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> LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVONS REQUE

# THE UNIVERSITY OF ALBERTA

DISAGREEMENT PRODUCED AROUSAL AND INTERPERSONAL ATTRACTION

BY

WILLIAM NICHOLAS GREEN

## A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

ΙN

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For my wife Gloria,

who constantly supports me when I'm down, who disagrees with me when I'm wrong,

and who attracts me the rest of the time.

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ABSTRACT

A 1969 study by Stapert and Clore utilizing symbolic models was designed to test the hypothesis that interpersonal attractiveness could be enhanced by manipulating the pattern of agreements and disagreements in a two person relationship. That is, psychological profiles of the models were presented in an agree, agree, agree, disagree (AAAD) pattern and in a disagree, agree, agree, agree (DAAA/ pattern. Subjects exposed to the DAAA sequence rated the profiles of the models as more attractive than they rated the profile of the "AAAD group. The present study utilizing an initial sample of over one hundred twenty subjects interacting with four real models demonstrated that unattractive females utilizing the DAAA sequence could significantly enhance their rated attractiveness.

Initially, over two hundred adult retraining students and senior undergraduate university students were asked to complete Thurstone's (1932) Attitude Toward Capital Punishment Scale. Those students demonstrating strong attitudes for or against capital punishment were asked to participate in an interview. The physically attractive male and female interviewer would contrive arguments that would follow the AAAD sequence regardless of whether the subject was strongly for or against capital punishment. The unattractive male and female interviewer would contrive arguments that would follow the DAAA sequence regardless of whether the subject was strongly for or against capital punishment. The unattractive male and female

After the interview all subjects were asked to complete Byrne's

(1971) Interpersonal Judgement Scale and the Subjective Attraction Scale devised by the writer. Data analysis utilizing 't' tests compared various treatment groups. A supplementary two way analysis of variance was utilized to check for possible interaction effects.

Results indicated that the unattractive female interviewer utilizing the DAAA sequence generally was rated as more attractive than the attractive male and female interviewer using the AAAD sequence. The unattractive female was also rated as more attractive than the unattractive malé using the DAAA sequence. The unattractive male interviewer using the DAAA formula did not appear to enhance his attractiveness.

Results were interpreted as evidence supporting the hypotheses that unattractive females can be perceived as more attractive by knowing when to agree and when to disagree in interpersonal interactions. Failure to find similar evidence for unattractive males might be interpreted in the light of social roles played by males in our society. More over, the inconsistency of results between males and females raise some serious procedural concerns when planning research in interpersonal attraction./

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The drama students

The staff of the Alberta Vocational Center (Edmonton) The many students from the Alberta Vocational Center (Edmonton) The many students from the University of Alberta

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### CHAPTER 1

### INTRODUCTION AND STATEMENT OF THE PROBLEM

### INTRODUCTION

In the fall of my senior year, I got into the habit of studying at the Radcliffe library. Not just to eye the cheese, altHough I admit that I liked to look. The place was quiet, nobody knew me, and the reserve books were less in demand. The day before one of my history hour exams, I still hadn't gotten around to reading the first book on the list, an endemic Harvard disease. "I ambled over to the reserve desk to get one of the tomes that would bail me out on the morrow. There were two girls working there: One a tall tennis-anyone type, the other a bespectacled mouse type. I opted for Minnie Four-eyes.

"Do you have the Waning of the Middle Ages?"

She shot a glance up at me.

"Do you have your own libraty?" she asked.

"Listen, Harvard is allowed to use the Radcliffe library." "I'm not talking legality, Preppie, I'm talking ethics. You guys have five million books. We have a few lousy thousand."

Christ, a superior-being type! The kind who think since the

ratio of Radcliffe to Harvard is five to one, the girls must be five times as smart. I normally cut these types to ribbons to but just then I badly needed that goddamn book.

"Listen, I need that goddamn book."

/ "Wouldja please watch your profanity, Preppie?"

"What makes you so sure I went to prep school?"

"You look stupid and rich," she said, removing her glasses.-"You're wrong," I protested. "I'm actually smart and poors" "Oh, no, Preppie. I'm smart and poor." . 1.5

She was staring straight at me. Her eyes were brown. Okay. maybe I look rich, but I wouldn't let'some [C]iffie' - even one with pretty eyes - call me dumb.

"What the hell makes you so smart?" I asked.

"I wouldn't go for coffee with you," she answered.

"Listen - I wouldn't ask you."

"That," she replied, "is what makes you stupid." (p. 2-3)

So begins the classic "Love Story" by Erich Segal (1970). Such an unlikely beginning. Boy meets girl. Girl spurns and disagrees with

boy. Girl becomes irresistible to boy. Is this a formula of fact or

### simply fiction?

Interpersonal attraction has been a subject which has been most interesting to the public generally, and to theorists of personality specifically. Among the public, it is well known that opposites attract each other. So too for that matter do people with similar qualities. It is not uncommon for young people to seek out what they have in common with each other at the initial stages of developing a relationship.

The apparent contradictory explanations for interpersonal attraction in the public sector are paralleled in more scientifically based personality theory. In fact the wide range of theoretical formulations for the attraction phenomenon suggests to the writer that the essential criteria for understanding interpersonal attraction have not as yet been established.

Precisely what is it that results in two people coming together and developing a relationship. Although there are varying theories, there is some evidence that resolution of disagreement produced arousal might serve as the basis of an alternative Explanation for interpersonal attraction.

Staper1 and Clore (1969) devised an important experiment wherein they observed that arousal produced by disagreement could produce an effect on interpersonal attraction. First, they tested 110 students with a survey of attitudes. Four weeks later each subject was presented with the attitude profiles of several supposed 'strangers'. Subjects were ostensibly asked to make predictions about each stranger on the basis of profile. In every case the profiles

presented were bogus and designed to either agree or disagree with the subject. Results indicated that the rating of each stranger was affected by the order in which the agreeing and disagreeing profiles were presented. See Table 1 below.

# TABLE 1

GROUP	STRANGER 1	STRANGER 2	STRANGER 3	STRANGER			
AAAA	9.04	8.50	8.63	8.33			
DA	6.04	11.22	•		· .		
DDA	5.88	7.00	11.63		, ,		
DDDA	6.20	8.00	9.00	12.10	$\overline{\}$		
DDDSA	6.50	7.25	8.45	11.40			

### MEAN ATTRACTION RATINGS

Code

A = agreement profile

D = disagreement profile

S = second administration of the Survey of Attritudes

That is, an agreement profile would be rated more attractive as a direct result of previous disagreement profiles that were presented. Note that the AAAA control group changed very little.

However, the study has some serious limitations, particularly if the investigator is attempting to examine the role of disagreement produced arousal in interpersonal attraction and the subsequent development of a relationship. Rather than demonstrating a change in attraction between the rater and one subject, the study indicates that a person might be more attractive to an individual if other people produced arousal through disagreement. In addition, the study does not trace the effects of prior agreements on a subsequent disagreement.

Although the article is limited in possibilities for beginning to understand the genesis and development of human relationships, it is useful in possibly providing a clue to an important variable that may contribute to the experienced attraction of one individual for another.

# Interpersonal Attraction and Personality Theory

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Personality theorists have consistantly discussed the role of affixiety or arousal in personality development and/or the development of neurotic disorders. Much of what they say however, can be interpreted to provide support for an arousal reduction theory of attraction.

Freud (Hall and Lindzey, 1970; p. 43) for example, postulated that anxiety was a result of either internal or external threats of pain or destruction. The person becomes afraid because he is not prepared to adapt to the situation. Generally, the well-developed ego will serve the interests of the id and function so as to fulfill the pleasure principle (for example, anxiety reduction). Thus, the individual when confronted with another who disagrees with him becomes tense and anxious. If the individual can adapt or if the other person can remove the threat of disagreement by subsequently agreeing, tension or afxiety is reduced and the id drives are satisfied. Moreover, Freud postulated onat anxiety can be reduced through the process of identification. Unconsciously people model their behavior after those who have achieved success in areas in which the person is currently striving. Initial disagreement with subsequent agreement on a particular issue will make the person or some quality of that person more attractive. Of course, "The ultimate test is whether the identification ... [agreement]... helps to reduce tension; if it does the quality is taken over, if it is not it is discarded" (Hall and Lindzey, p. 46).

