

THE EFFECTS OF MOTIVATIONAL ORIENTATION AND
APPARENT EMERGENT SOCIAL STRUCTURE UPON
LIKING AND THE PERCEPTION OF POWER WITHIN
MIXED - SEX DYADS

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This is to certify that the

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**The Effects of Motivational Orientation and
Apparent Emergent Social Structure upon
Liking and the Perception of Power within
Mixed-Sex Dyads**

presented by

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ABSTRACT

THE EFFECTS OF MOTIVATIONAL ORIENTATION AND APPARENT EMERGENT SOCIAL STRUCTURE UPON LIKING AND THE PERCEPTION OF POWER WITHIN MIXED-SEX DYADS

By

Gregory Evans Price

The present research investigated the effects of motivational orientation and emergent social structures upon perceptual and interactional processes within mixed-sex dyads. Seventy female undergraduates, 35 high safety (and low esteem) and 35 high esteem (and low safety), were selected as participants in the study based on their scores on the Aronoff Sentence Completion Test (1971). Three trained male confederates were paired with the female subjects, forming 70 mixed-sex dyads. A 3 (Emergent Social Structure: superordinate, subordinate, and egalitarian) \times 3 (Confederates) \times 2 (Motivational Orientation: esteem and safety) factorial design was employed. Two measures were used to determine subjects' liking for their male partners: a Likert scale composed of modified items chosen from scales that successfully elicited liking responses in previous research, and a semantic differential. A semantic differential was also employed in the determination of the perception of differential power.

The initial part of the study predicted that (1) safety-oriented subjects would express the most liking when the confederate

occupied the superordinate role. An intermediate level of liking was predicted when the social structure called for the participants to be egalitarian; and (2) esteem-oriented subjects would express the least liking when the confederate occupied the superordinate role and the most liking when he occupied the subordinate role; again, when the social structure called for the participants to occupy egalitarian roles, the degree of expressed liking was predicted to be intermediate to that of the subordinate and superordinate structures. The six hypotheses -- three each for esteem-orientation and safety-orientation -- were not supported, either with the Likert measure of liking or with the semantic differential on liking. There were, however, two marginally significant interaction effects, both indicating differential responding to the confederates by the two motivational groups.

The second part of the study predicted when the power structure within a two-person group would be attended to or perceived. Hypotheses were that: (1) esteem-oriented subjects would be more aware of differential power when they occupied the subordinate role than when they occupied the superordinate role; and (2) safety-oriented subjects would perceive the power structure as more hierarchial when they occupied the superordinate role than when they occupied the subordinate role. These hypotheses also were not substantiated, but there was a significant main effect of confederates ($p < .05$). Planned comparisons also were conducted; these indicated no significant differences.

A prediction about the relationship between perceived differential power and expressed liking also was made. It was predicted that an inverse relationship existed between the two variables. A

Pearson product-moment correlation was computed, producing an $r = .467$ ($p < .001$). Thus, data suggested that women prefer men to have the greater influence within a dyad, at least in a task-oriented setting.

The results of the study and aspects of the design were discussed, particularly the role that the motivational orientation of the confederates played, the task utilized, and the effects of the temporal limitations of the experimental session. Tentative explanations for these results were presented. Implications of this analysis were discussed in terms of future research.

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This dissertation is dedicated to

MY SON

Gregory Antoine Price

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CHAPTER I

INTRODUCTION

Despite the fact that some of the more prestigious researchers in personality psychology have deemed motivation a significant issue for study in terms of understanding human behavior (see The Nebraska Symposium on Motivation, 1953-1975), there has been in the past little research relating motivation and interpersonal attraction. An exception to this general trend has been Aronson and his associates (1961, 1969; Aronson and Cope, 1968; Aronson and Linder, 1965; Aronson and Mills, 1959; Aronson, Willerman and Floyd, 1966)¹; much of this research, however has centered around the basic reinforcement paradigm, which generally is accepted as outmoded by most researchers of interpersonal attraction, the major exception being Byrne, and his associates (Byrne, 1969; Byrne and Clore, 1970; Byrne, Griffith and Stefaniak, 1967). There clearly exists a need for researchers who are involved in attempts to understand the dynamics of interpersonal attraction not to shy away from investigating the effects of the motivational component which obviously influences these processes. The

¹This is not an effort to omit the contributions of other researchers in the area of interpersonal attraction; rather, it is to point out the awareness that there are researchers involved with this topic. Certain of these studies are reported on later in this presentation.

premise that motivation plays a mediating role in processes of interpersonal attraction received tentative support in an unpublished study by Price (1976) which suggests that motivation indeed does affect the process of mate-selection. As mate-selection is viewed as an ultimate goal of interpersonal attraction processes, it seems most logical that if motivation -- in the Price (1976) study this meant esteem-orientation versus safety-orientation as outlined by Maslow (1970) -- serves a mediating role at this more advanced level, then it probably has equivalent effects upon earlier stages of the attraction process. What seems to be needed is a comprehensive program of research that will encompass the "process" components of interpersonal attraction, and not simply one that stresses the antecedents and consequents of that process. Such a program would require considerations of personality as well as social and situational variables, and the means by which these factors interact to form an interpersonal matrix; that is, the "process" of interpersonal attraction. It would be ideal if psychologists were able to conduct much of their research within the "field;" however, such research often is not feasible, in part because of ethical considerations and in part because of the limitations of the many measuring instruments that often are employed. Additionally, to obtain a secure grasp of process phenomena, it often is best to seek it in a somewhat controlled environment. It is primarily for this latter reason that the present study was conducted in a laboratory setting.

When the question "What attracts one person P to another Q?" is raised, what is being asked at a more phenomenological level is

"Why does Person P like Person Q?" or "What is it about Person Q that makes Person P like him/her?" In short, the essence of attraction lies in the question of why people like people. It seems that the opposite of this question -- that is, why do people dislike people -- is also a relevant issue, which the present study investigated from both a personality perspective and a social perspective. The next question, at a higher level, is what are the variables producing attraction? While it is understood that, at this juncture, it is not possible to conceptualize a model that can encompass all variables producing attraction, a postulation of major variables affecting attraction is possible; and the contention here is that (1) sex of a person P, (2) P's motivation level (i.e., whether he or she is esteem-oriented or safety-oriented), and (3) the emergent social structure (i.e., hierarchical: superordinate and subordinate, and egalitarian structures) in which the interactions between P and the other Q take place, are major components of attraction.

Just as it is not possible to take note of all the variables interacting to produce liking or attraction, it also is not possible to conceptualize all of the products of the process generated by the interaction of these variables. Therefore, in this study only one of the more obvious "products" was considered; specifically, the power relationships within the dyads. In summary, the aim of the present study was to determine the (attraction to) another, and the perception of power within the relationship. Before outlining hypotheses pertaining to the study, reviews of the areas of interpersonal attraction, motivation (specifically from the Maslovian or fulfillment theory

viewpoint), social structure, and power (particularly the phenomenological aspects) are in order.

