This is to certify that the

thesis entitled

The Effects of Discrepancy, Disconfirmation, and
Cognitive Elaboration on Attitude Change

presented by

Chien-Ping Faith Lai

has been accepted towards fulfillment
of the requirements for

Master degree in Sociology

Major professor

Date 5/3/91

PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.

DATE DUE	DATE DUE	DATE DUE
SEP 3 1 4 2		
FEB 8 2		

MSU Is An Affirmative Action/Equal Opportunity Institution

THE EFFECTS OF DISCREPANCY, DISCONFIRMATION, AND COGNITIVE

ELABORATION ON ATTITUDE CHANGE

By

Chien-Ping Faith Lai

A THESIS

Submitted to

Michigan State University

in partial fulfillment of the requirements

for the degree of

MASTER OF ARTS

Department of Sociology

1991

ABSTRACT
THE EFFECTS OF DISCREPANCY, DISCONFIRMATION, AND COGNITIVE ELABORATION ON ATTITUDE CHANGE

By

Chien-Ping Faith Lai

The effects of discrepancy and disconfirmation on attitude change are reviewed. The role of cognitive elaboration is discussed that source focus which is one kind of cognitive elaboration should induce the effects of disconfirmation on comparative elaboration and issue focus which is the other kind of cognitive elaboration would lead to the effect of comparative evaluation on final position.

The results support the two process - two opinion model that discrepancy has a strong direct effect on final position, whereas disconfirmation has a direct effect on comparative evaluation. It is concluded that the more subjects think about the source and engage in the issue, the greater are the effects of disconfirmation on comparative evaluation and comparative evaluation on final position, respectively. Also, some problems of this experiment are discussed.

To my parents

Acknowledgements

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

Theoretical Review

Festinger and Aronson (1960) suggested that greater the discrepancy between the recipient own opinion and the opinion advocated by the communicator, the greater the dissonance, and hence the greater the opinion change. Based on cognitive dissonance theory, which was proposed by Leon Festinger in 1957, a person experiences dissonance when s/he finds the communicator's opinion is discrepant from what s/he has in mind. But, how do people get rid of or reduce the dissonance?

Aronson, Turner, and Carlsmith (1963) suggested two modes: the recipient may reduce dissonance by changing his/her own opinion or by derogating the communicator. Their experiment tried to find out: Under what conditions, will one change one's opinion and/or derogate the communicator when an individual is exposed at various discrepant circumstances? The key point is the communicator's credibility. Aronson et al. (1963) assumed that (1) when the communicator is highly credible, the larger the degree of opinion change advocated, the greater the dissonance, and the greater the opinion change. (2) As the communicator is presented as mildly credible, derogation will replace

opinion change as a method to reduce dissonance.
Accordingly, there would be little or no opinion change.

Their results showed that there is a significant
relationship between communication discrepancy and opinion
change. Under the condition of the highly credible
communicator, the greater the discrepancy between the
communicator's opinion and the opinion of the recipient, the
greater opinion change. That is, opinion change increases
with degree of discrepancy in the high credibility level.
However, in the mildly credible condition, it produces
greater opinion change with increasing discrepancy only up
to a point.

The experiment designed by Bochner and Insko (1966)
extended the results of Aronson et al. (1963). It measured
three dependent variables: opinion regarding sleep,
disparagement of the communication, and disparagement of the
source. It manipulated three independent variables:
discrepancy (nine levels of hours of sleep advocated),
source credibility (high or medium), and order of dependent-
variable measurement (opinion-disparagement or
disparagement-opinion).

The findings confirmed, in one hand, the study of
Aronson et al. (1963) that there was significant
curvilinearity between opinion change and discrepancy for
the medium credibility source. The expectation that the high
credibility source would show a curvilinear trend, however,

was not supported by the data. In the high credibility condition, opinion change was found to be linearly related to discrepancy between the communicator and recipients. Also, the data showed that the medium and high credibility sources do not differ in opinion change at the moderate discrepancy levels since theoretically the high credibility source should have been equal to or superior to the medium credibility source.

Therefore, if the source is highly credible, the relationship between discrepancy and opinion change reveals linearity. If the source is moderately credible, the relationship tends to be curvilinear. The above studies treated the communicator's (source) credibility as the important factor to affect recipients' attitude change when they experience discrepancy. But, what if recipients found that what they expected from the source disconfirm the source's actual position?

Eagly, Wood, and Chaiken (1978) studied the effect of disconfirmation on attitude change. They suggested that recipients would be influenced by two types of communicator biases during the process of message persuasiveness: knowledge bias and reporting bias. Knowledge bias refers to a recipient's belief that a communicator's knowledge about external reality is not truthful because of personal attributes. Reporting bias refers to the belief that a communicator's willingness to bring an accurate message of

external reality is compromised since s/he suffers situational pressures.

The results indicated that the communicator gained in perceived sincerity by taking the expected position in the knowledge-bias conditions since the source's disposition corresponded to his behavior. In contrast, in the reporting-bias conditions, the communicator was regarded as insincere when he advocated a position that confirmed subjects' expectancies. However, the source was judged more biased when he confirmed rather than disconfirmed expectations. No matter whether the source disconfirmed a knowledge-bias or reporting-bias expectancy (or both), he was significantly more persuasive than when expectancies were disconfirmed.

Wood and Eagly (1981) also studied persuasive messages through attribution analysis. They manipulated subjects' initial position, expectancy confirmation, and discrepancy of the source advocated position as three independent variables. As for dependent variables, they measured causal attributions, communicator bias, message comprehension, and opinion change.

The findings of this study asserted that both perceived communicator bias and message comprehension were determinants of opinion change. When the communicator's position disconfirmed subjects' expectancies based on the communicator's background, he was perceived as unbiased and more persuasive since recipients believed that he was

influenced by factual evidence. This result confirms the earlier study of Eagly et al. (1978) that message disconfirmation leads to greater opinion change.

From the above studies, it is obvious that two factors influencing opinion change are message discrepancy and message disconfirmation. Studies have defined message discrepancy as the difference between the position advocated by the source and the initial position of the recipient. Message disconfirmation has been defined by Kaplowitz and Fink (1990) as the difference between the position advocated by the source and the position which the recipient expected from the source.[1]

The effects of discrepancy and disconfirmation on opinion change seem, however, to have been confounded by many studies. Do both of them have distinct effects on opinion change from each other? Kaplowitz et al.'s (1990) study has further clarified the relationship between discrepancy and disconfirmation.

First of all, they specify that discrepancy studies typically use positional measures, but disconfirmation studies do not. Also, results of Wood and Eagly (1981) and Nemecek (1985)'s findings, suggested that discrepancy and

---

[1]Discrepancy and disconfirmation have been defined as follows: $Dp = P_A - P_0$
$Df = P_A - P_E$
where Dp is discrepancy; Df is disconfirmation; P_A is the position advocated by the source; P_0 is the recipient's initial position, and P_E is the position expected from the source.

disconfirmation affect different aspects of the receiver's opinion regarding the attitude object, via different processes.

Thus, they tested a model, the two process - two opinion model (see Figure 1), which assumes that discrepancy directly affects the receiver's final position and disconfirmation directly affect the receiver's comparative evaluation of the current issue relative to others in some class. Kaplowitz et al. (1990) created the questionnaire booklet which described the sentence guideline for armed robbery, Judge Walter's background and his past judicial experience, the case of Convict X, and, then, asked subjects' opinions about criminal issues.

The results of the two experiments successfully disentangle the effects of discrepancy and disconfirmation on attitude change and support the two process-two opinion model that discrepancy has a strong direct effect on final position, whereas disconfirmation has a direct effect on comparative evaluation.

