

# **THE EFFECTS OF DECEPTION AND DEBRIEFING UPON SELF-CONCEPT\***

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To be completely open and honest in describing the real goals and procedures of the psychological experiment to the subjects may create pressures which make it impossible for them to be open and honest with us (Carlsmith, Ellsworth and Aronson, 1976). For example, it is difficult to imagine an experimenter collecting valid data on the effects of group pressure on conformity by telling the subjects the true purpose of the experiment in advance (Asch, 1951).

Likewise, how could we investigate the factors that lead people to offer assistance to others if the subjects knew the purpose of the study? (Milgram, 1963). The obedient behavior of the subjects in the Milgram experiment is another example of this kind of studies.

It is essential that the subjects in any psychological experiment be unaware of the aims and hypotheses of the study, if the results are to be valid. Sometimes, the researcher may have to conceal the purposes and nature of the experiment from the subjects.

According to Aronson and Carlsmith's point of view (1968), there is an important need for secrecy about any experiment. Further, there is a need for experimental realism, so that the outcomes of the experiment will seem convincing and have the maximum possible impact on the subjects.

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However, **deception** has been commonly used in social psychological research by presenting a cover story to mislead subjects about what is going on, and prevent them from guessing the hypotheses of the study being tested (Stricker, Messick, & Jackson, 1969). In other words, the use of deception in social psychological research involves an attempt to hide the true purpose of the experiment from the subjects. This goal can be achieved by omitting some important facts regarding the study, and giving misleading instructions.

The use of deception for the reason that if subjects know the true purpose of the study, they will be unable to behave in a natural manner, and thus, no valid conclusion regarding their behavior can be drawn (Baron, Byrne, & Griffett, 1974). Therefore, temporary deception of subjects seems to be necessary in many cases. Deception can take many other forms such as presenting false feedback about the subjects success and failure on task or having confederates of the experimenter make preplanned statements (Edelman, 1970; Wrightsman, 1972), and sometimes denying the fact that subjects are participating in an experiment.

The subjects' experience in psychological experiments is not always painless. They may suffer anxiety, fear, self-doubt, frustration and sometimes physical pain for the sake of the experimenter's research. Subjects may agree to help in an experiment without knowing about all the possible negative consequences.

However, stress that subjects may suffer could be temporary, or it may involve some risk that some of them will continue to suffer after the experiment is over. In their study about "The Effects of prior experience in a deception experiment on behavior in a future experiment", Silverman, Shulman and Wiesenthal (1970) found that the main effect of previous deception was to increase the subjects' desire to present themselves in a favorable sight in the second experiment. Subjects responded to their deception experience by "Increasing evaluation apprehension and their tendencies to present themselves as psychologically strong and stable" (Silverman, Shulman and Wiesenthal, 1970, P.208). Moreover; subjects who were deceived before, complied less with experimental demands than did subjects who had never participated in a deception experiment. In general, the results showed that previous experience in deception situations had some systematic effects on subjects behavior in future experiment.

Although social psychologists have used the experimental deception in their studies for several years, it has become the focus of some rather severe criticism and also has raised some ethical questions. For example, Herbert Kelman (1967) in his famous article "Human use of Human subjects" raised two ethical problems by the use of deception:

1. There is the possibility that such technique may actually cause harmful consequences to subjects.
2. Such techniques tend to demean the relationship between the experimenter and his subjects.

However, when deception is used, the experimenter is obliged to protect the subjects' welfare. He should spend more time with the subjects after the experiment has ended than during the experimental session itself (Carlsmith, Ellsworth and Aronson, 1976). In other words, subjects should be very carefully **debriefed** at the end of the experiment. That is to say, the experimenter must tell the subjects the truth about all deceptions, the reasons for deceptions, and the aims of the study and reassuring the subjects about any relevant doubts that might remain.

Aronson and Carlsmith (1968) have pointed out that "If debriefing is done sensitively and thoroughly, most experimenters feel that subjects accept the necessity of deception and do not feel unfairly treated" (Aronson and Carlsmith, 1968, P. 32). In more recent reference (1976), they recommend that the experimenter should frankly explain that the deception was necessary and express regret about this necessity. It should be clear to the subjects that there was no other way to test the experimental question in a satisfactory manner.