Interpersonal Attraction

There to date have been three basic approaches to the understanding of interpersonal attraction. These approaches have been via learning theory, exchange theory, and balance theory; in some cases certain aspects of two and even all three have been combined to provide predictions about attraction behavior. These models, or approaches, to a greater or lesser degree, adhere to some kind of reinforcement model in studying attraction. An example of a pure reinforcement explanation of attraction may state that attraction is "a positive linear function of positive reinforcements received from [another]" (Byrne and Nelson, 1965, p. 662). There are, however, many problems associated with such a definition, the primary difficulty lying in the fact that since every action an individual makes is rewarding or reinforcing, the number of possible rewards are legion (Murstein, 1971); hence, the determination of the specific behaviors (and the subsequent rewards) leading to attraction are vague at best. Phrased another way, how can one discern reinforcing behaviors from non-reinforcing behaviors?

The greatest amount of research in adapting a learning model to the study of interpersonal attraction has been undertaken by Byrne and his associates (e.g., Byrne, 1960; Byrne, Baskett and Hodges, 1969; Byrne and Clore, 1970; Byrne, Ercin and Lamberth, 1970; Byrne and Griffith, 1966). In the Byrne and Clore (1970) study, attraction was viewed as one of a general class of evaluative responses; this viewpoint utilized a classical conditioning model. Within their model

a number of stimuli -- such as similarity of attitudes -- are assumed to function as unconditioned stimuli. Similarity is presumed to elicit a positive response in most individuals because they basically like and accept themselves. The strength of such a rationale has been directly questioned by the present author (Price, 1976) and more implicitly by Goldstein and Rosenfeld (1969) who found that low self-esteem subjects showed a greater preference for similar Os whereas high self-esteem subjects displayed a preference for dissimilar Os.

Byrne and Griffith (1973), in providing a concise review of the attraction literature, identified three research designs that generally are employed in research on the influence of personality upon attraction. In one approach, existing attraction pairs such as friends, fiances, or spouses are selected and then assessed with respect to one or more personality variables, with the scores of the series of pairs being correlated. Within a second approach, personality measures are obtained, and then previously unacquainted subjects are selected on the basis of their test scores and placed in an interactive situation, followed by an assessment of their attraction. Byrne and Griffith (1973) state that "in neither design is there control of the additional stimulus determinants of attraction beyond the small array of personality characteristics under study, and the relationship between the personality-relevant behavior of the subject and that of the target is unknown or nonexistent" (Byrne and Griffith, 1973). The third design -- one that Byrne often has employed -- allegedly eliminates these two problems. In this design, the subject's personality-relevant behavior consists of his responses to the instrument used to assess personality

characteristics, and he subsequently is exposed to the responses of the target to the same instrument, with other stimulus elements experimentally controlled. While it is accurate to state that this third design to an extent eliminates the problems mentioned, it also creates a new problem, since it limits radically the range of generalizability of the results produced.

The laboratory investigation of interpersonal attraction within a reinforcement paradigm has had as its goal the articulation of the effects of a variety of stimulus variables upon a single response variable (i.e., attraction). Byrne, Ervin and Lamberth (1970) assumed that attraction was a positive linear function of the proportion of weighted positive reinforcements associated with the object of attraction. These researchers, utilizing this reinforcement paradigm, tested the model in a non-laboratory "real-life" situation. Recognizing the limitations imposed on extra-laboratory research, Byrne et al. created a limited dating situation to minimize these limitations.

Specifically, it was hypothesized that in a computer-dating situation (a) attraction would be a joint function of similarity of attitudes and physical attractiveness, and (b) the greater the extent to which the specific elements of similarity are made salient, the greater the relationship between similarity and attraction (Byrne, Ervin and Lamberth, 1970). The authors constructed a 50-item questionnaire that measured five variables: authoritarianism (Sheffield and Byrne, 1967), repression-sensitization (Byrne, Griffith and Stefaniak, 1967), attitudes (Byrne, 1969), self-concept (Griffith, 1970) and EPPS items (the particular items used were not elaborated). Previous

research had shown this instrument to be effective in eliciting responses of similarity and dissimilarity. In order to provide a baseline for similarity effects under controlled conditions, a simulated stranger condition was run in which the other person was represented only by his or her purported responses to the attitude questionnaire. The simulated scales were prepared to provide a .33 and .67 proportion of similar responses between stranger and subject. Subjects were asked to read the responses of an opposite-sexed stranger and then to make a series of evaluations via a version of the Interpersonal Judgment Scale. The results of this study indicated that there was a positive relationship between physical attractiveness and attitude similarity.

Byrne has contributed a great deal to the attraction literature particularly in terms of attraction to strangers within the confines of the laboratory. Little research, however, has been generated from this frame of reference with any immediate applicability. It should be noted that in the typical personality-similarity study, as well as the usual attitude paradigm, the subjects have never interacted with the alleged strangers (as the latter did not actually exist!). The subjects, therefore, were unable to form any reactions to the stimulus person. Any statement about such reactions (i.e., the amount of attraction felt toward the other) must at best be accepted as tentative.

The Exchange Theory Model

The Byrne paradigm focused mainly on the factors causing an individual to be attracted to another. Exchange theory, on the other hand, has concerned itself with the transactions between members of a

dyad. The individuals contributing most to this area of knowledge have been Homans (1959), and Thibaut and Kelley (1959). The theory generally speaks in terms of the reward-value and cost-value of behaviors enacted within the dyad. Each member in the dyad, in some form or fashion, assesses the worth of the rewards provided by a set of behaviors against the price which he or she must pay to receive that set of behaviors (i.e., the costs which accrue to those behaviors). Thibaut and Kelley introduced the notions of comparison level (CL) and comparison level for alternatives (CL_{ALT}) to handle the problem of deciding between two rewarding or two costly alternatives. Attraction is dependent upon the degree to which the profits (i.e., rewards > costs) of the exchange is above a minimum level of expectation (i.e., the CL) which is a function of past experiences, assessment of the current situation, and the general adaptation level of the individual at any one particular moment. Satisfaction or dissatisfaction, however, is also contingent upon the availability of alternatives to the present relationship. If a person is dissatisfied in a relationship yet finds that the best alternative available to him or her presents outcomes (i.e., rewards minus costs) which are not much more favorable, he or she may remain in that relationship.

Similarity -- particularly attitude similarity -- has been noted as a very important factor within the exchange theory perspective. This is because attitude similarity provides consensual validation of the norms and beliefs that one cherishes (Berscheid and Walster, 1969; Murstein, 1971).