In these two process, what is the role of cognitive elaboration? Kaplowitz et al. (1990) concluded that subjects responded to varying levels of discrepancy by simply taking a weighted average of their initial position and the position advocated, without deeply engaging in cognitive elaboration. Elaboration, however, is required for the indirect effect of disconfirmation on final position.

Figure 1 -
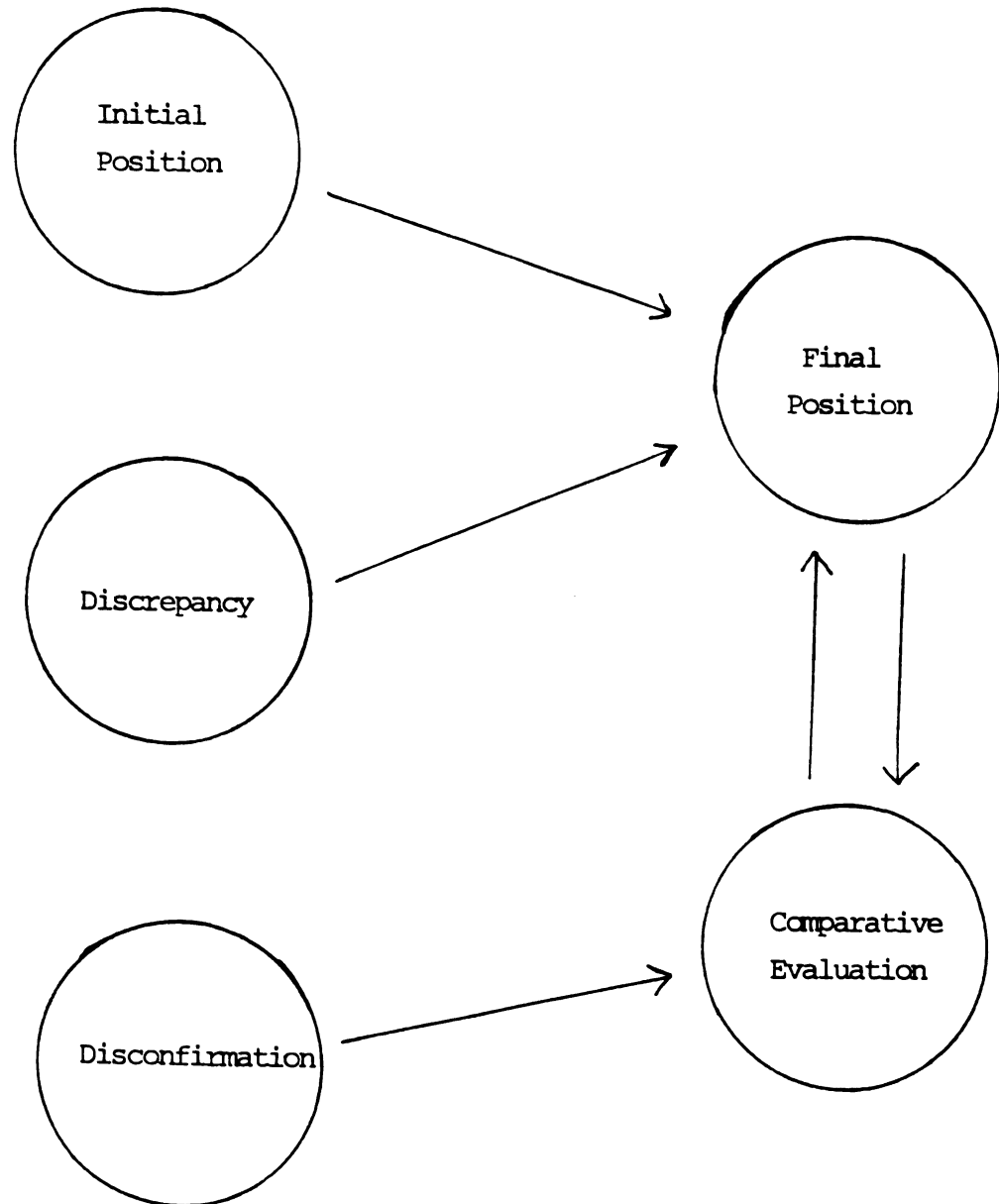
Therefore, Kaplowitz et al. (1990) suggested that the effects of disconfirmation need a greater degree of cognitive elaboration and future research should manipulate and measure elaboration levels to see the results under various conditions of cognitive elaboration.

The current study has taken the above suggestion in consideration to do further research. The amount of thinking (elaboration) is manipulated as the third independent variable in addition to discrepancy and disconfirmation.

Hypotheses

According to Kaplowitz et al.'s study (1990), the two process model implies that focus of attention can moderate the effect of disconfirmation on comparative evaluation. They suggested that the greater when subjects were asked to focus on the position expected from the source, there was the greater the effect of disconfirmation on comparative evaluation than when subjects were asked to focus on the issue. Based on this, we hypothesize –

H1) The more subjects think about the source, the greater should be the effect of disconfirmation on subjects' comparative evaluation of the current case, that is, the source focus should induce the effect of disconfirmation on comparative evaluation.

Moreover, the results of Kaplowitz et al's (1990) prior experiments showed that for comparative evaluation and position to affect each other, cognitive elaboration was required. In the first experiment, the issue focus group indicated the larger number of thoughts than the source focus group. Similarly, the second experiment showed that subjects, who had received a large amount of knowledge about the source's previous behavior, had more thoughts (see Kaplowitz et al. 1990).

These two groups, but not the others, showed significant effects of comparative evaluation on final position. Accordingly, there seem to be a larger effects of comparative evaluation on subjects' final position when recipients think more about the issue under considerations, i.e. when they cognitively elaborate on message contents. If this is the case, then, we have hypothesis 2 -

H2) The greater the amount of cognitive elaboration, on the issue, the greater will be the effect of comparative evaluation on final position.

Hypothesis 1 emphasizes source focus, which is thought to increase the effect of disconfirmation on comparative evaluation. Hypothesis 2 stresses issue focus, which is thought to enhance the effect of comparative evaluation on final position.

If (1) and/or (2) above are correct, this would lead to an indirect positive effect of disconfirmation on position.

Method

Overview

This study employed a 2 (source focus encouraged vs. not) × 2 (issue focus encouraged vs. not) × 3 (discrepancy levels: small, moderate, or extreme) × 3 (disconfirmation levels: small, moderate, or extreme) factorial design. Subjects were told that we were doing a study of public attitudes regarding the criminal justice system, and were given a questionnaire booklet to complete.

The Experimental Design

This study continued to use the questionnaire booklet similar to one designed by Kaplowitz et al. (1990), which concerned public attitudes towards the criminal justice system. The topic of criminal sentencing was chosen because it can express the message and subjects' position on a numerical scale with ratio measurement. Armed robbery was selected from 16 different crimes based on a pilot study in which the recommended years imprisonment for armed robbery had the lowest dispersion relative to its central tendency (Kaplowitz et al. 1990).

First of all, the questionnaire begins with the introduction of criminal justice system and its functions

and the purpose of this study. Subjects then are given some
information about the Michigan sentencing guideline for the
crime of armed robbery, which is ten years imprisonment.
Based on the sentencing policies, subjects give their
initial views of the appropriate sentence for the crime of
armed robbery, which is treated as the initial position
(P_0).