Furthermore, Kelman has mentioned a very important principle that should be followed "A subject ought not to leave the laboratory with greater anxiety or lower self-esteem than he came in with" (Kelman, 1968, P. 222). But how can we be assured that this goal has been achieved? Is it true that what is done is done and debriefing can do nothing with undoing the deception situation? It seems to us that it is sometimes difficult to tell whether or not the subjects still feel uncomfortable after the debriefing.

Moreover, most of the previous studies in that area did not use any self-concept scale to measure changes that take place before and after deception. Accordingly, such procedures should be carried out.

However, evidence has been found that debriefing was not always immediately effective and that some subjects may act as though they still believe the manipulation, even after a long time later (Walster, Berscheid, Abrahams and Aronson, 1967).

### **The problem:**

The aim of this paper is to answer two basic questions:

1. What is the influence of deception procedure conducted in social psychological experiment upon the subjects' self-concepts as measured by a self-concept scale?
2. Does the debriefing process eliminate the influence of the deception upon subjects' self-concepts during a social psychological experiment?

In case of no evidence of negative influence of deception procedure on self-concept, then will be no need to go further to the second question.

## Hypotheses:

Two basic hypotheses to be tested in this study have been operationally defined in terms of the posttest measures as follows:

1. Subjects' self-concept scores as measured by Emad Ismail's self-concept scale are significantly different before and after deception.
2. There are no significant differences in subjects' self-concept scores as measured by Emad Ismail self-concept scale before and after debriefing.

## Method

### Subjects:

Subjects for the preliminary part of the study were 77 freshman college students randomly selected from vocational education department (industrial section), College of Education, Ain Shams University, enrolled for the academic year (1982 — 1983). All participants were prepared to be teachers in their future careers. They were males with a mean age of 19.25 years old.

For the second part of the study, two groups (16 subjects each) have been matched according to their self-concept scores. They have an equal number and homogenous variance in the four subtests at  $P > .05$  as shown in the table No. 1.

Table No. 1 shows homogenous of variance between groups in the four subtests of self-concept.

Groups Measures	N=16 R — 1		N=16 G — 2		* F — Max
	M	SD	M	SD	
Realistic Scale	331.00	3.09	332.88	35.06	1.002
Discrepancy	173.38	96.62	182.88	87.32	1.22
Acceptance of self	125.94	67.25	154.06	68.09	1.03
Acceptance of others	190.94	95.87	239.88	73.17	1.72

\* All values of F-max are not significant at .05 level.  
 $P > .05 F(1, 30) = 2.41.$

By using this formula:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{SD_1^2 + SD_2^2}{N - 1}}}$$

No significant differences were found in the pre-test scores between the two groups in the four subtests of self-concept as shown in table No. 2.

Table No. 2 (Pre-test measures)  
 Means and standard deviations and "t-test" on the four subtests for the two experimental groups.

Self-Concept Measures	G — 1		G — 2		"t"
	M	SD	M	SD	
Realistic Scale	331.00	35.09	332.88	35.06	.15
Discrepancy Scale	173.38	96.62	182.88	87.32	.28
Acceptance of self	125.94	67.25	154.06	68.09	1.14
Acceptance of others	190.94	95.87	239.88	73.17	1.57

All t-tests in this table were not significant at .05 level (two tail test).  
 $P > .05 = 2.042$

### Measures:

Emad Ismail's self-concept scale (Adult Form) has been used to get students scores on the four subtest areas.

- A. Realistic self-concept
- B. Discrepancy scale
- C. Acceptance of self scale
- D. Acceptance of others scale

The test is consisted of 100 statements. The subject can describe himself as sees himself. Each one has a specific character. People are not equal on this character. They differ in the degree they have on this character, Subjects have to evaluate themselves according to a nine points scale ranging from zero to eight, Zero means nothing and eight means very high. (Ismail, 1966).

The test is a kind of self-report scale which is derived from Thurstone's idea in measuring attitude.

It has hree basic concepts:

1. Realistic self-concept which means self as a person sees and feels as it is.
2. Ideal self-concept which means self as it must be in the ideal person.
3. Normal self-concept which means self as subject sees it in the other normal people.

In addition, it has three other subscales derived from the basic ones.

#### 1. Discrepancy scale

It is the absolute difference about rating scores between the subject's self score as it is and the self for the normal other people. Low scores mean that person is very close to normal person. High scores mean that person very far from normal person and may be either has inferiority or superiority.