Exchange theory, akin to learning theory, also has its shortcomings. Specifically, difficulty arises with attempts to explain several types of attraction relationships. Among these, as noted by Murstein (1971), are "love systems" and "threat systems." Despite these shortcomings, many theorists -- including Murstein -- incorporate exchange theory into some aspects of their approaches to interpersonal attraction.

As stated earlier Homans (1959, 1973) also postulates an exchange theory explanation of attraction. He expresses the feeling that attraction is not "altogether unambiguous." He states:

Most of us assume that when a man fails to get a reward under circumstances in which he has received one in the past, and in which, therefore, he has come to expect one; or when he has received an unexpected punishment, he will feel and display some degree of an emotion we call anger, and direct it at the perceived source of the punishment or some surrogate. This is, in effect, the frustration-aggression hypothesis. We assume too that this response is to some degree innate and not learned. Do we also assume, by symmetry, that when a man gets a reward under circumstances in which he did not expect one, or fails to receive a punishment when he did [expect one], he will feel and display some emotion opposite to anger, and direct it at the perceived source of the reward? ...I certainly assume that some response of this kind, directed at the person perceived as the source of reward, is one of the things we tap in confidential sociometric tests that ask each member of a group to say which other members he likes or approves of (Homans, 1973, p. 52).

Balance Theory

First propounded by Heider, balance theory has accrued an increasing amount of interest and research in recent years (Murstein, 1971). Balance theory concerns itself with attitudes and perceptions of a person P towards another person Q and/or an object (X); sometimes, instead of an object there's a third person Q. The two types of

relations studied are sentiments and units, the former referring to P's feelings about or evaluations of O or X (either positive or negative), while the latter refers to the perception of unity, either of two persons or of a person and an object. When the perceived units and/or sentiments are seen as lacking tension, they are said to be in a balanced state. When a system (i.e., a relationship between P, O and X) experiences tension, it is said to be lacking balance. For a more comprehensive statement of Heider's theory, one is directed to Abelson et al. (1968).

A slightly different approach to balance theory was proposed by Newcomb (Newcomb and Svehla, 1937; Newcomb, 1953, 1959, 1961). This theory of balance is labelled the A-B-X theory. The theory is based upon the general hypothesis that "there are lawful relations among beliefs and attitudes held by an individual and that certain combinations of beliefs and attitudes are psychologically unstable, resulting in events leading to more stable combinations" (Shaw and Constanzo, 1970, p. 193). The difference between Newcomb's theory and that of Heider is present in that the former extended the theory to encompass communication among individuals and relations within groups.

The minimal components of an A-B-X system are (1) A's attitudes toward X, (2) A's attraction toward B, (3) B's attitudes toward X, and (4) B's attraction toward A. According to the balance scheme presented by Newcomb, attraction most likely will occur when the attitudes and attraction of A and B are similar; that is, when there is a symmetrical relationship between the (Heiderian) units and sentiments between A and B.

Murstein (1971) raises several criticisms of balance theory, particularly as the theory relates to interpersonal attraction. These include the lack of a quantitative metric, the absence of a conceptual clarification of liking, and, perhaps the most important criticism with respect to the present paper, the absence of consideration of the role of the self-concept.

It seems somewhat evident that the three approaches to interpersonal attraction -- learning theory, exchange theory, and balance theory -- all have some shortcomings in explaining attraction; each, however, can provide tremendous contributions to a partial understanding of the total attraction process. Several theorists have incorporated into their approaches to attraction aspects of two or all of these theoretical approaches, either explicitly stated or implicit in the approach. Such a theory or approach is Murstein's (1971) Stimulus-Value-Role (SVR) theory of mate-selection; his approach, however, leaves many questions unanswered as well (Price, 1976).

Motivation

In the study by Price (1976), cited above, the relevancy of motivation to the mate-selection process was investigated. The issue that provoked this study was the apparent lack of consideration by theorists of the effects of motivation -- specifically, esteem-versus safety-orientations -- upon mate-selection processes. Results indicated that motivation level indeed does have an effect upon the processes of mate-selection (e.g., in terms of the importance of value consensus to the development and maintenance of a dyad). The

theoretical framework upon which this study was based was the personality theory of Abraham Maslow (1953, 1970).

Maslow's Theory of Personality Motivation

Maslow belongs to the group of psychologists that has been labelled the "Third Force" or "Fulfillment Theorists," the other "forces" being Freudian psychoanalysis (and its variations) and learning theory or behaviorism. Third Force theorists (irrespective of whether they term themselves as field theorists, phenomenologists, fulfillment theorists, or self-theorists) tend to share the view that humans are a unique, dynamic whole organism capable of self-awareness and self-direction. Additionally, these approaches assume that (1) human beings are not predetermined, and (2) human beings, above all else, must have meaning in their lives.

There are two aspects to the development in Maslow's theory. The first concerns itself with the need for personality theorists to conceptualize personality from a holistic approach. For Maslow, a human being is an integrated whole. Taking this stance produces several immediate implications: (1) The whole individual is motivated, not just a part of the individual; (2) satisfactions, therefore, are received by the whole individual and not parts of her/him; and (3) people are multiply-motivated. An example cited by Maslow (1970) for the first two implications in the case of hunger. When a person experiences pangs of hunger, the experience is not that of "My stomach is hungry;" rather, the phenomenological experience is that "I am hungry." Similarly, when said person carries out goal-appropriate

behaviors (i.e., eats some food) the satisfaction coming from this behavior is not experienced as "My stomach is satisfied" but "I am satisfied." The behavioral activity noted to exemplify the third implication is sexual behavior. In short, when people engage in sexual activity, they are not merely reducing tensions experienced in the genital areas, thus satisfying these needs; to the contrary, they may very well (and often are!) be satisfying these sexual needs, along with the need for closeness, the need to be cared for (succorance) and its opposite, the need to care for another (nurturance), aggressive needs, etc.

The second aspect of the development of Maslow's theory is the utilization of the notion of motivational states, in preference to drives or drive-states. Motivational states, as viewed in this theory, refer to states of the human organism that are never-ending (dynamic), fluctuating, and complex. The aim of the personality psychologist, therefore, should be the discernment of relationships between these motivational states. The arguments advanced against drives are the following:

- (1) To categorize or list drives suggest that all drives are equivalent (in effect) upon the organism;
- (2) Drive theories assume that drive-potency is equivalent; if this in reality was true then organisms would be in a constant state of conflict, eventuating finally in the death of the organisms;
- (3) Drive theories assume that each drive has an equal probability of occurring;
- (4) Drive theory assumes that drives are isolated; and

(5) With drive theory the dynamic aspects of drives are ignored.