In a similar way, an arousal reduction theory of attraction can be accounted for by the learning theories of Dollard and Miller (1950). Initially disagreement with another person produces arousal. The reduction of arousal produced by subsequent agreement is rewarding. In addition, the pairing of that perceived individual through a classically conditioned association with the pleasurable arousal reduction makes that person more attractive. The effects of tension reduction on attraction can be further illustrated by physiological arousal produced by other means then disagreement. Two sexual partners erotically stimulate each other. Their subsequent climax and release of tension is rewarding, and both experience a greater closeness and attraction.

Wolpe (1958) suggests that in any normal individual, drive states arise which excite overt action. The resultant action if adaptive, dissipates the drive state or internal excitatory stimulation. Broadly speaking these actions that reduce arousal have been classified as sexual responses, assertive responses and relaxation responses. In as much as arousal produced by disagreement is dissipated through subsequent agreement, Wolpe's' principle contention applies. A subsequent reduction in arousal facilitates, flexible adaptive behavior and is

rewarding to the organism.

Cattell (Hall and Lindzey, 1970; p. 396-397) argues that the behavior of an individual can be expressed as a mathematical function of biologically based drives (ergs) and acquired attitude structures (sentiments). Thus in predicting a course of action for an individual one would examine the positive ergs and sentiments suggesting one course of action in combination with the negative ergs and sentiments relating to the same course of action. The more that positive ergs and sentiments are balanced with the negative ergs and sentiments, the more conflict. Conflict might be reduced by the changing of a negatively valenced erg or sentiment to a positive one. For example, a young woman could be physically attractive to a young man. He experiences attraction on the basis of her good qualities (physical and attitudinal) overbalancing her bad qualities. If there seems to be a balance of good and bad qualities, the young man might be quite ambivalent about the young lady. Now consider what could happen if the lady was aware of how she was being perceived, and she systematically altered either her physical appearance and/or her attitude structure. Conflict is reduced and interpersonal attractiveness is increased. Disagreement produced arousal and subsequent conflict resolution produced by agreement could improve interpersonal attractiveness.

In the area of biofeedback as well, the reduction of disagreement produced arousal through subsequent agreement could account for increased interpersonal attractiveness. Karlins and Andrews (1973) describe the kinds of self-deceptions or the systematic screening the individual undergoes in order to protect the self from information

that "violates social norms or upsets his self image" (p. 54). In the same vein Gardiner Murphy (in Barber, 1970) describes

the striped musculature of the arms, hands, trunk, neck, and by implication, other parts of the body, may be conceived to be used all the time in the battle of thought, especially the battle against thought, specifically the battle against recognition of information, and most of all, against information unfavourable to the self. (p. 49)

Thus the individual's body reacts grossly to protecting the self from information inconsistent with the self. The reduction of arousal caused by subsequent agreement with the individual's attitudinal set would have some physiological correlates as well. In individual who experiences increased relaxation through arousal reduction and who hears information that enhances himself (through agreement) would tend to seek out that other person. In short, increased physical attraction is experienced.

In the foregoing, questions have been asked as to what specifically might account for interpersonal attraction. A study by Stapert and Clore (1969) was reported wherein the resolution of disagreement produced arousal appeared to be an important variable in determining interpersonal attraction. Freud, Dollard and Miller, Wolpe, Cattell and biofeedback theory were then explored, providing an underlying structure supporting the argument that interpersonal attraction could be explained in arousal reduction terminology. A review of the literature as it specifically relates to the field of attraction research is warranted in order to provide a background of work that is already being done.

CHAPTER 11

As discussed heretofore, interpersonal attraction can be explained in terms of reduction of disagreement produced arousal. Such a formulation, as also previously indicated; would not be inconsistent with the mainstream of various personality theorists. However, various theories exist to account for the attraction of an individual to a partner and the development of a relationship.

Cognitive dissonance theory (Festinger, 1957) provides a framework in which one's treatment of another person will subsequently affect his liking for him. That is, if a person is to reward or punish another person he is initially neutral about, a considerable amount of mental energy will go into resolving the experienced dissonance. In this way for example soldiers during combat are taught to think of anyone, even women and children as the enemy. On the other hand, teachers, social workers and counsellors are taught to think of the people they work with as good or lovable.

In a different way Homans (1961) argues that people are attracted to each other on the basis that receiving esteem (rewards) from others is continent on his capacity to reward them. For example, as a politician rise: in fame and power, he becomes more attractive to others because of his increasing capacity to provide certain kinds of rewards in to them.

Heider (1958) explains attraction on the basis of a balance theory

wherein the individual strives to make his sentiment (positive or negative attitude) relationships consonant with their unit (perceived as belonging together) relationships. For example, in a family (unit) relationship, affect will tend to develop toward those feelings that will reflect 'familiness'. In gestalt terms also, propinquity' is important in that the nearer another person is, the more likely they will be perceived as belonging together (unit relationship). In a similar vein, various writers (Maissonneuve, Palmade and Fourment, 1952; Willerman and Swanson, 1952; Festinger, 1953; Byrne and Buehler, 1955; Byrne, 1961) suggest proximity as a determinent of who is attracted by whom. Generally these studies take the form of x percent of marriages take place when the two people live within y number of blocks of each other.

Newcomb (1961) espouses the view that people with similar attitudes are attracted to one another. At the University of Michigan he found that male students who liked each other, tended to have similar attitudes. Similarly, he found that given an opportunity to discover the attitudes of others, male students tended to like those perceived as having similar attitudes. Ostensibly, such a 'theory could provide a theoretical rationale for the computer dating service phenomenon.

On the other hand, Winch (1952) is an exponent of a complementary needs theory wherein each partner in a relationship enhances the other by fulfilling various personal deficiencies. That is, people tend to gravitate toward each other on the basis of their needs (strengths and weaknesses) balanced by their partner. For example, a person with a high need for dominance might be balanced with a person who

needs dominance or direction in his/her own life.

A variation of the above is the need completion principle put forward by such people as Cattell and Nesselroade (1967). Herein the emphasis is on social desirability in that

Every person tends to seek in a partner much the same set of desirables - good looks, intelligence, emotional stability etc. - but more so to the extent that he or she lacks them. (p. 356)

Unlike complementary needs theory, the need completion principle does not concern itself with the consequences of an individual's actions.

The plethora of foregoing theory, raises some vital problem areas. First, contradiction exists between personality similarity versus the complementary needs position as the basis for interpersonal attraction. Secondly, irrelevant issues cloud the literature. For example, work that centers on propinquity as an explanatory construct and its relationship to attraction is misleading because it is simply a logical argument. In the extreme, people who are near enough to be perceived have a greater chance to be attracted to each other, than those who are not near enough to be perceived. Finally the issues are further obscured by those who attempt to force the data to fit pre-existing theoretical constructs. This could be argued of researchers who appear to use cognitive dissonance or learning theory as central constructs. Because of the discrepancies and problems that tend to make research ambiguous in the area of interpersonal attraction, a re-examination of the literature is required. A subsequent reformulation of basic constructs will be offered.

4

First Berschied and Walster (1969) report that the presence of others is rewarding when one is particularly anxious, afraid, lonely, or unsure of oneself. For example, students tend to be more friendly, sociable, and joking during a period just before an examination. In this yein, Schracter (1959) demonstrated an increased affiliative tendency under anxiety conditions. College women were randomly ó. assigned to a high or low anxiety condition involving anticipated electrical shock. Because of a fabricated equipment malfunction, subjects were told that they would have a brief ten minute delay. They were given a choice of waiting alone in a private cubicle or in a room with other girls. Girls in the high anxious condition sought to be with other girls in sixty-three percent of the cases, whereas only thirty-three percent of the girls in the low anxious group expressed an affiliative tendency. Schracter in this experiment also asked the girls to indicate how strongly they felt about each preference. As was the case in the first part of the experiment, girls indicated a greater intensity towards affiliation in the high anxious condition as compared to the low anxious group.