Next, subjects were told a story about Judge Walters,
who has served as a judge for several years. During his
years as a judge, Judge Walters had sentenced many
defendants, often relying on his own points of view, instead
of simply relying on the sentencing guidelines. Subjects
were informed that Judge Walters had imposed fifteen prison
sentences for armed robbery and were informed of the
average, the smallest, and the greatest of these sentences
in prison. After reading the above descriptions, subjects of
the source focus group (H & S forms) were asked to write
down their viewpoints about Judge Walters' degree of
severity or leniency.

Then, a particular defendant called Convict X, was
introduced to subjects. They read the statement Judge
Walters made as he sentenced Convict X. Convict X's sentence
was varied in different conditions. Then, subjects indicated
their final position regarding Convict X's proper sentence
and also answered other questions about it.

Independent Variables

There are three independent variables in this study –
message discrepancy, message disconfirmation, and cognitive
elaboration. In order to create low, moderate, and extreme
message discrepancy and message disconfirmation, we varied
the position advocated by the source (P_A) to be 10, 22.5,
and 50 years, and the position expected from the source (P_E)
was manipulated by varying the previous sentences of the
source for armed robbery. These were 2, 4.5, 10, 22.5, and
50 years, respectively. The individual subject's initial
position (P_0) should be the sentencing guideline – 10 years.
Hence, a position advocated of ten years leads to a zero
level of message discrepancy.[2] The nine (3×3) combinations,
in which discrepancy and disconfirmation are orthogonal, are
presented in Table 1.

---

[2]We used the logarithms to express three levels and
kinds of discrepancy and disconfirmation instead of the raw
numbers. According to Kaplowitz et al. (1990), the constant
ratio should be made to increase discrepancy and
disconfirmation in steps which will be equally far apart to
subjects. Thus, the logarithms is used. Since the lowest and
highest number is 10 and 50, respectively, they can be
expressed like 10, 10X, and $10X^2$.

Since, $10X^2 = 50$, $X = 2.24$
Therefore, $Dp = \log_{2.24} (P_A/P_0) = \ln (P_A/P_0) / \ln (2.24)$
Similarly, $Df = \log_{2.24} (P_A/P_E) = \ln (P_A/P_E) / \ln (2.24)$

From the above steps, three levels of discrepancy and
disconfirmation (0, 1, 2) are created.

Table 1 -

Discrepancy and Disconfirmation Levels for the Experimental Design

Discrepancy level	Disconfirmation level		
	0	1	2
0	10/10 (8, 12.5)	10/4.5 (3.6, 5.6)	10/2 (1.6, 2.5)
1	22.5/22.5 (18, 28)	22.5/50 (8, 12.5)	22.5/4.5 (3.6, 4.5)
2	50/50 (40, 62.5)	50/22.5 (18, 28)	50/10 (8, 12.5)

Note: The number of the right of each slash is the average of previous sentences (P_E) which manipulates expected position. The number of the left of each slash is the sentence for Convict X (P_A). The numbers in parentheses are the lowest and highest of previous sentences for armed robbery. The initial position (P_0) of the sentence for armed robbery is assumed to be 10 years.

The third independent variable, which is the main different feature from Kaplowitz et al.'s study (1990), is the amount and kind of thinking (cognitive elaboration) encouraged. We designed four forms to manipulate the levels of cognitive elaboration. Four forms (H, S, I, L) are distinguished from each other in terms of specific key instructions at the end of the introduction to the form. Simultaneously, two different kinds of focuses (on source vs. on issue) were encouraged within four forms. For the definitions of these forms and what the abbreviations, H, S, I, and L stand for, see Table 2.

Table 2 -

Issue Focus	Source Focus	
	Yes	No
Yes	H	I
No	S	L

Note:
H - High: Cognitive elaboration encouraged on both the
    source and the issue
S - Cognitive elaboration encouraged on the source only
I - Cognitive elaboration encouraged on the issue only
L - Low: Cognitive elaboration encouraged neither on the
    source nor on the issue

Two of the forms (H & S forms), asked subjects to think

about the source, i.e. the judge. The H & I forms asked

subjects to pay attention to the crime, the sentence, and

the reasoning behind the sentence. As for the low level of

elaboration (L form), we ask subjects to give their first

impressions without carefully thinking about other things.

The key instructions of H and L forms are stated,

respectively, as follows:

For H form -

> "The Commission is interested in the reasoned
>
> opinions of a broad spectrum of the community. It
>
> is especially interested in your thoughts about
>
> how the characteristics of the judge, as well as
>
> the crime and the reasoning behind the sentence,
>
> can affect the sentence. .... Be sure to
>
> focus primarily on the judge, the crime, the
>
> sentence, and the reasoning behind the sentence

and try not to let other things distract you. This is not a speed test."

For L form -

"Sometimes people form their opinions after a great deal of thought. At other times, they must act on relatively fast first impressions. While first impressions are sometimes different from judgments formed from extensive thought, the evidence suggests that they are sometimes more valid. We suspect that this may even be in true issues of criminal sentencing. Hence, we would like you to answer this questionnaire with your first impressions."

In the S form, the instructions put stress on the judge and ask for subjects' thoughts about "how the characteristics of the judge can affect the sentence". In the I form, we ask subjects think about "the crime, the sentence, and the reasoning behind the sentence".

In both conditions in which source focus is encouraged (S & H), subjects were also be asked their view of Judge Walters' severity, his future sentences for armed robbery, and to indicate their confidence in their own prediction. These questions, however, are omitted in the I and L forms.

Major Dependent Variables

Subjects' attitudes were measured in two ways: the subjects' final position was their view of the sentence Convict X should receive after reading Judge Walters' sentencing speech for Convict X. The comparative evaluation of Convict X, asked how bad he was. It used a magnitude scaling question (see Lodge 1981 for discussion of this technique) which rated 100 as bad as the average armed robber. The higher the numerical value, the worse is subjects' comparative evaluation of Convict X. The scale has no maximum value. We also assume that thinking about the object should be reflected in thoughts listed. Subjects were then asked to list all thoughts about the sentence of Convict X. This thought listing was also used to measure different kinds of elaboration.

In addition, we assumed that the more subjects think about the object, the more effort and time they should spend on it. We measured two different time, one is the time subjects say they spent on thinking about the case of Convict X; the other is the actual time they spent finishing the whole questionnaire.

Data Collection

Three hundred forty-eight male and female undergraduates in several communication courses at Michigan State University participated as subjects who received extra

credit for their participation. We have 36 different forms, which were randomly administered to subjects in order to get as near an equal number as possible in each form.

Before subjects started to fill out the questionnaire, we explained some of the opinion scales to assist them with the magnitude scaling questions. We set the number 100 as a moderate value and subjects were free to choose any number they like. In other words, there was no upper limit. To enhance motivation, subjects were told that their opinions would be important to judges and be reported to the US Commission on Judicial Reform. They were encouraged to answer every question as well as possible.

So that we could measure the amount of time spent on the questionnaire, subjects were asked to write down their time of starting on the cover sheet and their time of completion on the final page. For this purpose, we helped them by putting the time on the blackboard and updating it every minute.

After excluding some subjects who have previously heard or participated or did not believe in the cover story, the final valid sample is reduced from 348 to 331.

Results

Data Transformations

By examining the skewness and the distribution of the residuals of raw data in this study, we found that the

assumption of normality and homoscedasticity appeared to be violated. Therefore, we transformed the raw data to meet the assumptions. Since the distribution of residuals of the data has a tail in the positive direction, it's helpful to take logs of the dependent variables. Zero is the lowest value among the magnitude scale variables and we cannot use a log transformation without adding a constant value. Thus, we tried some different additive constants and selected the most appropriate one which had the minimal skewness.[3] The data appeared to less skewed and more homoscedastic after taking the logarithm (See Table 3 & 4).