Maslow posited that there were five basic motivational states, arranged in an ascending hierarchy, the "lower" needs occupy the lower rungs of the hierarchy while the "higher" needs are located further toward the top of the hierarchy.

"These basic needs arrange themselves in a fairly definite hierarchy on the basis of the principle of relative potency; thus, the safety need is stronger than the love need, because it dominates the organism in various demonstrable ways when both needs are frustrated" (Maslow, 1970, pp. 97-98).

The motivation levels posited by Maslow, in ascending order, are physiological needs, safety needs, love and belongingness needs, esteem needs, and self-actualization needs. Additionally, Maslow suggested that there are also aesthetic needs and cognitive needs (i.e., need for meaning) but where these needs should be positioned within the hierarchy was not clarified. "It is central to this idea of need hierarchy that, before an individual can begin functioning on a more advanced level, the earlier, more basic, levels have to be relatively well-satisfied" (Aronoff, 1971, p. 1).

The concern of this study is with two of the need, or motivation, levels as postulated by Maslow, the safety level and the esteem level. Safety needs center around the requirements for a predictable, secure and orderly world. Maslow categorized the various manifestations of the safety needs as the needs for "security; stability; dependency; protection; freedom from fear, from anxiety and chaos; need

for structure, order, law, limits; [also] strength in the protector" (Maslow, 1970, p. 39).

Esteem needs center around the issue of firmly establishing a high sense of self-worth, which is achieved both through the appraisal of actual competence in one's own activities and through receiving the esteem of others. According to Maslow, there are two components to the esteem level of motivation. These components are: (I) the desire for strength, for achievement, for adequacy, for mastery and competence, and the desire for independence and freedom; (II) also, the desire for prestige, for reputation, for status, for dominance, for recognition, for attention, and for appreciation (Maslow, 1970). Other manifestations of these needs are indications of expressed desires for self-reliance, self-acceptance, power, confidence, competition, truse in one's own abilities or self, leadership, and autonomy" (Aronoff, 1971, p. 20). The means by which these motivation-orientations were measured are discussed in a later chapter.

Social Structure

Several writers (e.g., Moore, 1969; Collins and Raven, 1969) have written about "social structure;" most researchers, however, appear to accept it as a "given" and fail to operationalize the phrase. One plausible reason is that the defining of social structure can lead to extreme reductionism, and eventually the "social structure", as defined, becomes a conglomeration of components, and not a structure after all.

Moore (1969) examined definitions of social structure, and produced five minimal definitions. These were in terms of

- (1) patterns of actions;
- (2) social systems;
- (3) social differentiation;
- (4) statistical, distributive categories; and
- (5) orderly sequence.

In discussing these definitions, Moore pointed out the shortcomings of each. Of the five he seemed to display a preference toward the social systems' definition. Moore stated:

The phrase "social systems" has served to highlight the sociological levels of analysis of human behavior, by emphasizing the emergent properties of any order of phenomena which consists of elements and their interactions (emphasis, the present author)...social systems comprises values, rules (i.e., norms), as well as interacting individuals...It should be noted that the social system approach to social structure is not rooted entirely in strictly behavioral terms: acceptance and internalization of values and norms are left open for determination and explanation; the attributions and actions demanded by the system are specified for the actors (Moore, 1969, pp. 286-287).

Collins and Raven (1969), in discussing group structure, noted that the regularity of person-to-person and person-to-task relationships observed in many groups has led social scientists to search for a patterning of interpersonal relationships transcending the personalities and peculiarities of a given group. From a review of these efforts these authors defined social structure as "the relationship among elements of a social unit. The elements of the structure may be individuals, or positions for which no person has yet been designated. The dimensions of the structure (i.e., the ways in which the elements can be interconnected) can include communication, attraction, prestige, role, power, locomotion and dependence" (Collins and Raven, 1969, p. 103). The definition provided by Collins and Raven is very important

with respect to an understanding of the relationship between power and social structure that is discussed below.

Arriving at a definition of social structure based on the definitions posited by Collins and Raven, and Moore should not present too difficult a problem. What is required is an examination of the two definitions to search out their commonalities (stated either explicitly or implicitly). One commonality is the importance of the relationship between elements, and their interactions ("interconnections," as phrased by Collins and Raven); another is the presence of rules or norms, not necessarily stated. Moore stated that "all social entities depend, to some degree, on what I have called conscientious compliance -- socialization, in the strongest sense of the word" (1969, p. 289). Implicit within both definitions cited above is that there exists some purpose or aim to be sought after by participants for whom a specific social structure is salient, whether such purpose be the completion of a task or the facilitation of interpersonal interactions. Included among the "elements" of the system must be the concept of role. Roles have been defined in numerous ways (see Biddle and Thomas, 1966). In one conception role is "defined as the specification which determines how an individual might be recruited into a position (within a particular social structure) and the rules of action which regulate the behavior of an individual assigned to a position" (Collins and Raven, 1969, p. 107). The concept of prescriptions may aid in the clarification of roles. Prescriptions are behaviors that indicate that other behaviors should (or ought to) be engaged in. They may be specified further as demands or norms, depending upon whether they are overt or covert, respectively (Biddle and Thomas, 1966).

From the above, social structure tentatively may be defined as consisting of an interlocking network of roles and norms or the rules for action (i.e., interactions) between individuals who are, or whom may become participants, in that structure. The dimensions of a social structure can include communication, attraction, prestige, power, and dependence (Collins and Raven, 1969).

Power

People have written about the role of power in human affairs at least since Plato described the decline of the ideal state and the rise of the despot:

When nature or habit or both have combined the traits of drunkenness, lust, and lunacy, then you have the perfect specimen of the despotic man...When a master passion is enthroned in absolute dominion over every part of the soul, feasting and revelling with courtesans and all such delights will become the order of the day...Goaded on to frenzy,...he will look out for any man of property who he can rob by fraud or violence...When the numbers of such criminals and their hangers-on increase and they become aware of their strength, then it is they who, helped by the folly of the common people, create the despot out of that one among their numbers whose soul is itself under the most tyrannical despotism (The Republic, pp. 572-574).

The type of "power" implied by the above passage connotes force or coercion. There are, however, several types or classes of power and numerous researchers (e.g., Cartwright, 1959; French and Raven, 1959; Kelman, 1974) have investigated various aspects of power.

The Power Motive

One of these viewpoints or aspects (of power), which has recently come to the fore, has been that of power as a motive (Veroff, 1957; Uleman, 1973; Winter, 1973). As Winter (1973) summarizes the

views of both Veroff and Uleman, an account of the power motive from the Winter perspective is presented here.

