not really non-reactive*

Results and Discussion

Knowledge of the ten ethical principles put forth by the American Psychological Association concerning psychological research with human participants was determined in two ways. The first method was to subjectively rate the essay's of the subjects concerning their knowledge of the above principles, each principle which the subject correctly expressed received a value of two points, thus making the total possible score twenty. (Partial credit was given for partially correct answers.) The essays were scored by two judges and their judgements of individual essays showed a high degree of correlation. Scores on this subjective knowledge of ethics

*Might break this section into sub groups*

*1. g. Knowledge of Ethics  
2. Personal ethics  
etc.*

ranged from 1-10 with a  $\bar{x}$  of 5.59. The second method used to determine the subject's knowledge of ethics (of psychological research with human participants) was to give each subject one point for each correct response on the objective multiple choice, true-false questionnaire. Scores on this objective rating ranged from 8-18 with a  $\bar{x}$  of 14.17. A high correlation was found between objective scores and doubled subjective scores. ( $r_s = .8813$ ,  $p \leq .01$ ). Because of this high correlation the researchers chose to use the subjective analysis in any further statistical manipulation.

On the locus of control questionnaire scores ranged from 15-43 with a  $\bar{x}$  of 27.45.

On the subjective rating (1-10) of the ethicality of the proposed research ratings ranged from 1-8 with a  $\bar{x}$  of 4.32. Those subjects to which no mention was made of any judgements of the proposed research by the authority figure scored the research as having an average subjective rating of ethicality of  $\bar{x} = 4.55$ , while those who were informed of the previous rejection of the research proposal by the authority figure gave the research an average subjective rating of ethicality of  $\bar{x} = 4.05$ . The variance of those subjective ratings of ethicality in the no mention category was  $s^2 = 4.99$ , while the variance between the subjective ratings of ethicality of those in the rejection manipulation was  $s^2 = 3.63$ . These variances are not significant at  $N = 40$ ,  $k = 2$ ,  $p \leq .05$ . The above means show a slight overall effect of the independent variable on the subjective ratings of ethicality, in that, those in the group

rejection  
group  
(Fmax)

that were told that an authority figure had previously rejected the proposed research tended to rate the research proposal slightly lower in ethicality than did those in the no mention manipulation.

ANOVA should have been done - F values reported -

Those subjects in the no mention manipulation who had a relatively high knowledge of ethics gave an average subjective rating of ethicality of  $\bar{x}=4.4$  with variability in these scores equal  $s^2=6.58$ . Those in the rejection manipulation who had a relatively high knowledge of ethics gave an average rating of ethicality of  $\bar{x}=4.82$  with variability equal to  $s^2=2.96$ . Those in the no mention manipulation who had a relatively low knowledge of ethics gave an average rating of ethicality of  $\bar{x}=4.70$  with variability equal to  $s^2=4.23$ . Lastly, those in the rejection manipulation with relatively low knowledge of ethics gave an average rating of ethicality of  $\bar{x}=3.11$  with variability equal to  $s^2=3.11$ . While these variances in the subjective ratings of ethicality are not significant at  $N=40$ ,  $k=4$ , and  $p \leq .05$ , by a  $F_{max}$  test these variances show a definite trend toward "focus" by the rejection manipulation. In other words, when mention of an authority figure's rejection was made the ratings of ethicality of both the high knowledge and low knowledge groups tended to show less variability than when no mention was made of the authority figure's judgement. This tends to indicate that a subject's knowledge of ethics is not a major factor in determining whether or not that subject will be swayed in his thinking by what an authority figure says. Thus this data does not support

!!!  
table of data -  
as figures -  
would have  
really helped !!!

one of the hypothesis put forth by the researchers.

Those in the no mention manipulation who had a relatively internal (low) locus of control gave an average rating of ethicality to the research proposal of  $\bar{x}=4.4$  with a variability of  $s^2=6.04$ , while those in the rejection manipulation with a relatively internal locus of control gave the research proposal an average rating of ethicality of  $\bar{x}=4.18$  with a variability of  $s^2=6.16$ . Subjects in the no mention manipulation who had a relatively external (high) locus of control gave an average rating of ethicality of  $\bar{x}=4.70$  with variability equal to  $s^2=4.44$ , while those in the rejection manipulation with a relatively external locus of control gave an average rating of ethicality of  $\bar{x}=3.89$  with a variability in their scores of  $s^2=0.86$ . These variabilities are significant at  $N=40$ ,  $k=4$ , and  $p \leq .05$  by an  $F_{max}$  test. ~~This~~ <sup>These (phases)</sup> data supports the research hypothesis that there would be no change in the variability of those relatively internal but that those relatively external would tend to accept the judgements of the authority figure and thus be more "focused" in their ratings.