---

[3]For the variable of EFFORT, one outlier was found and we recoded the extreme values greater than 1500 to 1500 before transforming.

Table 3 -

Skewness for Dependent Variables

Dependent Variables	Skew before Transformation	Skew after Transformation	Value of K
INIT POS	2.514	-.213	0
FIN POS	2.158	.178	0
SURPRISE	3.627	-.635	15
PSYDISC	2.302	-.772	15
UNEXPECT	2.877	-.636	15
EFFORT	6.483	.480	15
BADPRE	5.419	-.396	25
CONBAD	2.975	.571	.001
TIMSPD	1.095	-.186	1
TOTATIM	3.745	.691	1

Note: The logarithmically transformed data used the formula X^* = Ln(X+K) where X is the raw variable and X^* is the transformed. The adjusted geometric mean is found by first taking the anti-logarithm of the mean of X^*, then, subtracting the constant K. Here, the value K of each variable is listed on the last column as the above. For the abbreviations, **INIT POS** and **FIN POS** are subjects' initial and final positions, respectively. **SURPRISE** - "how surprising did you find the Judge's sentence on Convict X"; **PSYDISC** - "how different was the Judge's sentence on Convict X from the prior sentence"; **UNEXPECT** - "how unexpected did you find the Judge's sentence on Convict X"; **EFFORT** - "how much effort did you spend thinking about this case"; **BADPRE** - "how bad are the previous armed robbers"; **CONBAD** - "how bad is Convict X"; **TIMSPD** - "the time spent thinking about the case of Convict X"; **TOTATIM** - "the time spent completing the whole questionnaire".

Table 4 -

Homoscedasticity for Dependent Variables

Dependent Variables	Cochran's C before Transformation	Cochran's C after Transformation	Sample Size
INIT POS	.2148	.1343	328
FIN POS	.3387	.1994	330
BADPRE	.5009	.1742	331
CONBAD	.2906	.1420	331
SURPRISE	.2900	.1609	331
PSYDISC	.2592	.1917	330
UNEXPECT	.4123	.1746	331
EFFORT	.5082	.1916	331
TIMSPD	.2024	.1307	330
TOTATIM	.3160	.2000	331

Note: The value of Cochran's C (max variance/sum of variances), which was used to test for homoscedasticity, was computed by nine group (three levels of discrepancy * three levels of disconfirmation) in ANOVA.

Manipulation Checks

Discrepancy - Our assumption that a position advocated of ten years has a discrepancy of zero requires that subjects initial position (P_0) be that ten years is the proper sentence for armed robbery. In other words, P_0 should have a mean of 10 years and low variance. The geometric mean of subjects' initial attitude was 10.87 years. There were 37.2% of subjects choosing ten years and 89.1% of subjects in the range from five to fifteen years.

Also, we checked the correlation between PSYDISC (how psychological discrepant Judge Walters' sentence was) and the actual positional discrepancy, $r=.429$, $F(1, 328)=73.911$, $p=.000$. Thus, subjects were aware of the discrepancy.

Disconfirmation - It was manipulated by varying both the position Judge Walters was expected to pass and the actual position he decided to sentence Convict X. After reading Judge Walters' average sentences in the previous armed robbery (PREVAVE), subjects of source focus group (H & S forms) were asked about expected average sentence from Judge Walters' in the future. We found that PREVAVE predicted subjects' expectation of Judge Walters' average sentence in the future (FUTAVE1) with $r=.843$, $F(1, 112)=272.887$, $p=.000$. It showed that subjects expected Judge Walters to behave the same way as he had behaved before.

For the manipulation of disconfirmation, both of magnitude scaling questions - SURPRISE and UNEXPECT (how surprising and how unexpected Convict X's sentence was) were significantly affected by Df. For Df and SURPRISE, analysis of variance showed that, $r=.503$, $F(1, 329)=111.662$, $p=.000$; for UNEXPECT, $r=.495$, $F(1, 329)=106.660$, $p=.000$. The results mean that subjects responded to the two questions according to the different levels of disconfirmation.

<u>Cognitive Elaboration</u> - There were two independent cognitive focus variables, source focus and issue focus, which were presented by four forms. Six variables were measured as manipulation check: subjects' effort spent thinking about the case of Convict X (EFFORT); their report time on this case (TIMSPD); their total number thoughts while completing this questionnaire (TOTTH) - source thoughts (SOTH) and issue thoughts (ISTH); and their time finishing the whole questionnaire (TOTATIM). If manipulation of elaboration is successful, we would expect to see either the source or the issue focus groups (H, S, & I forms) spend significantly more effort, and more time, and generate more thoughts than the group of L form. We would also expect more source thoughts in the source focus conditions and more issue thoughts in the issue focus conditions. In other words, the main or interaction effects of the two elaboration encouragement on the above six dependent variables would be anticipated.

For EFFORT (see Table 5), we found that there was no significant effort of source focus (F=.168, p=.683) or issue focus (F=.116, p=.734) since subjects in L form contributed more effort (M=4.97) than those in H form (M=4.93).

Table 5 -

The Means of Subjects' Effort Spent Thinking about Convict X Case (EFFORT) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	4.93 (H)	5.01 (I)	4.97
No	5.00 (S)	4.97 (L)	4.99
Column means	4.97	4.99	4.98

Note: The variable of EFFORT has been transformed prior to doing ANOVA. There are between 73 and 83 subjects per cell, for a total N=308.

As for TIMSPD, though subjects of both elaboration conditions did spend more time on the current case on the average (Table 6), it failed to show significant effects of either of the two independent variables. For source focus, $F=1.286$, $p=.258$, and for issue focus, $F=1.378$, $p=.241$.

Table 6 -

The Means of Subjects' Time Spent on the Case of Convict X (TIMSPD) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	2.23 (H)	2.13 (I)	2.18
No	2.08 (S)	2.09 (L)	2.08
Column means	2.15	2.11	2.13

Note: The unit of time is minutes. TIMSPD was transformed before doing ANOVA. There are between 80 and 85 subjects per cell, for a total N=330.

As another check on the focus manipulation, subjects were asked to list all thoughts in their minds. The results indicated that subjects in either the source or issue focus groups generated more thoughts than those in L form (Table 7), however, the slight difference of the means of total thoughts was not statistically significant since the values of F for source focus and issue focus are .028 (p=.867) and .235 (p=.628), respectively.

Table 7 -

The Means of Subjects' Total Thoughts on the Whole Questionnaire (TOTTH) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	2.68 (H)	2.79 (I)	2.74
No	2.66 (S)	2.64 (L)	2.65
Column means	2.67	2.71	2.69

Note: There are about 73 to 83 subjects per cell, and the total N=308.

Among total thoughts, we distinguished two kinds of thinking - source thoughts and issue thoughts. There were significant effects of source focus and issue focus on these two dependent variables. For the manipulation of source thoughts (SOTH), Table 8 showed that subjects of source focus group engaged in more significantly source thinking, $F(1, 327)=6.102$, $p=.014$. We also saw that an issue focus actually reduced the number of source thoughts,

F(1, 327)=31.464, p=.000. In addition, there was a significant source focus by issue focus interactions on SOTH, F(1, 330)=11.920, p=.001.

Table 8 -

The Means of Subjects' Source Thoughts (SOTH) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	.20 (H)	.29 (I)	.25
No	.93 (S)	.46 (L)	.69
Column means	.57	.38	.47

Note: There are about 80 to 85 subjects per cell, and total N=331.

For the issue thoughts (ISTH), significant effects of both source focus and issue focus groups were found, F(1, 330)=6.036, p=.015, and F(1, 330)=12.035, p=.001, respectively. Table 9 indicates the result. While an issue focus increased the number of issue thoughts, it decreased the number of source thoughts.