To begin, Winter defines social power as "the ability or capacity of O to produce (consciously or unconsciously) intended effects on the behavior or emotions of another person, P" (Winter, 1973, p. 5). Close scrutiny of this definition of power reveals similarities between it and the definition of power provided by Cartwright (1959). Winter's goal was not to formulate a redefinition of power nor was it to suggest innovative means of measuring power; rather, his goal was the discernment of the extent to which people want or strive for power.

An interesting point about Winter's position is his approach to power. As opposed to analyzing the bases of power (French and Raven, 1959), or looking at the goals of influence or power (Lasswell and Kaplan, 1950), Winter has attempted to conceptualize power as a three-dimensional semantic space, encompassing the bases of power, the goals of the influence, and the reactions of P to attempts at influence by O. Winter labeled these dimensions as (A) the relative inequality of O and P in status, strength, etc.; (B) the legitimacy or morality of the action; and (C) the resistance of P to O's action. "These three dimensions seem quite similar to the more general dimensions of meaning proposed by Osgood et al. (1957): legitimacy suggests evaluation, status inequality suggests potency, and resistance fits with activity" (Winter, 1973, p. 9).

To assess this power motive Winter utilized a six-card modified TAT. A response was scored for the n Power if power imagery was present (that is, if the "actor" was concerned about his impact; i.e.,

about establishing, maintaining, or restoring his prestige or power in the eyes of the world) (Winter, 1967).

Some of Winter's manipulations are questionable, at least in the eyes of the present author. For instance, to manipulate the arousal of power, subjects were shown film clips of the presidential inauguration of John Kennedy. A group of control subjects were shown film strips which were assumed to be lacking arousal potential. It was assumed by Winter that the inauguration would be perceived by subjects as having a great deal of power being placed in Kennedy's hands (this, despite the fact that this potential power had been wrested from his hands via the assassination three years prior to Winter's study!). The point of contention here is that a much stronger manipulation of power arousal via video materials could have been chosen. It would be interesting to test Winter's posultates about a power motive today by exposing the experimental subjects to some recent movies (e.g., "Jaws," "One Flew Over the Cuckoo's Nest") in which power is quite noticeably a theme.

In summary, Winter has attempted to treat power as a personality variable -- as a motive -- and not a situational variable as it is generally treated. Such efforts as those by Veroff, Uleman, Winter, and more recently by McClland (1975) in the long run may prove fruitful; it is doubtful, however, that the critical questions concerning power -- such as "Under what circumstances can it be expected that power will be used to benefit the masses as opposed to benefiting an elite set of individuals?" -- can be answered by such research.

While Winter, Veroff, and McClelland speak in terms of a power motive, it is by no means the sole avenue of investigation of the phenomena of power. Bertram Raven and John French, two researchers who are more situationally-oriented, speak of power in terms of the numerous bases of power.

By the "basis of power" French and Raven (1959) are referring to "the relationship between O and P which is the source of that power [note: their theory of social influence and power is limited to influence on the person, P, produced by an agent, O, where O can be either another person, a role, a norm, a group, or a part of a group; p. 151]. These researchers note that there are many possible bases of power which could be listed, and that the categorizations they employ are five which they feel are the most common as well as the most important ones. The five bases of power are (1) reward power, based on P's perception that O has the ability to mediate rewards for him; (2) coercive power, based on P's perception that O has the ability to mediate punishments for him; (3) legitimate power, based on the perception by P that O has a legitimate right to prescribe behavior for him; (4) referent power, based on P's identification with O; and (5) expert power, based on the perception that O has some special knowledge or expertness (French and Raven, 1963, p. 525).

Reward Power. The strength of the reward power of O/P increases with the magnitude of the rewards which P perceives that O can mediate for him. Reward power depends on O's ability to administer positive valences and to decrease or remove negative valences. The strength of reward power also depends upon the probability that O can

mediate the rewards, as perceived by P. Since Q administers the rewards he also controls the probability that P will receive it. The range of reward power is specific to those regions in which Q can reward P for conforming.

Coercive Power. This form of power is similar to reward power in that it involves Q's ability to manipulate the attainment of valences. Coercive power of O/P stems from the expectation that P will be punished by Q if he fails to conform to Q's influence attempts. The strength of coercive power depends on the magnitude of the negative valence of the threatening punishment multiplied by the perceived probability that P can avoid the punishment by conformity. Coercive power leads to dependent change, and the degree of dependence varies with the level of observability of P's conformity (i.e., dependency is contingent upon the extent of surveillance).

Referent Power. The referent power of O/P has its basis in the identification of P with Q. By identification is meant a feeling of oneness of P with Q; or a desire for such an identity. P's identification with Q can be established or maintained if P behaves, believes, and perceives as Q does. Accordingly, Q has the ability to influence P, even though he may be unaware of this referent power. A verbalization of such power might be, "I am like Q, and therefore I shall behave or believe as Q does," or "I want to be like Q, and I will be more like Q if I behave or believe as Q does." The stronger the identification of P with Q the greater the referent power of O/P. The greater the attraction of P toward Q, the greater the range of referent power of O/P.

Expert Power. The strength of the expert power of O/P varies with the extent of the knowledge or perception which P attributes to O within a given area. Probably P evaluates O's expertness in relation to his own knowledge as well as against an absolute standard. In any case expert power results in primary social influence on P's cognitive structure and probably not on other systems. The range of expert power is more delimited than that of referent power.

Legitimate Power. This is probably the most complex bases of power, as it embodies notions from the structural sociologist, the role-oriented social psychologist, as well as the clinical psychologist (French and Raven, 1971). Conceptually, legitimacy may be thought of as a valence in a region that is induced by some internalized norm or value. "This norm has the same conceptual property as power, namely, an ability to induce force fields" [Lewin, 1951, pp. 40-41 (French and Raven, 1971, p. 528)]. Legitimate power of O/P is here defined as that power which stems from internalized values in P which dictate that O has a legitimate right to influence P and that P has an obligation to accept this influence. Legitimate power is very similar to the notion of legitimacy of authority which has long been explored by sociologists (i.e., a role relationship is implicit when one speaks of legitimacy of authority in sociological terms); however, legitimate power is not always a role relation: P may accept an induction from O simply because he gave his word to O that he would help him, and he values his word (French and Raven, 1971). "In all cases, the notion of legitimacy involves some sort of code or standard, accepted by the individual by virtue of which the external agent can assert his power" (French and Raven, 1971, p. 528).

These authors pointed out several bases from which legitimate power can arise. Among these are cultural values, acceptance of the social structure by P (e.g., formal organizations), and designation by a legitimizing agent (i.e., such as an experimenter's ascribing leadership to a subject within a group). Of these three bases, the one of concern with the present study is legitimate power as derived from cultural values; this point will be elaborated upon in a later discussion.