In a similar way, Bovard (1959) examined the presence of social stimuli on physiological stress. Herein he proposed that animals in a psychological (restraint) stress condition as opposed to a physiological (extreme cold) stress condition could have the effects of that stress minimized by the presence of a familiar animal in the same situation.

The simplest hypothesis to account for the observed phenomenon at the human and animal levels is, therefore that the presence of another member of the same species stimulates activity of the anter<u>ior</u> hypothalmus and thus, as a by product, inhibits activity of the posterior hypothalmus and its centers mediating the neuroendrocine response to stress. Previous interaction with the other person or animal, as the case may be, could be assumed to accentuate this affect. (p. 269)

Thus the presence of other people can serve as a conditioned reinforcer in the sense of being an arousal or stress reducer. For example, members of the same family in Nazi prison camps served to calm each other down even in the face of extermination. Another example would be the extreme care that communist interrogators would take in separating American prisoners of war during the Vietnam war. As a group drawing strength from each other (stress reducing) they were difficult to break down, but separated they "broke" under the stress much more quickly.

Aronson and Linder (1965) argued that a person being liked is largely a function of the type of interaction between himself and the person experiencing the attraction. That is, if an individual initially relates in a negative manner to another person and subsequently becomes more positive, he will be more liked than if he would be uniformly positive in his relationship with that other person. This trend was also established by Stapert and Clore (1969)., They devised an experiment that might test the hypothesis that attraction is largely a, function of the order of positive and negative consequences in an interaction. At the same time, the present problem is to design an experiment to control for other possible explanations of the experienced attraction such as physical attributes and attitude similarity or difference.

### CHAPTER 111

### PROCEDURE

As mentioned previously, within research and personality theory a basis exists for arguing that disagreement produced arousal followed by subsequent agreement could be an important variable for studying interpersonal attraction. In this vein the following experiment was designed.

# Selection of Attractive and Unattractive Experimental Assistants

Professor Shank, a casting director of the Department of Drama, University of Alberta was approached with the view of selecting four actors who could respectively play the parts of an attractive male, an attractive female, an unattractive male, and an unattractive female. Four undergraduate students majoring in drama were referred to the writer. Over the course of two, one hour, individualized sessions each actor was given careful instruction in the role they were to play, the way they were to dress, their posture and even the kind of voice and diction they were to 'use. Voice and diction were felt to be important supplementary dimensions of each role.

# Empirical Determination of Differential Attractiveness in Experimental Assistants

Although the casting director and the experimenter were satisfied with the selection of the four actors for their parts, an assessment was designed to provide some empirical basis for saying one actor/actress was more attractive than another. Accordingly, four thirty-five millimeter photographs were taken of each actor;

close-up (front and profile) and full length (front and profile). During the photography sessions the actors were instructed to wear suitable clothing and to assume postures appropriate to the parts they were to play.

The photographs were arranged in sets of four (all poses of each actor) and mounted on display cardboard. All of the sets were shown to forty-five staff at the Alberta Vocational Center (Edmonton). Staff members were asked to inspect the photographs and rate each individual on attractiveness as measured by the Attraction Rating Scale (ARS) devised by the experimenter. See Appendix A. High scores denote greater attraction on this seven point scale. The results are as follows

'Attractive' female actuant				1	• 1		
'Attractive' female actress	•	•	۰.	•	•	5.67	
'Attractive' male actor							
'Unattractive' female actress	• •	•	•	•	•	4.96	i
	•	• 1	•	•	•	3.00	
'Unattractive' male actor	•	•	•	•	•	3.16	Ŭ

Invariably, the attractive actors were rated higher in attraction on the ARS than the unattractive ones. Thus some empirical basis was a established for declaring a male and female experimental assistant as measurably more attractive than the unattractive counterparts.

# The Experimental Overview

Once the actors were determined empirically to be attractive or unattractive, they were coached in their parts according to the following treatment conditions. In Table 2 below, 'A' represents an agreement interaction and "D' represents a disagreement interaction.

#### TABLE 2

# PROPOSED TREATMENT PATTERNS

	***************************************	=======================================	:=
GROUP	PHYSICAL ATTRIBUTES STEREOTYPE	PATTERN OF INTERACTION	•.
1	attractive female (good voice and diction)	AAAD	 0
2	attractive male (good voice and diction)	AAAD 🔍	
3.	unattractive female (poor voice and diction)	DAAA	
4	unattractive male (poor voice and diction)	DAAA	

That is, for example, the attractive female and male actors would invariably confront subjects in an agree, agree, agree, disagree pattern of interaction, whereas the unattractive male and female actors would confront subjects in a disagree, agree, agree, agree pattern of interaction.

### Subjects

Over one hundred (102) senior undergraduate students in the Faculty of Education at the University of Alberta, and over one hundred (104) adult upgrading students at the high school level in English at the Alberta Vocational Center (Edmonton) were involved in the study. In each group all students were asked to complete Thurstone's (1932) Attitude Toward Capital Punishment Scale. See Appendix B. In each case, the top scoring one third and the bottom scoring one third were asked to participate in the experimental stage of the project. Experimental Treatment

Subjects were randomly assigned to one of the four treatment

conditions. Table 3 below identifies the number of participants in each experimental group.

#### TABLE 3 /

	NUMBER	OF SUBJECTS IN EACH TREAT	MENT CONDITION
GROUP	N	STEREOTYPE	PATTERN OF INTERACTION
1	29	attractive female	AAAD*
2.	31	attractive male	AAAD
3	31	unattractive female	DAAA
4	31	unattractive male	S DAAA

\* A = Agreement Interaction, D = Disagreement Interaction

During the interaction, each subject was asked to express his/her view on capital punishment. Both subject and actor were presented with appropriate green or red cards indicating their partner's initial opinion on capital punishment. Of course, each actor was required to present pre-rehearsed arguments (See Appendix D) depending on the assigned formula and the expressed attitude of each subject. For example, if a subject who believed in capital punishment was assigned to Group 1, he/she would be introduced to the attractive female. Both would be given green cards with the inscription 'Express your own view of capital punishment the other person is FOR capital punishment', thus further giving the impression that both were subjects. The actor and the subject were asked permission to tape record the session 'to verify that in fact they were talking about capital punishment and not about something else'. The experimenter then left the room and the actress and subject were left to interact. In this case, the actress would agree on three separate occasions with the subject that capital punishment was necessary or good or whatever. The actress would terminate the interview by disagreeing with the subject. The disagreement could result from something the subject said or 'just that she had changed her mind'. Either one of the participants could then open the door thereby signaling the experimenter that the session was over. The experimenter would then give the impression that he wanted both parties to rate the other person. The experimenter would take the subject into a separate room and ask him/her to complete.two short paper and pencil tests.

Each subject was asked to rate the 'other person' on the Interpersonal Judgement Scale (IJS) (Byrne, 1971) and the Subjective Attraction Scale (SAS) designed by the writer. See Appendix E and Appendix F respectively.

Monitoring of Treatments

Each interview with all subjects was audio-taped. As a check on the experimental assistants, three teachers, carefully rained in sessions totalling about one hour each, were asked to rate the interactions as to whether or not they met minimal criteria established by the experimenter. The raters made judgements on sixteen taped segments representing each actor equally. Their responses on the Rating Experimental Interactions form (See Appendix G) were scored. Results of their rating indicate that on 97.9% of the cases, raters agreed that the actors were appropriately playing their roles.

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### Instruments

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As stated, the instruments planned for use in this study were the Attitude Toward Capital Punishment Scale, Interpersonal Judgement Scale, and a scale created by the writer to provide a subjective index of attraction.