Table 9 -

The Means of Subjects' Issue Thoughts (ISTH) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	2.13 (H)	2.31 (I)	2.22
No	1.35 (S)	1.96 (L)	1.66
Column means	1.74	2.13	1.94

Note: The number of subjects is from 80 to 85 per cell, and total N=331.

Finally, for the time of completion of this questionnaire, there was a highly significant effect of source focus variable (H & S forms) on TOTATIM, $r=.242$, $F(1, 330)=20.464$, $p=.000$. It indicated that subjects in the source focus conditions spent more time on the whole questionnaire. There were also two-way interaction effects of source and issue focus, $F(1, 330)=6.322$, $p=.012$. (see Table 10).

Table 10 -

The Means of Subjects' Actual Time Spent on Finishing the Whole Questionnaire (TOTATIM) by Cognitive Elaboration Condition

Issue Focus	Source Focus		
	Yes	No	Row means
Yes	3.13 (H)	3.07 (I)	3.10
No	3.21 (S)	3.01 (L)	3.11
Column means	3.17	3.04	3.11

Note: The unit of time is minutes. TOTATIM was transformed. The number of subjects is from 80 to 85 per cell, and total N=330.

In sum, it appeared that both SOTH and ISTH variables were manipulated successfully for source focus and issue focus, and TOTATIM indicated success only for source focus manipulation.

Effects on Attitude Change

Four way analysis of covariance was performed to examine the effects of independent variables on attitude change, which were measured by subjects' final position (P_1) and comparative evaluations of Convict X. The independent variables include discrepancy, disconfirmation, source focus, issue focus, and subjects' initial position (P_0) as the covariate.

For subjects' final position (P_1), we found highly significant effects of the covariate P_0, $F(1, 327)=145.08$, p=.000, and Discrepancy, $F(2, 327)=69.254$, p=.000. It showed

that there was a strong linear relationship between discrepancy and attitude change (final position), but disconfirmation had a non-significant relationship with position, consisted with Kaplowitz et al.'s two opinion-two process model. See Table 11 for the geometric mean and 95% confidence interval of subjects' recommended sentences for Convict X, by discrepancy and disconfirmation level.

Table 11 -

Geometric Mean (95% Confidence Interval) of Subjects' Final Position for Convict X (P_1) by Discrepancy and Disconfirmation Level

Discrepancy level	Disconfirmation level			
	0	1	2	Row means
0	11.02 (9.44,12.22)	9.97 (8.5,11.69)	10.87 (9.72,12.16)	10.56
1	15.56 (13.59,17.83)	13.63 (12.3,15.1)	14.06 (12.23,16.17)	14.47
2	21.37 (17.43,26.23)	20.41 (17.32,24.05)	20.68 (17.15,24.95)	20.81
Column means	15.67	14.76	15.32	15.27

Note: The geometric mean is the anti-logarithm of the arithmetic mean of the logarithmically transformed data. The limits of the confidence interval for the geometric mean are obtained by taking anti-logarithms of the limits of the confidence interval for the transformed data. There are between 32 and 42 subjects per cell, and the total sample is 330.

For the comparative evaluation of the badness of Convict X (CONBAD), however, only the independent variable of Df showed a highly significant effect, $F(2, 327)=16.240$,

p=.000. The means for low, moderate, and extreme
disconfirmation are; 119.4, 166.9, and 174.8, respectively.
It indicated that subjects' comparative evaluation of the
badness of Convict X increased with the rising of
disconfirmation levels (see Table 12).

Table 12 -

Adjusted Geometric Means (95% Confidence Interval) of Comparative
Evaluation of Convict X's Badness by Discrepancy and Disconfirmation Level

Discrepancy level	Disconfirmation level			
	0	1	2	Row means
0	125.3 (105,149.5)	159.2 (136.6,185.7)	145 (117,180)	142.1
1	123.8 (107.4,142.6)	175.4 (141.7,216.8)	140.8 (118.6,167)	144.9
2	107.3 (90.3,127.7)	166.7 (135.8,204.4)	236.3 (192.5,289.7)	171.9
Column means	119.4	166.9	174.8	149

Note: For a definition of the adjusted geometric mean, see Table 3 (Here,
K=.001). There are between 32 and 42 subjects per cell, for a total N=330.
100 is a moderately bad level, and the higher the value, the worse Convict
X is viewed.

Tests of Hypotheses

As for the effects of cognitive elaboration, subjects
using the H & S forms should think more about the source
than those using the other forms. This should lead to a
greater effect of disconfirmation on comparative evaluation
of the Convict X case. The result clearly confirms

the greater should be the effect of disconfirmation on subjects' comparative evaluation of the current case (see Table 13).

Table 13 -

The Effect of Disconfirmation on Comparative Evaluation

Issue Focus	Source Focus	
	Yes	No
Yes	$\beta=.315^{**}$ (H)	$\beta=.155$ (I)
No	$\beta=.375^{***}$ (S)	$\beta=.156$ (L)

Note: Simple regression was run with comparative evaluation as the dependent variable and disconfirmation as the predictor. Beta (β) is the standardized coefficient. ** $p<.01$, and *** $p<.001$.

On the other hand, we predicted that a greater issue focus should increase the greater effect of comparative evaluation on final position. This second hypothesis was confirmed by subjects of I form (the issue focus group), who showed a significant effect of comparative evaluation on final position (see Table 14). That is, the greater the amount of cognitive elaboration subjects engage in the issue, the greater is the effect of comparative evaluation on final position.

Table 14 -

The Effect of Comparative Evaluation on Final Position

Issue Focus	Source Focus	
	Yes	No
Yes	$\beta=.097$ (H)	$\beta=.166^*$ (I)
No	$\beta=.080$ (S)	$\beta=.070$ (L)

Note: Multiple regression was run with final position as the dependent variable and discrepancy, initial position, and comparative evaluation as predictors. * p<.05.

If disconfirmation (Df) significantly affects comparative evaluation (Eval), and comparative evaluation also has a significant effect on final position (P_1), then, it should lead to the relationship that disconfirmation indirectly affects final position. However, none of the four forms indicated such indirect positive effect of disconfirmation on final position.[4]

According to cognitive consistency theories, subjects' comparative evaluation of Convict X's badness and their final position regarding the appropriate sentence should be related to each other. Based on Kaplowitz et al's finding (1990), we would expect that comparative evaluation should

---

[4]The diagram is like as follows:

Df → Eval

Eval → P_1 $\Bigg]$ Df → P_1
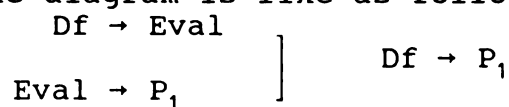
Though H & S forms showed strong effects of Df on Eval, they did not have any significant effect of Eval on P_1. Thus, the indirect positive effect of Df on P_1 is always small.

have a greater effect on position than vice versa.
Hypothesis 2 has predicted that subjects' comparative
evaluation affect their final position. But, conversely,
their final position can also predict comparative evaluation
(see Table 15). This result is not expected because the
finding of Kaplowitz et al. (1990) seems to be an one way
effect. This study, however, shows two-way effects instead
of one way. It seems that position has more impact on
comparative evaluation than the reverse, at least in our
study. However, these ordinary least squares (OLS)
regressions are somewhat questionable because the causal
model has two-way causation.