As opposed to speaking in terms of one person's or group's power over another, Herbert Kelman (1974) has pointed out the processes of influence that may take place between persons and groups of persons. Kelman has outlined three processes of social influence, compliance, identification, and internalization. A brief description of these three processes follow:

Compliance can be said to occur when an individual accepts influence from another person (or group) in order to attain a favorable reaction from the other, that is, to gain a specific reward or avoid a specific punishment controlled by the other ... Identification can be said to occur when an individual accepts influence from another person (or group) in order to establish or maintain a satisfying self-defining relationship to the other. In contrast to compliance, identification is not primarily concerned with producing a particular effect in the other. Rather, accepting influence through identification is a way of establishing or maintaining a desired relationship to the other, as well as the self-definition that is anchored in this relationship. By accepting influence the person is able to see himself as similar to the other (as in classical identification) or to see himself as enacting a role reciprocal to that of the other. Finally, internalization can be said to occur when an individual accepts influence in order to maintain the congruence of his actions and beliefs with his value system. Here, it is the content of the induced behavior and its relation to the person's value system that are intrinsically satisfying (Kelman, 1974, p. 142).

It should be pointed out that these processes are not orthogonal; in

fact, they frequently overlap as Kelman aptly states. Additionally -- and this is a point which has been implicit in Kelman's earlier writings -- these processes of social influence as described above provide the linkages between the individual and the social system. As Kelman phrases it: "...social influence processes can be conceptualized most fruitfully in terms of the social systems within which they are generated and to which a person's acceptance of influence is directed. Thus, the three processes of influence, when viewed within the context of a particular social system, represent three ways in which P may be linked to the system -- three ways in which he meets the demands of the system and maintains his personal integration in it" (Kelman, 1974, pp. 147-48).

If a comparison were to be made between Kelman's processes of social influence and the bases of power as forwarded by French and Raven, it would appear as in Table 1.

TABLE 1

Comparison Between Kelman (1974) Processes of Social Influence
and French and Raven (1971) Bases of Power

Kelman Processes, Social Influence	French and Raven Bases of Power
Compliance	Reward Power Coercive Power
Identification	Referent Power
Internalization	Legitimate Power Expert Power

As can be seen in Table 1 expert power is viewed here as similar to the influence process of internalization. The rationale is that the possessor of expert power becomes -- although this may be transitory -- a figure of authority to P. Hence, the internalized value of respecting authority is activated.

Thibaut and Kelley (1959) also have discussed the issue of power. Briefly, they speak in terms of the types and quality of outcomes that one individual can provide for another individual as well as the outcomes that the second individual can provide for the first. This outcome "potential" sets up one of three behavioral control situations: behavior control, fate control, and converted fate control. Behavior control occurs if a person, P, by varying his/her behavior, can make it desirable for another person, O to vary his/her behavior also (Thibaut and Kelley, 1959). Essentially, this means that if person P, by changing his/her behavior in interaction with person O, can make O's outcomes (as well as his/her own) more profitable if O changes his/her behavior in interaction with P, then it can be said that P has behavior control over O. If, however, P, by varying his behavior, can affect the outcomes of O "regardless of what O does," then P has fate control over O (Thibaut and Kelley, 1959, p. 102).

One of the alternatives available to the individual who is under the fate control of another individual within a relationship is to leave the relationship; such a state of affairs, however, is not necessarily satisfying to the individual, and his/her actions indicate that the CL_{ALT} for this individual (see above) will be equal to his outcomes -- at this point summing zero. Similarly, P's outcomes

also will cease (i.e., sum to zero) with a dissolution of the relationship. This state of affairs may not be altogether satisfying to P either, but if she/he holds fate control over another, Q, she/he can control or maintain Q within the relationship by learning what behaviors she/he emits that are desirable to Q, to occasionally altering these behaviors. Such maneuvers have been termed, "converted fate control" (Thibaut and Kelley, 1959; Jones and Gerard, 1967; Callahan and Messe', 1973), as the counter-power of Q is increased, thereby, permitting Q to inadvertently "control" P's behavior.

There are naturally two sides to the issue of power: that is, the power holder (or influencing agent) and the power recipient (or influence target). Surprisingly, there has been little in the way of psychological theory to foster an understanding of forces shaping the actions of those in authority, i.e., the powerholders. One researcher, David Kipnis (Kipnis and Cosentino, 1969; Kipnis, 1974), recently has been investigating this issue both in the field and the laboratory. This line of research will not be mentioned further as the gist of the present study is concerned more with the phenomenology of the power recipient than with that of the powerholder (although the phenomenology of power for the influencing agent -- those persons holding a superordinate position within the social structure -- also was examined). It was felt that mention of the Kipnis research was important in that such research, assuming that there is a great deal of reciprocity in terms of experiencing the relationship between two people, should provide clues to the phenomenal aspects of power as experienced by the influence target.

The theories or approaches to power listed above concern themselves with either the acquisition and maintenance of power within a dyadic relationship (e.g., Thibaut and Kelley, 1969) or the quality, magnitude, and conditions leading to power. Each of these approaches view power as emanating from individuals, and possibly because of this perspective, fail to address the issue of what power is. It is further conceivable that this focus upon what the possession of power can and cannot do, how it is acquired and maintained, how it can be increased, etc., as opposed to what power is, may be the reason why it is difficult to assess what power feels like; that is, what the phenomenological experience of power may be. Additionally, this problem may lie in the error of analyzing power as rooted in individuals rather than the social structure in which these persons interact.

Olsen (1968, 1971) takes an approach to power that is different from the theorists mentioned earlier; this approach also is congruent with the viewpoint of power utilized by the present author. "Power -- social power -- is the ability to affect social life (social actions, social order, or culture)" (Olsen, 1971, p. 533). Olsen states: An inevitable outcome of all social organization, whenever and wherever it occurs, is the creation of social power. By ordering their social interactions and infusing their relationships with common meaning, participants in social organizations collectively exercise power that none of them could exert individually...Social power is generated through the process of social organization and is inseparable from it" (Olsen, 1971, p. 532).

From the above one immediately comes to the conclusion that social power is a relational rather than a psychological phenomenon. That is, social power always exists within the context of social relationships, and never within individual persons (Olsen, 1971). An example of this truism is the case of the chairman of the board of a corporation. While chairman, such an individual may exercise tremendous social power in that specific context because of his position; however, upon giving up the chairmanship (perhaps via retirement) this individual can no longer exert social power over that group. The importance of this point with regard to the present study is elaborated on in a later section of this paper.

Olsen gives consideration to "influence" and "control," terms used by other theorists to connote power. As he sees them, they are not synonymous with power; rather they represent special cases of power. Social influence is seen as an instance of power in which the outcomes are not predetermined whereas social control is an instance of power in which the outcomes are largely or totally predetermined (Olsen, 1971). Influence can only be attempted, not enforced, while control can be exercised regardless of the wishes of the target person.