#### 2. Acceptance of self scale

It is the absolute difference between rating scores for realistic self-concept and ideal self-concept. Low scores mean acceptance of person to himself. High scors mean a very high level of aspiration.

### 3. Acceptance of others scale

It is the absolute difference between rating scores for self in normal person and ideal self-concept. Low scores represent acceptance of others. High scores represent nonacceptance of others.

According to this test, self-concept is a concept that person has about himself as a biological and social organism. In psychological term it is the perceptual and emotional organization which includes person's responses about himself. This meaning can appear in verbal report about self.

The test's author had tried to find out the validity of the test by using three judges of the expertises. Test retest reliability had been applied on 110 cases during one week period. Correlation coefficient scores were as follows:

- F. Discrepancy scale = .942
2. Acceptance scale = .967
3. Acceptance of others scale = .957

All values were significant at .01 level (Ismail, 1966)

In general, the test is a valid and reliable scale, and widely accepted and successfully used in the Egyptian environment.

However, the researchers in this study have tried to figure out the coefficient of stability by using test retest reliability on 32 cases during a one month period.

Correlation Coefficients were as follows:

1. Discrepancy scale = .862
2. Acceptance of self-scale = .523
3. Acceptance of others scale = .707

Although some of these Correlation Coefficients were low comparing with the author's results, all of them were sig. at .01 level.

#### **Procedures:**

1. On January 4th, 1983, Emad Ismail's self-concept scale had been administered for 77 freshmen male college students.
2. Two experimental groups have been matched on the basis of their scores in the four subtests of the scale. No significant differences have been found between them.  
(Table No. 2)
3. Deception procedures have been used with both groups on Feb. 8th, 1983. The experimenters have used the same deception technique conducted by

S. Asch in his famous studies, "The influence of group pressure upon the individual's behavior in a social situation", with some little modifications to fit the aim of this study. The subjects were not told what is going on. They were just told that the experiment involved a test of perceptual judgment, and the task would be matching figures of equal length or size. The experiment was conducted in the laboratory of Educational Psychology Department, College of Education, Ain Shams University. \*Eight cards have been used by overhead projector. The first two cards were used for practice only and the six other cards for deception (Table No. 3).

Five Confederates of the experimenters were used to give wrong answers before the response of each subject. They were selected from different sections and grade levels to be sure that they were not familiar to the subjects. Different arrangements were used to show that all participants did not know each other. Answer key for wrong answers was prepared in front of the first Confederate\*\*.

- Four days later of deception situation, posttest measures have been applied for experimental group No. 1 (Deception group). If there was an influence upon Self-Concept scores as a result of deception situation, presumably there was an influence in the same direction for the experimental group No. 2 (Deception and Debriefing group).

**Table No. 3:** Trials and length of figures used in the study for deception procedures.

Trials	Figure	Length of Standard figure in Cm.	Comparison Figure in Cm.			Correct Response	Grp. Response
			A	B	C		
1	Circles	1.9	1.9	2.2	2.4	A	A
2	Lines	10	8.5	10.5	10	C	C
3	Lines	4	6	4.5	4	C	B
4	Circles	2	2.2	2.4	2	C	B
5	Lines	10	9.25	10.75	10	C	B
6	Arrows	6	6	7	5.5	A	C
7	Lines	9	10.5	8.25	9	C	B
8	Lines	8	8.5	9	8	C	A

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5. One week later \* (Feb. 15, 1983), debriefing process has been conducted with the experimental group No. 2 by the researchers. In warm atmosphere, the experimenters confessed to the subjects that the entire situation was arranged and there were some subjects cooperating with the experimenters by giving wrong answers on some of their responses by calling two obviously different lines equal. The aim of this process was to provide subjects with a clear and detailed explanation of the study, and allow them to ask questions and spend time clearing up any ambiguities that may remain after the experiment.

The subjects were also told that the deception was the only way to conduct this study. At the end of this session they shared a glass of tea with experimenters and the confederates.