The Attitude Toward Capital Punishment Scale was developed by Thurstone in 1932. Twenty-four sitems range from capital punishment for all criminals to those which reject capital punishment completely. Reliability estimates range from .59 to .88 (Lorge, 1939) and .79 to .85, (Ferguson, 1944). Test - retest reliability over a fifteen day interval on 501 school children is reported at .71. In addition to good content validity, Diggory (1953) reports construct validity correlations of +.26 and +.42 between this scale and Thurstone's Attitude Toward Punishment of Criminals Scale. For example, a typical item would be "Capital punishment may be wrong but it is the best preventative to crime". Subjects were asked to indicate agreement with the statement by a check mark (  $\checkmark$  ), disagreement with the statement by a cross mark ( X ) or uncertainty about the statement by a question mark ( ? ). Each checked item was scored according to a weighting system. All scored items were totaled. High total scores indicated attitudes for capital punishment whereas low scores indicated opposition to capital punishment.

The Interpersonal Judgement Scale (IJS) is reported to be used most frequently in attraction research (Byrne and Griffitt, 1973). The test is comprised of six items, each of which is of the seven point likert type. Subjects are asked to rate target persons on intelligence,

knowledge of current events, morality, adjustment, likeability, and desirability as a work partner. It is in the last two items that the two attraction scales are embedded. Specifically, subjects are asked to rate target persons on the basis of personal feelings and willingness to work together in an experiment. Scores range from 2 (low attraction) to 14 (high attraction). The first four items exist to disguise the tester's purpose in giving the test, and to lend credence to the apparent task of making interpersonal judgements. Byrne and Nelson (1965) report a split-half reliability (.85) on this two item response measure. Byrne and Griffitt (1973) claim that construct validity has been established to some degree by showing a relationship of the IJS to other measures purporting to assess attraction

such as: social distance scales; social choices; ratings of desirability as a date, sexual partner and spouse; voluntary physical proximity; eye contact; the affective dimension of the semantic differential scale; voting choices; and a number of additional verbal and non-verbal behaviors. (p. 318)

The third scale to be utilized for this study employed several items of the five point likert type. It was used as a subjective request for backup data. The Subjective Attraction Scale was designed to provide subjective attraction ratings of individuals across several dimensions of interpersonal interaction. The first five items are scored from low reports of attraction (1) to higher levels (5). The sixth item reversed the scoring order, going from higher levels (5) to lower levels (1) in order to check on whether subjects consistently reported their feelings for the target person.

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### <u>Data Analysis</u>

All subjects completed the Attitude Toward Capital Punishment Scale. The top scoring one third and the bottom scoring one third will be selected for the treatment phase of the experiment on the assumption that they will represent the most deeply held attitudes for or against capital punishment. In so far as the attitudes represent extremes, individuals holding their particular view are more likely to defend their position because of a sizable emotional investment. Subjects representing these extreme positions will be randomly assigned to one of four treatment conditions. After each treatment interaction subjects were asked to complete the Interpersonal Judgement Scale and the Subjective Attraction Scale. Both IJS and SAS were scored. Analysis consisted of 't' tests to determine differences between experimental groups, according to the following hypotheses.

### Hypotheses

From the foregoing the following hypotheses about attraction as measured by the IJS and the SAS are suggested.

 There will be no difference in attraction between group one (exposed to the AAAD sequence via an attractive female with good voice and diction) and group two (exposed to the AAAD sequence via an attractive male with good voice and diction).
 There will be no difference in attraction between group three (exposed to the DAÅA sequence via an unattractive female with poor voice and diction) and group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction).

Group three (exposed to the DAAA sequence via an unattractive female with poor voice and diction) will score higher on attraction than will group one (exposed to the AAAD sequence via an attractive female with good voice and diction).
 Group three (exposed to the DAAA sequence via an unattractive female with poor voice and diction) will score higher on attraction than will group two (exposed to the AAAD sequence

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via an attractive male with good voice and diction).
5. Group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction) will score higher on

attraction than will group one (exposed to the AAAD sequence via the attractive female with good voice and diction).

Group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction) will score higher on attraction than will group two (exposed to the AAAD sequence via an attractive male with good voice and diction):
 Groups three and four combined (exposed to the DAAA sequence via unattractive interviewers with poor voice and diction) will score higher on attraction than will groups one and

two combined (exposed to the AAAD sequence via attractive interviewers with good voice and diction).

### CHAPTER 1V

### FINDINGS AND CONCLUSIONS

### Introduction

Basically, seven hypotheses were formulated, dealing with the validity of the proposition that resolution of disagreement produced arousal could contribute to interpersonal attraction. Prior to presenting the results in the order in which each of the hypotheses were presented in the previous chapter, a brief review of the research methodology will be provided.

Selection of Subjects

As stated before, subjects were selected from students enrolled in senior undergraduate educational psychology courses at the University of Alberta, as well as from adult students enrolled in senior high school level English courses at the Alberta Vocational Center (Edmonton). Those candidates scoring in the top one third and in the bottom one third of Thurstone's Attitude Toward Capital Punishment Scale (1932) were selected for the experimental phases of the program.

Selection and Training of Experimental Assistants

As stated previously, four actors were recruited from the Department of Drama at the University of Alberta. All were carefully instructed in the roles they were to play, as well as appropriate apparel to be worn for each part. In addition, each actor was rated on attractiveness in order to empirically validate the roles they were to play. The

attractive actor and actress were to initially agree with the subject three times and finally disagree; while, the unattractive actor and actress were to disagree initially and subsequently agree three times in the experimental interaction.

# The Experimental Interaction

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Subjects were randomly assigned to one of each experimental condition. The experimenter indicated whether each of the participants (subject and experimental assistant) had (ostensively for the subject's benefit) rated strongly for or against eapital punishment. Subjects then discussed the issues until the carefully coached experimental assistant had completed the appropriate agreement disagreement sequence. Subjects were then asked to step into another room and complete the Interpersonal Judgement Scale and the Subjective Attraction Scale, with the following results.

There will be no difference in attractiveness between group one (exposed to the AAAD sequence via an attractive female with good voice and diction) and group two (exposed to the AAAD sequence via an attractive male with good voice and diction).

Subjects responses on the IJS and the SAS were scored and means were calculated for each group. To determine whether differences exist \* between groups, t tests were performed. Tables 4 and 5 below confirm that there is no difference between groups exposed to the attractive models utilizing the AAAD sequence on both the Interpersonal Judgement Scale and the Subjective Attraction Scale.



TABLE 4

As predicted, attractive models utilizing the same sequence (AAAD) were rated as equally attractive. Therefore it may be said that people do not differentially react to attractive males and attractive females utilizing the same particular strategy of interaction.

### Hypothesis 2

There will be no difference in attraction between group three (exposed to the DAAA sequence via an unattractive female with poor voice and diction) and group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction).

Subjects responses to the IJS and the SAS were scored and means determined for each group. To determine whether differences exist between groups, t tests were performed. Table 6 and Table 7 below confirms that there is a real difference between the groups exposed to the unattractive male model and the unattractive female model (both utilizing the DAAA sequence) on the Interpersonal Judgement Scale and the Subjective Attraction Scale.

#### TABLE 6

### t TESTS COMPARING MEANS BETWEEN GROUP 3 AND GROUP 4 ON THE IJS

Group*	N	X	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
3	31	11.80	1.80	3.315	real difference in
4	31	10.22	1.95		groups.

\*Group 3 - unattractive female utilizing the DAAA sequence 4 - unattractive male utilizing the DAAA sequence

### TABLE 7

t TESTS COMPARING MEANS BETWEEN GROUP 3 AND GROUP 4 ON THE SAS

GROUP*	о	N	•	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
<sup>°</sup> 3		31	22.03	4.25	3.448	real difference in
4		31	18.16	4.09	· · ·	<b>groups</b> (3

\*Group 3 - unattractive female utilizing the DAAA sequence 4 - unattractive male utilizing the DAAA sequence

Contrary to what was predicted, the unattractive male model and the unattractive female model were not rated the same on attractivenss even though they utilized the same treatment sequence (DAAA). Therefore, the possibility exists that people respond more favourably to unattractive females as compared to unattractive males even though both untilize the same particular strategy of interaction.