Olsen also presents a discussion of two theories of social power, a dependency theory and a trust theory. Both theories begin with two major assumptions: (1) power is embedded within the context of social relationships, and (2) there is some degree of interdependence between actors. The dependency theory hypothesizes that the amount of power that a person A has over another person B is based on the extent to which B depends on A for a goal he seeks. Trust theory

hypothesizes that power of one actor A over another actor B is contingent upon the amount of trust invested by B in A. This investment of trust is dependent upon B's perception that A will act in a manner which will be beneficial to B. It should be obvious that the conceptualization of how power occurs as viewed by Olsen is not very different from that of other theorists; the importance of Olsen's conceptualizations is that he makes explicit that power is embedded within social relationships, and not within individuals. The importance of power being conceptualized in this manner should be obvious: as power is embedded within the social structure the perception of the social structure all but demands that the power relationship also be perceived. These perceptions of the social structure dictate that the individual either accepts or rejects (via efforts toward changing the social structure) the power relationship.

Norms

A few words about norms and their effects upon behavior should be mentioned at this time. The concept of norm has been central in social psychology serving somewhat as a point of departure for both psychological and sociological approaches to the study of group phenomena. Thibaut and Kelley (1959), in defining norm with reference to dyads, state: "A norm is a behavioral rule that is accepted, at least to some degree, by both members of the dyad" (Thibaut and Kelley, 1959, p. 129). There are several ways in which individual behavior can be influenced by groups norms. One process of gaining conformity to norms involves the transmission of cues of approval or disapproval by each group member to one another, rewarding those appropriate

behaviors and punishing those inappropriate behaviors. This process, carried to its logical conclusion, is essentially what the process of socialization is all about. It is through the socialization process that societal norms are transmitted to all members of a society and maintained over time. One such norm which is important to the present study is that societal norm which governs behaviors in mixed-sex groups. This norm essentially states that, within a mixed-sex group men are expected to occupy the role of leader while women are expected to occupy the role of follower. Despite the fact that changes in society are evolving, particularly with regards to the functions and roles of women, the norm governing behaviors in mixed-sex groups remain, for the most part, unchanged. Any discussion of the effects of social structure upon sexually-heterogeneous groups must take into consideration the societal norms which are salient for those particular groups.

The issues of interpersonal attraction, motivational orientation, social structure, power, and norms have been elaborated to varying extents. The following chapters present research relating some of the issues that have been discussed above, hypotheses that are generated by such discussions, and the methodology employed to test these hypotheses.

CHAPTER II

RESEARCH

The last chapter focused upon the theoretical and/or definitional characteristics of motivation, attraction, social structure, and power. The present chapter aims to relate these concepts empirically so that the conceptualization of their interrelationships might be clarified prior to the presentation of hypotheses that were examined in this study. The focus of this chapter is on research pertaining to motivation and attraction, motivation and social structure, and finally, motivation and power.

Research on Motivation and Attraction

As stated earlier there has been a dearth of research investigating the effect of motivation upon attraction, or of relating one's motivational level to the attraction of another. There have been, however, some studies purporting to look at the effects of self-esteem on attraction. A few of these studies are reported below.

Jacobs, Berscheid and Walster (1971) asked the question: Is a person more receptive to love and affection when his self-esteem is high or when it is low? These researchers first reviewed two conflicting theories relating to this question: a drive reduction hypothesis which suggests that low self-esteem persons would be more receptive to affection from another (as they need social approval more

than high self-esteem persons): and, a clinical hypothesis which suggests that love is a capacity (which low self-esteem persons lack) and the high self-esteem persons will therefore be more receptive to affectionate others.

The study was designed to investigate the hypothesis that the degree of liking generated by an evaluation depends not only on the self-esteem of the recipient but also upon the amount of ambiguity present in the evaluation.

It was predicted that "(a) when another's evaluation clearly rejects the subject, there will be a positive relationship between self-esteem and liking; when the other clearly accepts the subject, there will be a less strong, even negative relationship between self-esteem and liking; (b) when another expresses ambiguous acceptance for the subject, there will be a positive relationship between self-esteem and liking similar to that observed under conditions of clear rejection" (Jacobs, Berscheid and Walster, 1971, p. 85).

Subjects were 151 males from the University of Rochester and Temple University, all volunteers. Subjects were informed that the researchers were interested in refining computer-dating matching programs. Subjects were given a 174-item "personality" questionnaire, composed of items from the MMPI and Murray et al. (1938). These items were selected on the basis of face validity. Subjects also were informed that a clinician would evaluate their test scores, as well as other information present in the students' files. Evaluations actually were bogus and served as the manipulation of self-esteem.

Subjects were told to conduct five telephone conversations with a hypothetical girl, supposedly to test their verbal facility with the opposite sex. In the second experiment subjects were given the rating of the clinician and the evaluation of the test. They were then asked to rate themselves on 20 polar adjectives, the sum of which represented their self-esteem scores. Subjects then listened to a tape of the evaluation made by the hypothetical girl; afterwards, subjects rated the girls on the same 20 polar adjectives, and an index of liking was derived from these ratings. Subjects also were asked if they would like to go on a date with the girl and how much they would expect to like her.

Results indicated that self-esteem and type of evaluation interacted significantly ($p = .03$). Raised self-esteem subjects liked the ambiguous evaluator more than the lowered self-esteem Ss ($p < .001$).

One problem inherent in the procedures of the above study is the issue of whether self-esteem is limited to self-liking, which these researchers apparently assumed, in that the same adjectives checked as a measure of esteem for subjects were used also as an index of liking the evaluator! It is the contention here that self-esteem entails much more than positive self-evaluations; hence, what was raised or lowered with the manipulation was self-liking rather than self-esteem.

Aronson and Linder (1965) proposed that gain and loss of esteem are determinants of interpersonal attraction. Coming from a reinforcement model, these researchers contended that "a gain in esteem is a more potent reward than invariant esteem, and similarly, the loss of esteem is a more potent 'punishment' than invariant negative esteem" (Aronson and Linder, 1965, p. 156).

The primary intent of this experiment was to determine whether or not changes in the feelings of an individual, O, toward another, P, have a greater effect on P's liking for O than the total number of rewarding acts emitted by O. The specific hypotheses were (1) P will like O better if O's initial attitude toward P is negative but gradually becomes more positive, than if O's attitude is uniformly positive; (2) P will like O better if O's attitude is uniformly negative than if his initial attitude toward P is positive and becomes increasingly negative.

The results provided substantiation of the gain-loss theory, particularly the first hypothesis ($p < .001$) while only a trend in the predicted direction occurred with the second hypothesis ($p < .15$, two-tailed).