Table 15 –

The Effect of Final Position on Comparative Evaluation

Issue Focus	Source Focus	
	Yes	No
Yes	$\beta=.220^{*}$ (H)	$\beta=.239^{*}$ (I)
No	$\beta=.083$ (S)	$\beta=.262^{*}$ (L)

Note: Multiple regression was run with comparative evaluation
as the dependent variable and disconfirmation and final
position as predictors. * $p<.05$.

Discussion and Conclusion

Consistent with Kaplowitz et al.'s study (1990), the results of this study confirmed the assumptions of the two process model that discrepancy had a strong and direct effect on final position and disconfirmation had a significantly direct effect on comparative evaluation of the current case.

The results also provided strong support for hypothesis 1 that the more subjects focus about the source, the greater the effect of disconfirmation on their comparative evaluation. Hypothesis 2 was confirmed partly by one of the issue focus groups (I form), which showed a significant effect of comparative evaluation on final position. Originally, we would expect that the source or issue focus conditions should encourage subjects' to spend more effort and time, and to produce more thoughts. Since the manipulation of elaboration by these variables did not work very successfully, it influenced the experimental result.

We suspect that some errors in the experimental forms make such difference. Within the four forms, the first paragraph on page 44 (see Appendix), which introduces Judge Walter's sentence for Convict X, should not be the same in

the four focus groups. This error may have had some effect on the result.

In addition, through the manipulation of source focus and issue focus, we asked subjects think about the source, but it seemed that may not be enough because one kind of thinking (source) induced the other kind of thinking (issue), which weakened the effects of comparative evaluation on final position.

One important question about cognitive elaboration remains unaddressed by the present study. It concerns the limitations on increased the issue focus facilitating message processing. Theoretically, characteristics of the issue content should have a greater impact under high cognitive elaboration conditions. If the issue, however, is not so important and is non-self-relevant to subjects, there would be some limitations to enhance subjects' issue focus even in the high cognitive elaboration condition (Petty and Cacioppo, 1979). It may provide one of the reasons that subjects of the issue focus group of this study did not show strong effects of their comparative evaluation on final position since they were not highly involved in the issue of criminal justice system.

LIST OF REFERENCES

REFERENCES

Aronson, E., Turner, J.A., and Carlsmith, J.M.

1963 "Communicator Credibility and Communication Discrepancy
as Determinants of Opinion Change". Journal of Abnormal
and Social Psychology 67: 31-36.

Bochner, S., and Insko, C.A.

1966 "Communicator Discrepancy, Source Credibility, and
Opinion Change". Journal of Personality and Social
Psychology 4: 614-621.

Chaiken, Shelly

1980 "Heuristic versus Systematic Information Processing and
the Use of Source versus Message Cues in Persuasion".
Journal of Personality and Social Psychology 39: 752-
766.

Chaiken, S., and Stangor, C.

1987 "Attitudes and Attitude Change". Annual Review
Psychology 38: 575-630.

Chaiken, Shelly

1987 "The Heuristic Model of Persuasion". In M.P. Zanna,

J.M. Olson, and C.P. Herman (Eds.), Social Influences:

The Ontario Symposium, Vol. 5, Pp. 3-39. Hillsdale, NJ:

Erlbaum.

Eagly, A.H., Wood, W., and Chaiken, S.

1978 "Causal Inferences about Communicators and Their Effect

on Opinion Change". Journal of Personality and Social

Psychology 36: 424-435.

Festinger, L., and Aronson, E.

1960 "The Arousal and Reduction of Dissonance in Social

Contexts". In D. Cartwright & A. Zander (Eds.), Group

Dynamics: Research and Theory. (2nd ed.), Pp. 214-231.

Evanston, IL: Row, Peterson.

Hovland, C.I., Harvey, O.J., and Sherif, M.

1957 "Assimilation and Contrast Effects in Reactions to

Communication and Attitude Change". Journal of Abnormal

Social Psychology 55: 244-252.

Johnson, B.T., and Eagly, A.H.

1989 "Effects of Involvement on Persuasion: A Meta-

Analysis". Psychological Bulletin 106: 290-314.

Kaplowitz, S.A., Fink, L., Mulcrone, J., Atkin, D., and
Dabil, S.

1990 "Disentangling the Effects of Discrepancy and
Disconfirming Information". Unpublished paper, Michigan
State University, East Lansing, MI.

Lodge, M.

1981 Magnitude Scaling: Quantitative Measurement of
Opinions. Beverly Hills, CA: Sage.

Nemecek, P.J.

1985 "The Effects of Disconfirmation and Discrepancy on
Attitude Change". Unpublished master's thesis, Michigan
State University, East Lansing, MI.

Petty, R.E., and Cacioppo, J.T.

1979 "Issue Involvement Can Increase or Decrease Persuasion
by Enhancing Message - Relevant Cognitive Responses".
Journal of Personality and Social Psychology 37: 1915-
1926.

Petty, R.E., Cacioppo, J.T., and Goldman, R.

1981 "Personal Involvement as a Determinant of Argument-
Based Persuasion". Journal of Personality and Social
Psychology 41: 847-855.

Petty, R.E., and Cacioppo, J.T.

1981 <u>Attitudes and Persuasion: Classic and Contemporary

Approaches</u>. Dubuque, IA: Wm.C. Brown.

Petty, R.E., and Cacioppo, J.T.

1986 <u>Communication and Persuasion: Central and Peripheral

Routes to Attitude Change</u>. New York: Springer-Verlag.

Wood, W., and Eagly, A.H.

1981 "Stages in the Analysis of Persuasive Messages: The

Role of Causal Attributions and Message Comprehension".

<u>Journal of Personality and Social Psychology</u> 40: 246-

259.

APPENDIX

Study of Public Attitudes

Towards the Criminal Justice System

Michigan State University

Form 22H

1990

Today's date _____

Course Number _____

Section Number_____

Class Time   _____

Time Started Questionnaire _____

Study of Public Attitudes

Towards the Criminal Justice System

Crime has long been a major concern of our society, but different people have different views as to the proper treatment of criminals. Some people feel that our legal system treats criminals too leniently to be an effective deterrent. Others, however, feel that time in prison makes criminals more likely to commit crimes in the future and that overly long terms require the state to spend too much of its money on prisons.

If the law is to be supported, people must believe that the criminal justice system serves the needs of society. While not everyone need agree with every judicial decision, it is necessary that the public understand the way in which the criminal justice system functions and the kinds of factors which can enter into sentencing decisions.

In this study, you will first be asked about your own experience with the criminal justice system and your acquaintance with people who work in this system. You will then be given some information about sentencing policies in Michigan and asked your initial views of the proper sentence for a crime. You will then be told of a real-life sentencing decision by a judge and will be asked some questions about this decision.

The answers you provide will help make judges more aware of your concerns since your answers will be reported to the US Commission on Judicial Reform. This body is currently studying sentencing policies and practices in various states and will make recommendations about them.

The Commission is interested in the <u>reasoned</u> opinions of a broad spectrum of the community. It is especially interested in your thoughts about how the characteristics of the judge, as well as the crime and the reasoning behind the sentence, can affect the sentence. Therefore, please read all questions carefully and give each of them the carefully thought out answers they deserve. Be sure to focus primarily on <u>the judge, the crime, the sentence, and the reasoning behind the sentence</u> and try not to let other things distract you. This is not a speed test.

We are aware that you do not have full information about the case you will evaluate, but many decision in life must be made without complete information. Please answer all questions on the form.

Part I

Below you will be asked some questions about your experience with the criminal justice system. Please answer them honestly. Be assured that your responses are totally anonymous and confidential.