Also of interest is the fact that those relatively high in their knowledge of ethics and those relatively internal tended to give roughly the same mean subjective rating of the ethicality of the research proposal, while those in the relatively low knowledge and relatively external locus of control showed a drop in their mean ratings of ethicality when going from the no mention to the rejection manipulation. This indicates that the average scores of those in the relatively

low knowledge of ethics and relatively external in their locus of control were more easily influenced by knowledge of an authority figure's judgement than were the means of those relatively high in knowledge of ethics and relatively internal in locus of control. These trends tend to support the research hypothesis.

No significant correlation was found between knowledge of ethics and locus of control,  $r=0,084$ . Of those subjects who said that they would help conduct the research 9 were male and 4 were female, 7 were in the no mention and 6 were in the rejection category and the average subjective rating of the ethicality of the research proposal of those agreeing to help conduct the research was  $x=3,44$ .

Suggestions for future research should be along the lines of larger and more representative sample sizes. Another suggestion concerns an acceptance manipulation included in the rejection and no mention manipulations. (Also, knowledge of ethics could be broadened to include knowledge of the Ten Commandments. ) OK? → Preferably, - can they recite the Big 10 in water?

*you really think it?* [ In conclusion, this research team has determined that the results may be generalized to a further understanding of a person's ethical behavior. It seems that it is not so much what a person knows about the acceptable ethical standards of his day which determines the strength of his cognitions, but it is something deeper within him. - The Holy Spirit??

### Footnotes

<sup>1</sup> Stanley Milgram, Behavioral study of obedience, Journal of Abnormal and Social Psychology, 1963, 67, pp. 371-378.

<sup>2</sup> American Psychological Association, "Ethical Principles in the Conduct of Research with Human Participants", 1973.

<sup>3</sup> The term "relative" in this paper is used in the context of "relative to the mean".

<sup>4</sup> One subject's data deleted due to incomplete data.

<sup>5</sup> This research proposal taken, with permission, from John Edwards, Ph.D. of Loyola University of Chicago, as used in "Factors Affecting the Judged Value and Ethicality of Psychological Research", a paper presented at the eighty-fifth annual convention of the American Psychological Association, San Francisco, August, 1977, by John Edwards and Mark Greenwald of Loyola University of Chicago.

<sup>6</sup> Kathy Carlson, Ph.D. and amateur thespian, Loyola University of Chicago.

<sup>7</sup> The fictitious Committee for the Advisability of Research Ethics (CARE) was used as the authority figure in this study.

## Bibliography

American Psychological Association, "Ethical Principles in the Conduct of Research with Human Participants", 1973.

Capra, Fritzof, The Tao of Physics, New York: Bantam Books, 1975.

Chilton's Repair and Tune-up Guide for the Honda Twins, managing editor, John D. Kelly, Philadelphia: Chilton Book Company, 1972,

John Edwards and Mark Greenwald, "Factors Affecting the Judged Value and Ethicality of Psychological Research". A paper presented at the eighty-fifth annual convention of the American Psychological Association, San Francisco, August, 1977.

Milgram, Stanley, Behavioral study of obedience, Journal of Abnomal and Social Psychology, 1963, 67, pp. 371-378.

Pursig, Robert M., Zen and the Art of Motorcycle Maintainance, New York: Bantam Books, 1976.

Richie and Phares, Attitude change as a function of internal/external control and communication status, Journal of Personality, (1969) 37, pp. 429-443.

Wrightsman, Lawrence S., Social Psychology Second Edition, Belmont, California: Wadsworth Publishing Company, Inc., 1977.