### Hypothesis 3

Group three (exposed to the DAAA sequence via an unattractive female with poor voice and diction) will score higher on attraction than will group one (exposed to the AAAD sequence via an attractive female with good voice and diction).

Subjects responses on the IJS and the SAS were scored and the means determined for each group. To determine whether differences exist be-
tween groups, t tests were performed. Table 8 below confirms the hypothesis that an unattractive female model utilizing the DAAA sequence can be rated as more attractive than an attractive female model utilizing an AAAD sequence.

#### TÁBLE 8

### t TESTS COMPARING MEANS BETWEEN GROUP 3 AND GROUP 1 ON THE IJS

		*==========	=======================================	~~~~~	
GROUP*	Ň	X	S	t VALUE	SIGNIFICANCE AT THE, O5 LEVEL
3	31	11.80	1.80	1 0 00	
1	29	19.90	1-83	1.920	real difference in groups

\*Group 3 - unattractive female utilizing the DAAA sequence 1 - attractive female utilizing the AAAD sequence

Table 9 below does not confirm the hypothesis that an unattractive female model utilizing the DAAA sequence can be rated on the Subjective Attraction scale as more, attractive than the attractive female model using the AAAD sequence.

TABLE 9

TESTS COMPARING MEANS BETWEEN GROUP 3 AND GROUP 1 ON THE SAS

GROUP*	N	x	S	tVALUE	SIGNIFICANCE
	<u> </u>		·	•	AT THE .05 LEVEL
3 1	. 31	22.03	4.25	1.402	no difference i
1	29	20.72	2.78		no difference in groups

\*Group 3 - unattractive female utilizing the DAAA sequence 1 - attractive female utilizing the AAAD sequence

Although the hypothesis was not supported when measured by the subjective instrument it is interesting to note that the means tend to differ in • the predicted direction and the t value approches but fails to establish significance. The hypothesis is supported however, by subjects ratings on the more established instrument, the Interpersonal Judgement Scale. Therefore it may be said that some support was found for the idea that people are more attracted to unattractive females utilizing a particular pattern of interaction then they are to attractive females using a different strategy.

#### Hypothesis 4

Group three (exposed to the DAAA sequence via an unattractive female with poor voice and diction) will score higher on attraction than will group two (exposed to the AAAD via an attractive male with good

voice and diction).

Subjects responses on the IJS and the SAS were scored and the means of each group were calculated. To determine whether differences exist between groups, t tests were performed. Table 10 and Table 11 below confirms that there is a real difference in the predicted direction between the way subjects respond to an unattractive female model utilizing the DAAA sequence and the attractive male model utilizing the AAAD sequence.

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#### TABLE 10

GROUP**	N	x	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
3	31	11.80	1.80	1.673	real difference ir
2	31	11(.09	1.53	1.073	groups

#### t TESTS COMPARING MEANS BETWEEN GROUP 3 AND GROUP 2 ON THE IJS

\*Group 3 - unattractive female utilizing the DAAA sequence  $2^{2}$  - attractive male utilizing the AAAD sequence

#### TABLE 11

	BE	t TEST TWEEN GROUP	S COMPARING 3 AND GROUP	MEANS 2 ON THE SAS	
GROUP*	N	- - X	======================================	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
3	31	22.03	4.25	2.04	
2	31	20.13	2.96	2.04	real difference in groups

\*Group 3 - unattractive female utilizing the DAAA sequence

2 - attractive male utilizing the AAAD sequence

As predicted, the unattractive female model utilizing a particular strategy was rated as more attractive than the attractive male model using a different strategy. Therefore it may be said that people would be more attracted to an unattractive female utilizing the resolution of disagreement produced arousal to her advantage than they would be attracted to an attractive male using a different tactic.

Hypothesis 5

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Group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction) will score higher on attraction than will group one (exposed to the AAAD sequence via the attractive female with good voice and diction).

Subjects responses on the IJS and the SAS were scored and the means of each group were calculated. To determine whether differences exist between groups, t tests were performed. Table 12 below indicates that a real difference does not exist between groups exposed to the unattractive male model using the DAAA sequence and the attractive female model using the AAAD sequence on the Interpersonal Judgement Scale.

#### TABLE 12

t TESTS COMPARING MEANS BETWEEN GROUP 4 AND GROUP 1 ON THE IJS

GROUP*	,	N	x	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
4	•	31	10.22	1.95	-1.390	
1	1	29	10.90	1.83	-1,390	no difference in groups

\*Group 4 - unattractive male utilizing the DAAA sequence 1 - attractive female utilizing the AAAD sequence

In fact, not only was the hypothesis not supported, but a trend opposite to what was predicted was noted. The mean scores on the IJS for the attractive female using the AAAD sequence were higher than the mean for the unattractive male using the DAAA sequence although the differences were not significant.

Table 13 below indicates that a real difference opposite to that which was predicted exists between groups exposed to the unattractive male model using the DAAA sequence and the attractive female model using the AAAD sequence on the Subjective Attraction Scale.

=======		BE	t TEST TWEEN GROUP	S COMPARING 4 AND GROUP	MEANS 1 ON' THE SAS	·
GROUP*	•	N	, X	s s	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
4		31	18.16	4.09	-2.816	real difference in groups in opposite direction of pre-
<u>]</u>		29	20.72	2.78 °	• • • • • • • • • • • • • • • • • • •	diction

#### TABLE 13

\*Group 4 - unattractive male utilizing the DAAA sequence 1 - attractive female utilizing the AAAD sequence

Contrary to what was predicted the attractive female was rated as more attractive than the unattractive male. Therefore it can be said that hypothesis 5 was not supported. Indeed, some evidence exists to suggest that the attractive female model will be perceived as more attractive than the unattractive male model inspite of the interaction strategy used.

## Hypothesis 6

Group four (exposed to the DAAA sequence via an unattractive male with poor voice and diction) will score higher on attraction than will group two (exposed to the AAAD sequence via an attractive male with good voice and diction).

Subjects responses on the IJS and the SAS were scored and means

calculated for each group. To determine whether differences exist between groups, t tests were performed. Table 14 and Table 15 below indicate that a real difference opposite to what was predicted exists between the group exposed to the unattractive male model using the DAAA sequence and the attractive male model using the AAAD sequence on both the Interpersonal Judgement Scale and the Subjective Attraction Scale.

#### TABLE 14

#### t TESTS COMPARING MEANS BETWEEN GROUP 4 AND GROUP 2 ON THE IJS

GROUP*	N	x	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
4	31	10.22	1.95		$\int \int dx = \frac{1}{2} \int $
, I	•			-1.954	real difference in groups in op- posite direction
2	31	11.09	1.53		of prediction

## \*Group 4 - unattractive male utilizing the DAAA sequence 2 - attractive male utilizing the AAAD sequence

GROUP*	N	x	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
4	3,1	18.16	4.09	-2.173	real difference
.l	1	• • •		Х. С. р. — — — — — — — — — — — — — — — — — —	in groups in op- posite direction of prediction
2	31	20.13	2.96		

#### TABLE 15

t TESTS COMPARING MEANS BETWEEN GROUP 4 AND GROUP 2 ON THE SAS

#### \*Group 4 - unattractive male utilizing the DAAA sequence 2 - attractive male utilizing the AAAD sequence

Contrary to what was predicted, the attractive male was rated as more attractive than the unattractive male on both test instruments. Therefore it might be said that the resolution of disagreement produced arousal strategy utilized by the unattractive male failed to affect subjects ratings of attraction when compared to an attractive male using a different strategy.

#### Hypothesis 7

Group three and four combined (exposed to the DAAA sequence via unattractive interviewers with poor voice and diction) will score higher or attraction than will groups one and two combined (exposed to the AAAD sequence via attractive interviewers with good voice and diction).