6. On the same day of debriefing process, posttest measures have been applied.

**Table No. 4:** Details of the design steps followed in the study.

Grps.	Pre test Measures	Deception Feb. 8, 83	Posttest Feb. 12, 83	Debriefing Feb. 15, 1983	Posttest Measures
G — 1	For all	✓	✓	—	—
G — 2	Ss.	✓	—	✓	✓

**Results:**

Of major importance to this study was determining the influence of deception procedures conducted in a social psychological experiment upon subjects' self-concept. Secondly, to a determine if debriefing process eliminates the influence of deception upon subjects' self-concept.

The findings of this effort are presented in this section.

**A. Influence of deception upon self-concept.**

The results of t-test showed that subjects' scores before and after deception were significantly different on all measures of self-concept used in the study ( $P > .10$ ). Means, standard deviation and t-test are presented in table No. 5.

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\* Although the researchers were aware about what Kelman said that debriefing process should be done in the same session of the experiment, the experimental procedures have obliged the researchers to do it one week later.



**Table No. 5: Means, standard deviations and t-test for E. group No. 1 (deception group) before and after deception process.**

Measures	Pre		• Post		t-test	Level* of Sig.
	M	SD	M	SD		
Realistic self-concept	357.13	60.35	331.00	35.09	1.61	.06
Discrepancy Scale	173.38	92.62	189.38	98.85	1.34	.10
Acceptance of self	125.94	67.25	180.50	81.97	2.63	.01
Acceptance of others	190.94	95.87	225.56	103.72	2.05	.03

\*One tail test

Although most of psychological research used to accept at least .05 level of significance, the researchers in this study accepted .10 level of significance for human reasons related to the nature of the study. \* It was very difficult to consider  $P < .06$  not significant. However, this human decision will increase the test power and decrease the type two error. By this criteria all t-test in table No. 5 are significant ( $P < .10$ ).

### B. Influence of debriefing upon self-concept.

T-test showed that subjects' scores before and after debriefing on realistic self-concept and acceptance of self were significantly different ( $P < .01$ ). While subjects' scores before and after debriefing were not significantly different on discrepancy and acceptance of others scales ( $P > .10$ ). Means, standard deviations, t-test and level of significance are displayed in table No. 6.

**Table No. 6: Means, standard deviations, t-test and level of significance for subjects in E-group No. 2 (deception and debriefing group), before and after debriefing process.**

Measures	Pre		Post		t-test	Level of Sig.
	M	SD	M	SD		
Realistic Self-concept	350.69	49.70	332.88	35.06	*1.89	* P < .05
Discrepancy Scale	182.88	87.32	194.13	70.93	.96	P > .10
Acceptance of self	154.06	68.09	180.39	66.69	2.09	* P < .03
Acceptance of others	239.88	73.17	251.56	76.51	.73	P > .10

\*  $P < .05$  level

\* One tail test

\* Our appreciation is extended to Professor Dr. F. Abou-Hatab for his professional guidance with this problem.

## **Discussion of Findings**

### **A. Deception and Self-concept:**

The results of this study showed a significant change on almost all aspects of self-concept measures used in the study ( $P < .10$ ). The results gave a picture of decline in self-concept. The differences were statistically significant on all measures of self-concept.

With more details, the mean scores in realistic self-concept in E. Group No. 1 (deception group) was 357.13,  $SD = 60.35$  before deception and became 331.00,  $SD = 35.09$  after deception. The difference was significant at .06 level (one tail test). This means that deception caused a psychological injury in student's realistic self-concept.

Likewise, the mean scores in discrepancy scale for E. group No.1 was 173.38,  $SD = 96.62$  before deception and became 189.38,  $SD = 98.85$  after deception. It should be recalled that high scores mean that the person is very far from normal and tends to either inferiority or superiority. The difference was significant at .10 level. That is to say, that deception caused a significant change in students' self-concept as measured by discrepancy scale.

Similarly, the mean scores in "Acceptance of Self-scale" for E. group No. 1 was 125.94,  $SD = 67.25$  before deception and became 180.50,  $SD = 81.97$  after deception. (Recall that low scores mean acceptance of person to himself). The difference was significant at .01 level. That is to say, student's self-concept as measured by acceptance of self-scale was injured by deception.

With regard to "Acceptance of others Scale", the mean scores for E. group No. 1 was 190.94,  $SD = 95.87$  before deception and became 225.56,  $SD = 103.72$  after deception. (Recall that low scores represent acceptance of others). The difference was significant at .03 level. This means that student's self-concept was hurt by using deception technique.