CARE is interested in the consensual opinion of psychological research professionals concerning the ethicality of the following research proposal, for use in the decision as to whether the committee should grant its approval to this research. The following page contains a brief description of the research proposal, including its purpose and methods used. After reading the description you will be asked for your subjective evaluation of the ethicality of the proposed research. In addition, we ask that you fill out some other questionnaires dealing with your psychological background, and your background as a researcher. Your assistance in this survey is greatly appreciated.

Please return the completed evaluation to the CARE office before April 10. Thank you.

FMM/wgc

CARE is interested in the consensual opinion of psychological research professionals concerning the ethicality of the following research proposal, for use in the decision as to whether the committee should grant its approval to this research. This research proposal has previously been submitted once for approval and was rejected by the committee. It is now undergoing the committee's appeal process. The following page contains a brief description of the research proposal, including its purpose and methods used. After reading the description you will be asked for your subjective evaluation of the ethicality of the proposed research. In addition, we ask that you fill out some other questionnaires dealing with your psychological background, and your background as a researcher. Your assistance in this survey is greatly appreciated.

Please return the completed evaluation to the CARE office before April 10. Thank you.

WGC/fmm

## Experiment: Group Identification and Stress Tolerance

Purpose. For many years there had been some debate about differences between various ethnic and religious groups in their ability to withstand pain and suffering. One group of researchers believed that identification with a group will lead a person to defend the group when its reputation is being questioned - even at the cost of personal discomfort. These researchers predicted that a person would withstand more stress on behalf of a group with which he or she strongly identified than for a group with which they were not strongly identified. The following procedures were used to test this prediction.

Method. In the first phase of the study, the research participants indicated how strongly they identified with a number of groups to which they belonged such as their nationality, religion, age, and so on. Identification was measured in terms of how strongly committed they felt to the group, and how important it was for them to belong to it. On the basis of these ratings, the participants were divided into two groups - those who strongly identified with this label. All of the participants were Americans, but some identified with their nationality more than others.

In the second phase of the study, tolerance for stress was measured on two separate trials. Between the first and second trial the experimenter casually remarked to the research participant that the research so far was indicating that Americans could tolerate less discomfort than other national groups such as Russian. (It should be noted that in other conditions of the study using other research participants, a variety of other group labels were used such as religion, sex, age, and so on.) In these conditions comparisons were made between people who felt either a high or low degree of identity with the group label. The "American" condition is used here as an illustration of one of several group labels employed in the experiment.) Again, it was predicted that people who strongly identified with the group label (e.g., "American") would show more tolerance for stress on the second trial than people who were not strongly identified.

The type of stress used in this experiment was very mild and harmless electrical stimulation. The measure of discomfort tolerance was the number of such stimulations the person was willing to receive on the first and second trials. Observations during the experiment and interviews after the experiment revealed that the intensity of the stimulation was not particularly unpleasant. However, it was assumed that the greater the number of stimulations a person was willing to receive on the second trial in comparison to the first one, the more stress tolerance the person was showing on behalf of the group.

1) How ethical do you consider the above research proposal?

very unethical										very ethical
1	2	3	4	5	6	7	8	9	10	

2) Would you agree to helping conduct this research?

yes

no

STATEMENTS	1	2	3	4	5
	strongly disagree				strongly agree
1. There is some good in everybody.	1	2	3	4	5
2. It is impossible for me to believe that chance or luck plays an important role in my life.	1	2	3	4	5
3. Without the right breaks, one can not become an effective leader.	1	2	3	4	5
4. Children get into trouble because their parents punish them too much.	1	2	3	4	5
5. When I make plans, I am almost certain that I can make them work.	1	2	3	4	5
6. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.	1	2	3	4	5
7. There is a direct connection between how hard I study and the grades I get.	1	2	3	4	5
8. Team sports are an excellent way to build character.	1	2	3	4	5
9. Who gets to be the boss often depends on who was lucky enough to be in the right place first.	1	2	3	4	5
10. Most people don't realize the extent to which their lives are controlled by accidental happenings.	1	2	3	4	5
11. Capable people who fail to become leaders have not taken advantage of their opportunities.	1	2	3	4	5
12. One should always be willing to admit mistakes.	1	2	3	4	5
13. It is hard to know whether or not a person really likes you.	1	2	3	4	5
14. Heredity plays the major role in determining one's personality.	1	2	3	4	5
15. Many times I feel that I have little influence over the things that happen to me.	1	2	3	4	5
16. By taking an active part in political and social affairs, the people can control world events.	1	2	3	4	5

What are the "Ethical Principles in the Conduct of Research with Human Participants" prescribed by the American Psychological Association? (Please write your answer, preferably in essay form, in the space below. If necessary use the back of this page.)