Subjects responses on the IJS and the SAS were scored and means calculated for each combination of groups. To determine whether dif-

ferences exist between each combination of groups, t tests were performed. Table 16 and Table 17 below indicate that no difference exists between the combined unattractive group utilizing the DAAA sequence and the combined attractive group using the AAAD sequence.

#### TABLE 16

t TESTS COMPARING MEANS OF GROUPS 3 AND 4 COMBINED WITH GROUPS 1 AND 2 COMBINED ON THE LIJS

GROUPS*	N	× ×	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
3 & 4	62	11.02	2.032	· · · · · · · · · · · · · · · · · · ·	
· ,		· · ·		0.059	no difference in
1 & 2	60	11.00	1.683	· .	groups

\*Groups 3 & 4 - unattractive male and female utilizing the DAAA sequence 1 & 2 - attractive male and female utilizing the AAAD sequence

#### TABLE 17

t TESTS COMPARING MEANS OF GROUPS 3 AND 4 COMBINED WITH GROUPS 1 AND 2 COMBINED ON THE SAS

GROUPS*	N / S	, <u>-</u> X	S	t VALUE	SIGNIFICANCE AT THE .05 LEVEL
3 & 4	62	20.58	4.453	0.074	no difference in
1 & 2	60	20.42	2.889		groups

\*Groups 3 & 4 - unattractive male and female utilizing the DAAA sequence 1 & 2 - attractive male and female utilizing the AAAD sequence

#### Summary of Results

Basically, no difference was discovered between groups exposed to attractive models using the agreement, agreement, agreement, disagreement sequence; while, there was a significant difference between groups exposed to unattractive models (female outscoring male) utilizing the disagreement, agreement, agreement, agreement sequence. Some evidence was found for the reduction of disagreement produced arousal hypothesis in that, the group exposed to the unattractive female out performed the group exposed to the attractive female on the Interpersonal Judgement Scale. Moreover, the group exposed to the unattractive female utilizing the DAAA sequence, rated their model as more attractive than the group who was exposed to the attractive male model. On the other hand, the unattractive male model using the same DAAA sequence, did not fare as well on the measures of attraction. In fact, when compared with the attractive models, he was rated as less attractive. Over all, when comparing attractive males and females as opposed to unattractive males and females using the resolution of disagreement produced arousal sequence, no difference was found on both the IJS and SAS. In summary, the results supported the use of the DAAA sequence via the unattractive female, but not with the unattractive male.

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#### Supplementary Analysis

To further explore the validity of the findings a supplementary data analysis was performed. It was felt that the 't' test while adequate for hypothesis testing in this study, might not provide a total picture of how each of the experimental groups interacted with each other. Therefore to rule out possible counter hypotheses, subject responses on both the IJS and the SAS were scrutinized by a two way analysis of variance. Table 18 and Table 19 indicate the result of this analysis.

#### TABLE 18

## SUMMARY OF ANALYSIS OF VARIANCE OF SEX OF ASSISTANT BY TREATMENT PATTERNS ON THE IJS

Factor	df	MS	F Ratio	р
Females - Males	1	0.238	5.798	0.018
AAAD - DAAA Patterns	1	0.941	0.229	not significant
Interaction - Sex X Pattern	1	0.358	8.720	0.004

TABLE 19

SUMMARY OF ANALYSIS OF VARIANCE OF SEX OF ASSISTANT BY TREATMENT PATTERNS ON THE SAS

Factor	df	MS	F Ratio	• • •	р.,	<b>a</b>	1
Females - Males	1	0.154	9.606		0.002		<u> </u>
AAAD - DAAA Patterns	ו	0.365	0.228		not sig	nifican	t
Interaction - Sex X Pattern	' : .]	0.834	5.195	1	0.025		

On both the Interpersonal Judgement Scale and on the Subjective Attraction Scale, subjects rated experimental assistants differentially by sex. An inspection of scores based on an analysis of treatment patterns demonstrated no difference between groups. A significant interaction between sex of assistant and pattern used was found. That is more specifically, an unattractive female model utilizing the DAAA sequence produced enhancing effects in the way subjects reported the level of attraction toward her.

In basic terms, the study demonstrated that the resolution of disagreement produced arousal, through the DAAA sequence, was an effective interpersonal strategy when used by unattractive females. That is, it was effective to the extent that it enhanced attractiveness when utilized by females less endowed then their model is utiful counterparts. Contrary to what was predicted, the strate p appeared to have no enhancing effect on the rated attractiveness of unattractive males.

#### CHAPTER V

### DISCUSSION AND IMPLICATIONS

## Introduction

Basically, the question this study attempted to answer is: to what extent does pattern of disagreement produced arousal in context with prior or subsequent agreements influence interpersonal attraction, particularly when two persons make an initial contact. The study was designed in a sense to be a firm test of the theory. If physically unattractive individuals could make themselves more attractive than attractive individuals simply by manipulating a pattern of disagreement and agreement, then emphasis in interpersonal functioning could be shifted from genetic determinents of attractiveness to situational control of who would be attracted by whom.

#### Discussion

In summary, the study demonstrated that there was some evidence that the unattractive female could enhance her interpersonal attractiveness to both males and females alike by manipulating a pattern of disagreement produced arousal followed by reinforcing agreements. No such evidence was found for males in this respect. In fact, the attractive male out performed the unattractive male despite (or because of) the experimental manipulation. The study outcome may be examined in several ways. First, when the study was originally being designed, an assumption was made based on the work of Stapert and Clore (1969) that all people would be increasingly attracted to males

and females who resolved disagreement produced arousal. Similarly, Aronsen and Linder (1965) had previously reported a gain phenomenon wherein

a gain in esteem is a more potent reward than invariant esteem, and similarly, a loss of esteem is more potent 'punishment' than invariant negative esteem. (p. 156)

However, probably social roles in the light of the present study, or 'what' men as opposed to women 'can get away with', is as significant a variable as are the pattern of agreements and disagreements. A study by Clore, Wiggins, and Itkin (1975) noted increases in attraction toward a female actress on video tape as a consequence of non verbal initial cold - subsequent warm sequences. Not only does the present study utilize real actors as opposed to symbolic video taped representations, but also both males and females are used in the treatments. Representation of both males and females as in the present study, provides for the researcher the opportunity to observe differences between males and females even though the disagreement - agreement sequences a're the same.

Griffitt, May and Veitch (1974) found that erotically produced sexual stimulation had a differential effect on males and females particularly when asked to evaluate the likeability of symbolically represented males and females. Females tended to rate symbolically represented males as more likeable than symbolically represented females. Sexual arousal had no influence on the males' judgement of symbolically represented females.

The foregoing result along with the finding of the present

study should call for more research that examines sex differences in scrutinizing who is attracted by whom and under what circumstances. A second factor contributing to the results of this study is the characteristics of physical attractiveness itself. Although Gormly (1974) demonstrated that interpersonal attraction among males was influenced by the proportion of disagreements received by the subject, the study did not differentially manipulate attractiveness levels in the accomplice. The present study did make an empirical distinction between attractive and unattractive assistants; however, level or degree of attractiveness was not accounted for. Perhaps a continuum exists from the very unattractive to the very attractive. As one moves from one end of the continuum different behavioral repertoires are accepted to greater and lesser extents. Therefore, it is possible that one treatment such as the DAAA sequence of interaction can have differing effects at different levels of attractiveness.

Some support for such a conjecture, is provided in a current area of research in interpersonal attraction that examines physical attractiveness as central to an individual's lot in life. Landy and Sigall (1974) found that physical attractiveness affected the grades received by college freshmen co-eds. The work of attractive co-eds was rated as better than the same work ostensively written by unattractive co-eds.

Similarly, Sigall and Ostrove (1975) found that the attractiveness of an individual could have an effect on a hypothetical penalty provided by hypothetical judges. Where the crime was unrelated to physical attractiveness the more attractive defendant received a lesser

sentence. In situations where the defendant used her attractiveness in the crime the penalty imposed was more severe.