However, overall t-test ranged between 1.34 to 2.63 and all were significant at .10 level or less. In other words, the first hypothesis was true and should be accepted and there were significant differences in student's self-concepts scores before and after deception.

It seems clear that using deception in this study made students suffer stress, frustration and self-doubt. These problems seemed to continue after the experiment was over as shown by the significant change in their scores in the four subtests of self-concept. Deception actually caused harmful consequences to subjects' self-concept.

### **B. Debriefing and Self-concept**

It should be noted that significant differences between mean scores in this part of the study before and after debriefing, mean that debriefing did not

eliminate the influence of deception, and really what was done was done, debriefing had nothing to do in this case. On the other hand, none significant differences between mean scores in this case (before and after debriefing) mean that debriefing process was effective and restore students' self-concept as it was at the beginning of the experiment.

With regard to the influence of debriefing process upon self-concept, the results of this study showed a significant change on some aspects of self-concept measures used in the study, while other aspects did not significantly change ( $P < .10$ ).

In more details, the mean scores in realistic self-concept for E.group No. 2 (deception and debriefing group) was 350.58,  $SD = 49.70$  before deception and debriefing, and became 332.88 with  $SD = 35.06$  after debriefing. The difference was significant at .05 level (one tail test). This means that debriefing had no influence on students' realistic self-concept. Debriefing failed to restore realistic self-concept as it was before deception.

For discrepancy scale, the mean scores for E. group No. 2, was 182.88,  $SD = 82.32$  before debriefing and became 194.13,  $SD = 70.93$  after debriefing. The difference was not significant at .10 level. This means debriefing was effective process with E. group No. 2 regarding discrepancy scale.

With regard to Acceptance of self scale, the mean scores in E. group No. 2 was 154,  $SD = 68.09$  before deception and debriefing and became 180.38,  $SD = 66.69$  after debriefing. The difference was significant at .03 level (one tail test). This means that debriefing was not effective and did nothing to restore students' acceptance of themselves. This was consistent with realistic self-concept results. Deception did a big change in realistic self-concept and acceptance of self, then debriefing did nothing to eliminate the effects of deception to both of them. The relationship between realistic self-concept and acceptance of that self is highly positive.

Finally, with regard to "Acceptance of others scale", students' mean score in E. group No. 2 (deception and debriefing group) was 239.87,  $SD = 73.17$  before deception and became 251.56,  $SD = 76.50$  after debriefing. The difference was not significant at .10 level (one tail test). That is to say, debriefing process was effective to restore subjects' acceptance of others. One more reason for the effectiveness of debriefing with acceptance of others was that debriefing depended upon the good relationship between the experimenters and the subjects. This relationship was very good and warm after debriefing.

In general, we may conclude that the second null hypothesis with regard to debriefing process was partially rejected. Debriefing had no absolute value. It was true that it was effective with two aspects, but it was also true that it was not effective with two other aspects of self-concept measures.

However, debriefing process is costly in terms of time and effort, but it is well worth the effort and time spent. In this process, a large number of subjects gain understanding of the complexity of experimentation and actually have become enthusiastic about the research in general and the experiment in particular (Carlsmith, 1976). The subjects' responses to detailed debriefing is a good source of information about the strength and weakness of an experiment.

Although the results of this study showed that deception had a negative effect upon self-concept, and debriefing process was not completely effective, the researchers were not likely to generalize these results. Many others studies should be done in this area by using a large number of subjects and different techniques of deceptions.

### **Summary and Conclusion:**

In some cases of psychological research, temporary deception of subjects seems to be necessary. However, when deception is used, subjects should be very carefully debriefed at the end of the experiment.

Two basic hypotheses have been tested in this study:

1. Subjects' self-concept scores as measured by Ismail's self-concept scale are significantly different before and after deception.
2. There are no significant differences in subjects self-concept scores as measured by Ismail's self-concept scale before and after debriefing.

Two experimental groups have been matched according to their pre-test scores on four subtests of self-concept scale.

The results of the study showed a significant change on almost all aspects of self-concept measures used in the study before and after deception. ( $P < .01$ ) Also the results showed that subjects' scores before and after debriefing were significantly different on realistic self-concept and acceptance of self scale ( $P < .01$ ). While subjects' scores before and after debriefing were not significantly different on discrepancy and acceptance of others scales.