1.   Are you personally acquainted with anyone who has been a <u>judge</u> in criminal trials?
   _____ Yes (1)
   _____ No   (0)

2.   Are you personally acquainted with anyone who has been an <u>attorney</u> in criminal trials?
   _____ Yes (1)
   _____ No   (0)

3.   Are you personally acquainted with anyone who has been a member of a <u>parole</u> board?
   _____ Yes (1)
   _____ No   (0)

4.   Have you, or anyone you know well, ever been a <u>witness</u> in a criminal trial?
   _____ Yes (1)
   _____ No   (0)

5.   Have you or anyone you know well, ever been a <u>defendant</u> in a criminal trial?
   _____ Yes (1)
   _____ No   (0)

Part II

Sentencing Guidelines

The State of Michigan, along with many other states, has issued a Sentencing Guidelines Manual. These Guidelines, which are based on a consensus of legal experts, are to assist judges and provide some degree of consistency in sentencing. Below is a copy of the cover of the Sentencing Guidelines Manual of the State of Michigan.

State of Michigan

The sentence you will be examining was for the crime of armed robbery. The Michigan Sentencing Guideline for the crime of armed robbery is **10 years** imprisonment. The sentence for this crime is not only a consensus of legal experts, but has also been found to be supported by a large majority of the public.

These Guidelines, however, are recommendations, not laws. Because many people feel that a judge must be able to take into account the special features of each case, the law permits a judge to pass a sentence which is considerably greater or considerably less than the Guideline.

To make sure that you have absorbed all of the information above, please answer the following questions. REFER TO THE INFORMATION ABOVE, IF YOU NEED TO REFRESH YOUR MEMORY.

1. On the views of which group of people are the Sentencing Guidelines based?

    _____

    _____

2. What is the Sentencing Guideline for the crime of armed robbery? _____ years imprisonment

3. How does the public feel about this particular Guideline?

    _____

    _____

4. Think of some reasons which might be used to justify the selection of 10 years as the Guideline for the crime of armed robbery.

    _____

    _____

    _____

5. How many years in prison do you think is an appropriate sentence for the crime of armed robbery?

    _____ years

    (Note: You need not choose a whole number of years but do choose a number of years. Hence, please do not choose "life imprisonment" or "death." The death penalty is not allowed in Michigan.)

6. Are judges required to follow these Guidelines?

    ____ Yes (1)
    ____ No (0)

7. Why or why not?

    _____

    _____

    _____

Part III

As stated earlier, while the State of Michigan has Sentencing Guidelines, the State still allows Judges to make up their own minds in passing sentences. Therefore, a sentence may deviate considerably from the Guidelines, for a variety of reasons.

We will now give you some information about a particular judge, whom we shall call Judge Walters. The following are excerpts from a report on various Michigan Judges, which was released one year ago.

> Judge Walters is a judge in one of the larger metropolitan areas in Michigan. He is in his fifties, has gray hair, is married, and has grown children.
>
> He has had many years of experience as a judge in criminal cases. In imposing sentences, he sometimes imposes the sentence recommended by the Sentencing Guidelines. However, he places the greatest weight on his own judgment.
>
> In his many years of judicial experience, Judge Walters has had to pass sentence on many defendants for a variety of crimes. . . .
>
> Of those defendants, <u>fifteen</u> were convicted of, and sentenced for, the crime of armed robbery. Of these fifteen sentences for armed robbery, the **average** sentence he imposed was about **10 years** in prison. The <u>smallest</u> of these sentences was <u>8</u> years, while the <u>greatest</u> of them was <u>12.5</u> years. . . .
>
> (Criminal sentences are typically expressed as a certain number of years plus a certain number of months. To improve comprehension, however, this report has expressed parts of a year in decimal format. For example, 6 months is expressed as .5 years.)

Like all people, different judges have different points of view. Some tend to be more severe with defendants who have been found guilty, while others tend to be more lenient.

Please answer the following questions, <u>before</u> you turn to the next page.

1.   Keeping in mind what you have learned about Judge Walters, how <u>severe</u> do you view him?

_____

_____

If Judge Walters continues to be a judge for many more years, he may pass many more sentences for armed robbery. Suppose he passes 100 more sentences for <u>armed robbery</u>. These 100 sentences may not all be the same. We would like to know, however, what you think will be the <u>average</u> of the next 100 sentences he may pass for armed robbery.

2.   If, in the future, Judge Walters passes 100 additional sentences for armed robbery, what is your best guess as to what the <u>average</u> of the additional sentences will be?

     My guess is that the average of Judge Walters' <u>future</u> sentences for armed robbery will be _____ years imprisonment

3.   <u>How sure</u> do you feel about the guess you have just made?

     If you feel <u>completely certain</u> it is correct, choose 100%. If you feel completely certain it is <u>incorrect</u>, choose <u>0%</u>. If you feel it is <u>equally likely to be right or wrong, choose 50%</u>. You may use any number between 0% and 100%.

     I feel ____ % sure of my answer to question 2 above.

Part IV

This past year, after the release of the report which we quoted, Judge Walters had to again sentence someone for armed robbery. We will refer to this person as Convict X. We will now present the statement Judge Walters made as he sentenced Convict X. As you read it, keep in mind both what you know about Judge Walters the reasons he gave for his decision.

> By threat of force and violence, you gained access to money which was not rightfully yours. You brandished a lethal weapon and made quite clear that you would not hesitate to use it if your crime were in any way resisted. Since there was no resistance, you did not fire your weapon, but the terror you instilled in all of those present will be with them for a very long time. Clearly, you played a major role in the planning and execution of this crime. Finally, your record shows that this is not the first time that you have violated the laws which create a civilized society. . . Therefore, I sentence you to **50 years** in the penitentiary.

Before preceding further, let us be sure that certain facts are clear in your mind. To assure this please take a moment to answer the following questions. YOU MAY TURN BACK TO REFRESH YOUR MEMORY IF NECESSARY.

1.   What was the Sentencing Guideline for the crime of armed robbery?

                            _____ years imprisonment

2.   What was your <u>best guess as to the average</u> of the sentences Judge Walters would pass in the future?

                            _____ years imprisonment

3.   What sentence did Judge Walters pass on Convict X?

                            _____ years imprisonment

Remember it is important that you think about how the characteristics of the <u>judge</u> and those of the <u>criminal</u> and <u>crime</u> can influence the sentence. To help you with this thinking, **please answer the following questions.**

1) Taking into account what you know about Judge Walters, and about the case of Convict X, why do you think Judge Walters imposed that particular sentence on Prisoner X?

_____

_____

_____

_____

2) Do you think this was an appropriate sentence? Why or why

not?

_____

_____

_____

_____

_____

You will soon be asked to evaluate the case of Convict X.   As you answer these questions, **please be sure to think about**

      1)   the Sentencing Guideline for the crime of Armed Robbery

      2)   Judge Walters' sentence for Convict X

      3)   How strict or lenient Judge Walters generally is, and the sentences he has given before

and

      4)   the reasons Judge Walters gave for his sentence.

Part V

Earlier in this study, you expressed an opinion about the usual sentence for armed robbery but since then, you have received information about this specific case and have had additional time to think about this issue. Therefore, please feel free to give a different answer than you gave before, if you feel that is appropriate.

We know that you do not have all of the information that Judge Walters had when he imposed the sentence he did. Nonetheless, please answer the following questions the best you can. While some of the questions may seem very similar to others, please answer all of them.

1.   To how many years in prison do you think Convict X should have been sentenced?
     (Note: You need not choose a whole number of years) but do choose a number of years. Hence, please do not choose "life imprisonment " or "death." The death penalty is not allowed in Michigan.)

I think Convict X should have been sentenced to _____ years in prison.