Kleck and Rubenstein (1975) found that degree of physical attractiveness and not perceived attitude similarity, resulted in greater attraction over a two to four week period. In their discussion the authors claimed that the discontinuity of their study could be accounted for by methodological differences with the classic approach used by Byrne. They argued that Byrne utilized photographs primarily as stimuli whereas Kleck and Rubenstein "used actual persons in face to face contact" (p.ill2). The present study employed real persons, but in addition, manipulated the sequences of interpersonal agreements and disagreements.

Each of the studies above claimed physical attractiveness as a function of interpersonal attraction. Although Wilson and Nais (1976) supported the case for physical attractiveness as a basis personal opportunity and happiness, they allowed that each person could find happiness at their own level of attractiveness. The current investigation it is hoped, will provide insight into how unattractive females might enhance their interpersonal attractiveness.

However, an important limitation of the study exists in the basic design. Although the attractive male and female utilized one pattern of interaction and the unattractive male and female used another, each did not use the opposite pattern. In this way, each assistant could have acted as his her own control. Future experimentation in this area ought to examine the effect of different patterns of interaction

utilized by the same individuals regardless of their level of physical attractiveness.

#### Implications

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This project raises many questions, and provides insight into the area of interpersonal attraction. First, current work briefly outlined by Wilson and Nais (1976), indicates the importance of physical attractiveness as a determinent of success, status, and/or power. Their work nicely dovetails with the popular sociological construct of. "marriage as a marketplace" wherein the physical attractiveness of the female determines to what level she can aspire in marriage. The present study has demonstrated that within limitations, at least unattractive females can enhance their lot.

Secondly, the present study has implications for professionals in the area of teaching and counselling. Empirical evidence has been provided to support the thesis that some females can utilize strategies in helping to make themselves more attractive to those individuals they choose. Techniques and programs can be developed to assist those unfortunates who otherwise might needlessly suffer from the pain of rejection and loneliness.

Thirdly, and perhaps most important, the significance of this experiment lies in the fact that the 'formula' did not work for both females and males. Perhaps research in the area of interpersonal attraction ought to give more attention to differences in the way males and females attract others under controlled stimulus conditions. Corinne Hutt (1972) provides a massive amount of physio43

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logical and psychological data to support contentions that males and females are different and **a**s such, must be studied differently. In the past, much research in the interpersonal attraction area made the assumption that no differences exist between males and females.

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## BIBLIOGRAPHY

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#### BIBLIOGRAPHY

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Aronsen, E. and Linder, D. Gain and loss of esteem as determinents of interpersonal attractivenss. Journal of Experimental Social Psychology, 1965, 1, 156-171.

Barber, T., et al (Eds.) <u>Biofeedback and self - control, 1970</u>. Chicago: Aldine - Atherton, 1971.

Berschied, E. and Walster, E. H. <u>Interpersonal attraction</u>. Don Mills, Ontario: Addison-Wesley Publishing Co., 1969.

Bovard, E. W. The effects of social stimuli in response to stress. <u>Psychological Review</u>, 1959, 66, 267-277.

Byrne, D. The influence of propinquity and opportunities for interaction on classroom relationships. <u>Human Relations</u>, 1961, 14, 63-70.

Byrne, D. The attraction paradigm. New York: Academic Press, 1971.

Byrne, D. and Buehler, J. A. A note on the influence of propinquity upon acquaintanceships. Journal of Abnormal Social Psychology, 1955, 51, 147-148.

Byrne, D. and Griffitt, W. Interpersonal attraction. <u>The Annual</u> <u>Review of Psychology</u>, 1973, 204, 317-336.

Byrne, D, and Nelson, D. Attraction as a linear function of proportion of positive reinforcements. <u>Journal of Personality and Social</u> Psychology, 1965, 1, 659-663.

Cattell, R. B. and Nesselroade, J. R. Likeness and completeness theories measured by 16 personality factor measures on stably and unstably married couples. Journal of Personality and Social Psychology, 1967, 7, 351-361.

CTore, G. L., Wiggins, N. H. and Itkin, S. Judging attraction from non-verbal behavior: The gain phenomenon. Journal of Consulting and Clinical Psychology, 1975, 43, 4, 491-497.

Diggory, J. C. Sex differences in the organization of attitudes. Journal of Personality, 1953, 22, 89-200.

Dollard, J. and Miller, N. E. <u>Personality and psychotherapy: An</u> <u>analysis in terms of learning, thinking and culture</u>. New York: McGraw-Hill, 1950. Ferguson, L. W. Arevision of the primary social atttitude scales. Journal of Psychology, 1944, 17, 229-241.

Festinger, L. Group attraction and membership. In D. Cartwright and A. Zander (Eds.), <u>Group dynamics: Research and theory</u>. Evanston, Ill.: Row, Peterson, 1953.

Festinger, L. <u>A theory of cognitive dissonance</u>. Evanston, Ill.: Row, Peterson, 1957!

Gormly, J. A comparison of predictions from consistency and affect theories for arousal during interpersonal disagreement. <u>Journal</u> of Personality and Social Psychology, 1974, 30, 5, 658-663.

Griffitt, W., 'May, J. and Veitch, R. Sexual stimulation and interpersonal behavior: Heterosexual evaluative responses, visual behavior, and physical proximity. Journal of Personality and Social Psychology, 1974, 30, 3, 367-377.

Hall, C. S. and Lindzey, G. <u>Theories of personality</u>. Toronto, Ontario: John Wiley and Sons, Int. 1970.

Heider, F. <u>The psychology of interpersonal relations</u>. Toronto, Ontario: John Wiley and Sons, Inc., 1958.

Homans, G. C. <u>Social behavior: Its elementary forms</u>. New York: Harcourt, Brace and World, 1961.

Hutt, Corinne. Males and females. Harmondsworth: Penquin, 1972:

Karlins, M. and Andrews, L. M. <u>Biofeedback: Turning on the power of</u> your mind. New York: Warner Books, 1975.

Kleck, R. E. and Rubenstein, C. Physical attractiveness, perceived attitude similarity, and interpersonal attraction in an opposite sex encounter. <u>Journal of Personality and Social Psychology</u>, 1975, 31, 1, 107-114.

Landy, D. and Sigall, H. Beauty is talent: Task evaluation as a function of the performers physical attractiveness. Journal of Personality and Social Psychology, 1974, 29, 3, 299-304.

Lorge, I. The Thurstone attitude scales: 1. reliability and consistency of rejection and acceptance. <u>Journal of Social Psychology</u>, 1939, 10, 187-198.

Maissonneuve, J., Palmade, D., and Fourment, C. Selective choices and propinquity. <u>Sociometry</u>, 1952, 15, 135-140.

11.

- Newcomb, T. M. <u>The acquaintance process</u>. New York: Holt, Rinehart and Winston, 1961.
- Segal, E<sup>'</sup>. <u>Love story</u>. Toronto, Ontario: New American Library of Canada, 1970.
- Schracter, S. The psychology of affiliation. Stanford, California: Stanford University Press, 1959.
- Sigall, H. and Ostrové, N. Beautiful but dangerous: Effects of offender attractiveness and nature of the crime on juridic judgement. Journal of Personality and Social Psychology, 1975, 31, 3, 410-414.
- Stapert, J. C. and Clore, G. L. Attraction and disagreement produced arousal. Journal of Personality and Social Psychology, 1969, 13, 九, 64-69.
- Thurstone, L) L. (Ed.). The measurement of social attitudes. Chicago: University of Chicago Press, 1932.
- Will'erman, B. and Swanson, L. An ecological determinant of differential amounts of sociometric choices within college sororities. <u>Sociometry</u>, 1952, 15, 326-329.
- Wilson, G. and Nais, D. Beauty can't be beat. <u>Psychology Today</u>, 1976, 10, 4, 96-103.

Winch, R. F. The modern family. New York: Holt, 1952.

Wolpe, J. <u>Psychotherapy by reciprocal inhibition</u>. Stanford: Stanford University Press, 1958.