Finally, we conclude that deception actually caused harmful consequences to subjects' self-concept. Likewise, debriefing was not effective and failed to restore subjects' realistic self-concept and the acceptance of themselves. But it was effective with discrepancy scores and acceptance of others.

## REFERENCES

- Aronson, E. & Carlsmith, J.M. "Experimentation in Social Psychology". In G. Lindzey and E. Aronson (Eds.), **Handbook of Social Psychology**, Vol. 1, (2nd ed.), Readings, Mass.: Addison-Wesley Publishing Co., Inc., 1968, Pp.1-79.
- Asch, S.E. "Effects of Group Pressure upon the Modification and Distortion Judgments". In Harlod Guetzhov, (Ed.), **Group, Leadership and Men**, Pittsburgh, P.A.: Carnegie Press, 1951, Pp. 177-190.
- Atwell, J.E. "Human Rights in Human Subjects Research". In A.J. Kimmel (Ed.), **New Directions for Methodology of Social and Behavioral Science**, No.10, **Ethics of Human Subject Research**, San Francisco: Jossey — Bass, 1981.
- Baron, R.A.; Byrne, D. & Griffitt,W. **Social Psychology, Understanding Human Interaction**. Boston, Mass.: Allyn and Bacon, Inc. 1974.
- Carlsmith, J.M.; Ellsworth, PC. & Aronson, E. **Methods of Research in Social Psychology**, Readings, Mass.: Addison-Wesley Publishing Co., Inc., 1976.
- Edelman, R.I. "Some Variables Affecting Suspicion of Deception." **Journal of Personality and Social Psychology**, 1970,15,Pp. 333-337.
- Gray, B.H.; Cooke, P.A. & Tannenbaum, A.S. "Research Involving Human Subjects". **Science**, 1978, 211, Pp. 1094 — 1101.
- Ismail, M.E. **Self-concept Scale (For Adults)**, Cairo: Al-Nahada Al-Misria Publishers, 1966. (Arabic)
- Kelman, H.C. "Human Use of Human Subjects: The Problem of Deception in Social Psychological Experiments". **Psychological Bulletin**, 1967, 67, Pp. 1-11.
- Milgram, S. "Behavioral Study of Obedience". **Journal of Abnormal and Social Psychology**, 1963, 67, Pp. 371-378.
- Osman, S.A. & Abou-Hatab, F.A. "The Effect of Social and Physical Contexts on Perceptual Judgment", **National Review of Social Sciences**, 1974, 11, No. 3, Pp.71 — 86.
- Rosenthal, R. & Rosnow, R. "Applying Hamlet's Question to the Ethical Conduct of Research: A Conceptual addendum", **American Psychologist**, 1984, 39, 5, Pp. 561 — 563.
- Rosnow, R.L. **Paradigms in Transistion: The Methodology of Social Inquiry**. New York, Oxford University Press, 1981.
- Ross, L.; Leppir, M.R. & Hubbard, M. "Perseverance in Self-Perception and Social Perception: Biased Attributional Processes in the debriefing Pardigm." **Journal of Personality and Social Psychology**, 1975, 20, Pp. 120 — 128.
- Schultz, D.P. "The Human Subject in Psychological Research", **Psychological Bulletin**, 1969, 72, Pp. 214 — 228.

- Silverman, I.; Shulman, A.D. & Wiesenthal, D.L. "Effects of Deceiving and Debriefing Psychological Subjects on Performance in Later Experiments". **Journal of Personality and Social Psychology**, 1970, 14, Pp. 202 — 212.
- Stricker, L.J.; Messick, S. & Jackson, D.N. "Evaluating Deception in Psychological Research." **Psychological Bulletin**, 1969, 71, Pp. 343 — 351.
- Tennen, H. & Gillen, R. "The Effect of Debriefing on Laboratory Induced Helplessness: An Attributional Analysis." **Journal of Personality**, 1979, 47, No. 4, Pp. 629 — 642.
- Walster, E.; Berscheid, E.; Abrahams, D. & Aronson, V. "Effectiveness of Debriefing Following Deception Experiments." **Journal of Personality and Social Psychology**, 1967, 4, Pp. 371 — 380.
- Wrightsman, L.S. **Social Psychology in the Seventies**, Monterey, Cal.: Wadsworth Publishing Co., Inc., 1972.