1. To the extent that the researchers appraisal of his research suggests any deviation from Ethical Principle, the investigator should:
  - a) discontinue the research
  - b) seek ethical advise
  - c) observe more stringent safeguards to protect the rights of participants
  - d) continue to research with careful attention to debriefing
  - e) B & C
  - f) C & D
  
2. Which of the following are not responsible for the establishment and maintenance of acceptable ethical practice when conducting research?
  - a) collaborators
  - b) assistants
  - c) researcher
  - d) none of the above
  
3. Ethical practice requires the investigator to:
  - a) inform the participant of all features of the research that reasonably might be expected to influence willingness to participate.
  - b) explain all aspects of the research before the participants involvement.
  - c) explain all aspects of the research about which the participants inquire.
  - d) A & C
  - e) B & C
  
4. When using concealment the investigator is not responsible for:
  - a) insuring the participant's understanding of the reasons for this action beforehand.
  - b) insuring the participant's understanding of the reasons for this action afterwards.
  - c) restoring the quality of the participant's relationship with the investigator.
  - d) A & C
  
5. Which of the following statements is (are) true?
  - a) Ethical practice requires the investigator to respect the individual's freedom to decline to participate in research or to discontinue at any time.
  - b) The decision to limit the participant's freedom to decline to participate, increase the investigator's responsibility to protect the participant's dignity.
  - c) Participants often have no freedom to decline unless told so by the investigator.
  - d) A & B
  - e) B & C



6. Ethicality acceptable research begins with:
  - a) The establishment of a clear and fair agreement between the investigator and the research participant.
  - b) A classification of the responsibilities of both the investigator and the research participant.
  - c) The participant being assured that no deception will be employed in the research procedure.
  - d) A & B
  - e) All of the above
  
7. The ethical investigator protects participants from:
  - a) physical discomfort
  - b) mental discomfort
  - c) danger
  - d) A & C
  - e) All of the above
  
8. After the data are collected, ethical practice requires the investigator to:
  - a) provide the participants with a full clarification of the nature of the study.
  - b) remove any misconceptions that may have arisen.
  - c) Both of the above
  - d) None of the above
  
9. Where research procedures may result in undesirable consequences for the participant, the investigator had the responsibility to:
  - a) screen out those subjects with a predisposition towards such consequences beforehand.
  - b) detect and remove or correct these consequences.
  - c) Both of the above
  - d) None of the above
  
10. When the possibility exists that others may obtain access to information obtained about the research participants during the course of an investigation, ethical research practice requires that:
  - a) this possibility be explained to the participants.
  - b) plans for protecting confidentiality be explained to the participant.
  - c) informed consent of the participant be obtained.
  - d) A & C
  - e) All of the above
  
11. In planning a study, the investigator is responsible for submitting his research proposal to his institutions ethics review procedure for evaluation of ethical acceptability.
  - a) True
  - b) False

12. Once the procedure of the research is underway the investigator's ethical concerns pass fully to those assistants conducting the research.

- a) True
- b) False

13. Failure to make a full disclosure of all aspects of the research project gives added emphasis to the investigator's responsibility to protect the welfare and dignity of the research participant.

- a) True
- b) False

14. Openness and honesty are not essential characteristics between investigator and research participants.

- a) True
- b) False

15. The participant had no liberties once he has been fully informed and had agreed to participate in a research project.

- a) True
- b) False

16. The ethical investigator had the obligation to honor all promises and commitments included in the agreement made between the investigator and the research participants at the start of the procedure.

- a) True
- b) False

17. A research procedure may not be used if it is likely to cause serious and lasting harm to participants.

- a) True
- b) False

18. Sometimes the investigator is justified in delaying or withholding information. He then acquires a special responsibility to assume that there are no damaging consequences for the participant.

- a) True
- b) False

19. The researcher never had any responsibility for the subject after the subject is through participating.

- a) True
- b) False

20. Confidentiality of information obtained about the research participants may be breached only after approved by the researcher's ethics review procedure.

- a) True
- b) False.