## APPENDIX A

## THE ATTRACTION RATING SCALE

Look at each set of pictures. Decide how attractive you find each individual and rate them on the scales below.

Person A



**a**'

## A P P E N D I X B

## INITIAL INSTRUCTIONS TO STUDENTS

123

I would ask that you take a few minutes to complete this questionnaire aimed at assessing your attitude toward capital punishment. Once I examine each of your rating forms I will ask some of you to participate in a second phase of the study. In this second phase you will be asked to discuss <u>your</u> view of capital punishment with another person. I would then ask you to complete two more short questionnaires. I will be able to revisit your class (with your instructor's permission) in about three weeks and will at that time be able to give you more details as to what we were attempting to accomplish in this experiment.



#### ATTITUDE TOWARD CAPITAL PUNISHMENT

This is a study of attitude toward Capital Punishment. On the next page you will find a number of statements expressing different attitudes toward Capital Punishment.

Put a check mark if you agree with the statement. X Put a cross if you disagree with the statement.

Try to indicate either agreement or disagreement for each statement. If you simply cannot decide about a statement you may mark it with a question mark.

This is not an examination. There are no right or wrong answers to these statements. This is simply a study of people's attitudes toward Capital Punishment. Please indicate your own convictions by a check mark when you agree and by a cross when you disagree.



	· · · · · · · · · · · · · · · · · · ·
1	. Capital punishment may be wrong but it is the best preventative to crime.
2	. Capital punishment is absolutely never justified.
3	I think capital punishment is necessary but I wish it were not.
4	. Any person, man or woman, young or old, who commits murder, should pay with his own life.
5	Capital punishment cannot be regarded as a same method of dealing with crime.
6.	Capital punishment is wrong but is necessary in our imperfect civilization
7.	Every criminal should be executed.
. 8.	Capital punishment has never been effective in preventing crime.
9.	I don't believe in capital punishment but I'm not sure it isn't necessary.
10.	We must have capital punishment for some crimes.
11. • #	I think the return of the whipping post would be more effective than
12.	I do not believe in capital punishment under any circumstance.
13.	Capital punishment is not necessary in modern civilization.
	We can't call ourselves civilized as long as we have capital punishment.
15.	Life imprisonment is more effective than capital punishment.
16.	Execution of criminals is a disgrace to civilized society.
17.	Capital punishment is just and necessary.
18.	I do not believe in capital punishment but it is not practically advisable to abolish it.
19.	Capital punishment is the most hideous practice of our time.
20.	Capital punishment gives the criminal what he deserves.
21.	The state cannot teach the sacredness of human life by destroying it.
22.	It doesn't make any difference to me whether we have capital punishment or not.
23.	Caninal punishment is justified only for premoditated murder.
24.	Capital punishment should be used more often than it is.

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ARGUMENTS FOR CAPITAL PUNISHMENT

A deterrent to murder and violent crimes. 1. 2. A way of adding discipline to modern society. An eye for an eye concept of justice for the victime 3. Recently there have been deliberate murders of policemen and armed guards 4. I just think that law breakers should pay. Committing murders is. 5. breaking a big law and should deserve a big punishment. Save the state money for keeping lifers. 6. ARGUMENTS AGAINST CAPITAL PUNISHMENT It is an inhuman practice. 1. It is a reflection of a primitive culture 🗸 2. I am against legalized murder by the state. 3. Provides violent models for our youth. 4. The state should be concerned with rehabilitation, not the elimination 5. of criminals. 6.7 It's a known fact that most murders are crimes of passion, and as such are unlikely to be repeated. Therefore it's unfair to execute these people.



## INTERPERSONAL JUDGMENT SCALE

# I. Intelligence (check one)

	I belie this person is very much above every e in intelligence.
	The lieve that this person is above average instructions and the second
	I believe that this person is slightly above average in intelligence.
	I believe that this person is average in interligence.
	I believe that this person is slightly below average in intelligence.
	I believe that this person is below average in intelligence.
	I believe that this person is very much below average in interligence.
	(chaok and)
	2. Knowledge of Current Events (check one)
•	I believe that this person is very much below average in his (her)
	I believe that this person is very much below average in his (her)
	knowledge of current events. I believe that this person is below average in his (her) knowledge
	of current events. I believe that this person is slightly below average in hig (her)
	I believe that this person is slightly below average in may (not)
	knowledge of current events. I believe that this person is average in his (her) knowledge of
	current events.
	I believe that this person is slightly above average in his (her)
	knowledge of current events. I believe that this person is above average in his (her) knowledge
	of current events.
	I believe that this person is very much above average in his (her)
	knowledge of current events.
-	
•	3. Morality (check one)
	and a second a second warely morel
,	This person impresses me as being extremely moral,
	This person impresses me as being moral.
	This person impresses me as being moral to a slight degree.
	This person impresses me as being neither particularly moral nor
	particularly immoral.
	This person impresses me as being immoral to a slight degree.
<u> </u>	This person impresses me as being immoral.
	This person impresses me as being extremely immoral.

4. Adjustment (check one)

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The latence that this person is extremely relative	, ·
I believe that this person is extremely maladjusted.	
I believe that this person is maladjusted.	
I believe that this person is maladjusted to a slight degree.	
I believe that this person is neither particularly maladjusted no	r
particularly well adjusted.	
I believe that this person is well adjusted to a slight degree.	
I believe that this person is well adjusted.	-
I believe that this person is extremely well adjusted.	-
	•
5. Personal Feelings (check one)	•
I feel that I would probably like this person very much.	
I feel that I would probably like this person.	
I feel that I would probably like this person to a slight degree.	
I feel that I would probably neither particularly, like nor partic	ularly
dislike this person.	e, <sup>1</sup>
I feel that I would probably dislike this person to a slight degr	eta.
I feel that I would probably dislike this <b>train</b>	
I feel that I would probably dislike this person very much.	
I IEEI LINEL I WOULD PRODUDLY CIDINE LINE POLICE	1
6. Working Together in an Experiment (check one)	and a start of the st
0. WOIKING TOBELIET IN an Experiment (eneck one) instants of a	a region of
I believe that I would very much dislike working with this person	in
an experiment.	
I believe that I would dislike working with this person in an	
experiment.	1 I I
I believe that I would dislike working with this person in an	• /
experiment to a slight degree.	
I believe that I would neither particularly dislike nor particula	rly Q
enjoy working with this person in an experiment.	
I believe that I would enjoy working with this person in an exper	iment
	,
to a slight degree. I believe that I would enjoy working with this person in an exper	iment
I believe that I would enjoy working with this person in an exper	100110.
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I believe that I would very much enjoy working with this person i	
an experiment.	
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Your Name

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APPENDIX F

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						checking	•
-	the space that most	closely descri	bes how you	feel. 、	•		
		•	)			м	
	1. I would like to	talk to this pe	erson again.			•	· •
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1	2. I would like thi						
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3	. I would trust th	is person.	÷ .	1			
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4	. I would like to	spend some time	with this p	berson.		•	
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ς	. I l'iked this per	``			• • • • • •		· · · ·
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6	. I disliked this	person.			٩	•	1 - 4 
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## RATING EXPERIMENTAL INTERACTIONS

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Listen to each tape segment. Please try to decide whether the experimental assistant clearly demonstrates that he/she has followed the disagreement, agreement, agreement, agreement, agreement (DAAA) sequence; the agreement, agreement, agreement, disagreement (AAAD) sequence; or neither (0).

						•	
1.	DAAA	AAAD	• 0	9. "DAAA		0	
2.	DAAA	AAAD	0	10. DAAA	AAAD	0	
-3.	DAAA	AAAD	0	11. DAAA	AAAD	0	
4.	DAAA .	AA AD		12. DAAA	_ AAAD	0	•
5.	DAAA	AAAD	0	13. DAAA	AAAU	<b>0</b>	`
6.	DAAA	AAAD	0	14. DAA	AAAD		
7.	DAAA	AÀAD	0	15. DAAA		0	•
8.	DAAA	AAAD	0	16. DAAA	AAAD		
				•			7)
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