We will next be asking you some questions using a kind of scale with which you may not be familiar. While some scales have 100 as a maximum value, the scales which follow treat 100 as a moderate value and have no upper limit.

2.   Think back to the sentence you expected Judge Walters to impose on Convict X, after you were introduced to Judge Walters, but before you read his sentencing speech. How surprising did you find the sentence he imposed on Convict X?
     If you found the sentence not at all surprising, write 0 (zero). If you found his sentence moderately surprising, write 100. If you found his sentence twice as surprising as moderately surprising, choose 200 (2 x 100). If you found his sentence half as surprising as moderately surprising, choose 50 (1/2 x 100). You may use any number between 0 and 100 to indicate a level of surprise which is less than moderate and any number greater than 100 for to indicate a level of surprise which is greater than moderate. While 0 is the lowest number you may use, there is no "highest number."

Judge Walters' sentence of Convict X was _____ units surprising to me.

PLEASE THINK ABOUT EACH QUESTION BEFORE YOU ANSWER IT. THINK ABOUT THE JUDGE, THE SENTENCE AND THE REASONING BEHIND THE SENTENCE.

3.   Think back to the sentence you thought armed robbery
      <u>should</u> receive, <u>before</u> you read Judge Walters' sentencing
      speech.

How <u>different</u> was Judge Walters' sentence of Convict X from
your own prior view of a proper sentence for armed robbery?

      Imagine that 100 is <u>moderately</u> different from your own
      view. If you think the difference between your view and
      Judge Walters' sentence is <u>twice</u> as much as a moderate
      difference, rate it as a 200.   If you think the
      difference between your view and Judge Walters' view is
      <u>half</u> as much as a moderate difference, rate it as a 50.
      If Judge Walters' sentence is <u>not at all different</u> from
      your view, rate it <u>0</u> (zero). You may use <u>any number</u> you
      wish, from zero on up.

Judge Walters' sentence was _____ units different from the
sentence I initially would have imposed.

4.   How <u>expert</u> a judge do you think Judge Walters is?
      (Imagine that 100 is moderately expert and zero is not at
      all expert.)

I think Judge Walters is _____units expert.

5.   How <u>fair</u> a judge do you think Judge Walters is?
      (Imagine that 100 is moderately fair and zero is not at
      all fair.)

I think Judge Walters is _____ units fair.

6.   How <u>serious</u> a crime is armed robbery? (Imagine that 100
      is moderately serious and zero is not at all serious).

I think armed robbery is ____ units serious.

7.   Think back to the sentence you <u>expected</u> Judge Walters to
      impose on Convict X, after you were introduced to Judge
      Walters, but <u>before</u> you read his sentencing speech. How
      <u>unexpected</u> did you find the sentence that Judge Walters
      imposed on Convict X? (Imagine that 100 is moderately
      unexpected and zero is not at all unexpected.)

I found the sentence Judge Walters imposed on Convict X
_____ units unexpected.

**PLEASE THINK ABOUT EACH QUESTION BEFORE YOU ANSWER IT. THINK
ABOUT THE JUDGE, THE SENTENCE AND THE REASONING BEHIND THE
SENTENCE.**

8.   How <u>objective</u> a judge do you think Judge Walters is?
     (Imagine that 100 is moderately objective and zero is not
     at all objective.)

I think Judge Walters is _____units objective.

9.   How <u>biased</u> a judge do you think Judge Walters is?
     (Imagine that 100 is moderately biased and zero is not at
     all biased.)

I think Judge Walters is _____ units biased.

10. How strong, or <u>compelling</u>, do you think were the reasons
     Judge Walters had for the sentence he imposed on Convict
     X? (Imagine that 100 is moderately compelling and zero
     is not at all compelling.)

I thought the case for Judge Walters' sentence was _____
units compelling.

We are now going to ask you how bad you think various
criminals are. To measure badness of criminals, let us now
use a new "yardstick".

     As your new "yardstick", imagine that the <u>average armed
     robber is 100 units bad</u> and <u>zero is not at all bad</u>. You
     will then be comparing the badness of various criminals
     with the badness of the average armed robber.

11. Think back those who Judge Walters sentenced for armed
     robbery, <u>prior</u> to his sentence of Convict X. How bad are
     they?

I think those <u>previously</u> sentenced for armed robbery, by Judge
Walters, were _____ units bad.

12. How bad is Convict X? (Again, imagine that the average
     armed robber is 100 units bad.)

I think Convict X is _____ units bad.

**PLEASE THINK ABOUT EACH QUESTION BEFORE YOU ANSWER IT. THINK
ABOUT THE JUDGE, THE SENTENCE AND THE REASONING BEHIND THE
SENTENCE.**

13. Imagine that **-7** is strongly favoring, for Convict X, the **ten year sentence** recommended by the Sentencing Guidelines and **+7** is strongly favoring Judge Walters' **actual sentence** for Convict X. Further, imagine that numbers between -7 and +7 represent views in between those extremes. Where would you put <u>your own view</u> on that scale? (Circle the number which best represents your view.)

10 years														Actual Sentence
-7	-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6	+7

PLEASE THINK ABOUT EACH QUESTION BEFORE YOU ANSWER IT. THINK ABOUT THE JUDGE, THE SENTENCE AND THE REASONING BEHIND THE SENTENCE.

Part VI

We would now like to ask some factual questions. Please answer them, <u>without looking up the information</u> in the questionnaire. Do not worry if your answers are incorrect. The questionnaire is strictly anonymous and any wrong answers will have no effect on you.

1.   Prior to his sentence of Convict X, how many defendants did Judge Walters sentence for armed robbery?
       _____ defendants

2.   The average of those prior sentences was _____ years imprisonment.

3.   The lowest of those prior sentences was _____ years.

4.   The highest of those prior sentences was _____ years.

For the next few questions, place a check next to True, for statements, which are TRUE, according to the speech made by Judge Walters as he sentenced Convict X. Place a check next to False, for statements, which are FALSE, or which were not stated or implied in Judge Walters' sentencing speech.

5.   In the armed robbery in which Convict X took part, someone was shot.
                        _____ True (1)
                        _____ False (0)

6.   Convict X played a major role in the crime.
                        _____ True (1)
                        _____ False (0)

7.   This robbery was the first crime Convict X had committed.

                        _____ True (1)
                        _____ False (0)

8.   Hostages were taken in that armed robbery.

                        _____ True (1)
                        _____ False (0)

Part VII

We know that we have asked you many questions and some of them may seem very similar to others. We want to assure you that we do have reasons for asking them and to request your patience and co-operation in answering them.

1. Please list **all** thoughts which were at all related to the sentence received by Convict X. Please list each thought on a separate line. Moreover, please <u>categorize each</u> thought as either favoring <u>severity</u> (marked S), favoring <u>leniency</u> (marked L), or favoring <u>neither</u> (marked N).

_____

_____

_____

_____

_____

_____

2. How much <u>effort</u> did you spend thinking about this case? (Imagine that 100 is moderate effort and zero is no effort.)

I spent _____ units of effort on this case.

3. About how much <u>time</u> did you spend thinking about the case of Convict X?

_____ minutes and _____ seconds

4.   Have you previously <u>heard</u> of this study?

   _____ Yes (1)
   _____ No   (0)

If "yes", please explain briefly what you heard.

_____

_____

_____

5.   Have you previously <u>participated</u> in this study?

   ____ Yes (1)
   ____ No (0)

If "yes", please explain briefly.

_____

_____

_____

6.   In your own words, please describe the purpose of this
     study.

_____

_____

_____

7.   Please indicate your time of completion of this
questionnaire.

     Time of Completion _____

We very much appreciate your participation.