The major difficulty with the Aronson and Linder study is that esteem here refers more or less to the weight one attaches to others' evaluation of himself. Thus, if one accepts Cohen's (1959) position about the characteristic responses of low- and high-self-esteem individuals, then the Aronson and Linder findings would be reversed (i.e., the strongest difference should occur between subjects given the Positive-Negative Condition and those subjects given the Negative-Negative condition).

It is not the intention here to rule out the importance of others' evaluation nor of self-liking to the formation of one's self-esteem; it is, however, imperative that neither of the above be accepted as self-esteem, only components of it.

There have been other studies relating self-esteem and attraction (Walster, 1965; Karylowski, 1976; Hendrick and Page, 1970); none of these have developed from a solid theoretical base of self-esteem. This fact seems to be a major stumbling block to progress in research on this relationship.

Research on Motivation and Social Structure

There clearly has been a proliferation of research relating motivation to social structure (Carter, 1951; French, 1958; Smelser, 1961): however, much of this research has dealt with the effects of personality characteristics on outcome measures, and not with the effects of personality on the emergent social structures (Aronoff and Messe', 1971).

Aronoff (1967, 1970) found a relationship between personality and the social structures among two occupational work groups. The personality variables in this instance were safety-orientation and esteem-orientation as conceptualized by Maslow (1970). It was found that persons high on safety needs worked in groups with authoritarian, hierarchical social structures, while those persons high on esteem needs worked in groups whose social structure was egalitarian (Aronoff, 1970).

Citing Tuckman's (1964) study which related the personality dimension of cognitive complexity to social structure, Aronoff and Messe' (1971) conducted an investigation of individual motivation as a determinant of group structure. This research sought to examine, in a quantitative manner, personality influences on those dimensions of social structure related to task-oriented behaviors (Aronoff and

Messe', 1971). The research used the definition of task-oriented acts provided by Borgatta and Crowther (1965).

The motivational dimension utilized here was the same as that employed by Aronoff (1967, 1970), the safety (low esteem) needs and the esteem (low safety) needs, described by Maslow (1954, 1970).

Male subjects were recruited through advertisement in the University newspaper. Based upon a sentence completion pre-test, 25 high safety and 25 high esteem males were selected, and placed in homogeneous five-man groups based on motivational level.

Subjects were led into an observation room, seated around a circular table facing a videotape camera. They were presented with instructions for the tasks to be completed. The task lasted for two hours.

It was predicted that the distribution of task-oriented leadership acts would be more hierarchical in safety-oriented groups than in esteem-oriented groups. Also, the degree of concentration of leadership functions should appear differentially in the two types of groups, so that the relative frequencies with which persons emit different kinds of task-oriented acts should be more positively correlated in safety-oriented groups than in esteem-oriented groups.

As predicted, safety-oriented groups tended to establish hierarchical social structures, in that task-oriented behaviors consistently were concentrated in fewer members in safety groups than in esteem groups. These researchers concluded that individual motivation influences the development of social structure, and that such social structure can be derived from a set of task-oriented behaviors (Aronoff and Messe', 1971).

In a related study Messe', Aronoff and Wilson (1972) investigated the role that motivation plays in role assignment in small groups. As in the study cited above, homogeneous groups of safety-oriented and esteem-oriented subjects were formed. These were three-person groups composed of one male and two females. This research explored the extent to which external social rankings, in the form of sex-linked status differences, affected role differentiation in homogeneous groups.

Utilizing Borgatta's (1962) IPS system, it was predicted that the assumption of the leadership role would be manifested in the differential frequency with which members emitted these acts. Further, it was predicted that males in safety groups would have greater frequencies of procedural suggestion (6), gives opinions (8), gives orientation (11), draws attention (12), and asks for opinion (13) than would either males in esteem groups or females in safety groups (Messe', et al., 1972). It was also predicted that "suggest solution" (7) scores would correlate positively with task-oriented leadership behavior within esteem-oriented groups, whereas the correlation between leadership behavior and "suggests solution" scores would be lower in safety-oriented groups.

From a pool of 150 students, subjects were selected on the basis of their scores falling within the upper or lower 15th percentile of the distribution of scores. This provided the researchers with 24 high safety (low esteem) females; 12 high safety (low esteem) males; 24 high esteem (low safety) females; and 12 high esteem (low safety) males.

The means for each coder's pair judgement were used as the basic data. To test the hypothesis that safety-oriented persons use

externally derived sex rankings as their basis for role differentiation, the contribution of the male member to a group's frequency of acts per task of each Interaction Process Scores category was calculated in terms of proportion (Messe' et al., 1972). Results indicated that males in safety-oriented groups had significantly higher proportion scores than did males in esteem-oriented groups for three of the IPS categories, and marginally significant for another category (i.e., "gives orientation" (11), $p < .10$). Also, as predicted, the proportions for "suggests solution" (7) were not significantly different. Additionally, males in safety-oriented groups had significantly higher proportions derived from composite leadership scores than did males in esteem-oriented groups ($p < .005$).

To test the hypothesis that there would be a positive relationship between leadership and "suggests solutions" for esteem-oriented persons, the composite leadership scores and the frequencies of "suggests solution" acts were ranked within each group. "Ranking within a group for each of the variables were used since the groups differed widely in their total activity" (Messe' et al., 1972, p. 88). As predicted, the coefficient for the esteem group was highly positive ($r = .71$, $p < .0005$). The correlation for the safety-oriented groups was also positive but the difference between esteem groups and safety groups' correlations was significant in the predicted direction ($z = 1.95$, $p < .026$).

The results of Messe' et al. (1972) study indicated that the motivation of group members mediates the process of role differentiation (in small groups) by selectively focusing on certain variables

from among the array present in every group; these variables apparently are external status cues (i.e., sex, age, possibly height) and other personal attributes.

While Messe' et al. (1972) touched upon an issue that is extremely relevant to the present study, that is, the importance of externally derived cues upon role differentiation, the study did not provide all the needed answers. One conjecture not considered as an explanation of the findings within the esteem-oriented groups is that, possibly due to motivational orientation, the females were perceptually-cognizant of the other female in the group; thus, their need or strivings to express competence may have been intensified, resulting in the female subjects in these groups emitting just as many (proportionately) leadership acts. Another probable reason for the findings may be found in the following paragraph.

It should be stressed that the intensity of competition depends on the identity of the opponent. In a recent study (Peplau, 1973), dating couples of college students competed under two conditions: against each other, or as a team competing against another couple...Girls who had traditional attitudes about women's roles, and who feared success (in Horner's terms), performed considerably less well when competing against their boyfriends than when joining them to compete against other couples. For men, and women with "liberated" attitudes, the identity of the competitor made little difference in performance. Evidently, many women feel that to compete against a man with whom they are emotionally involved will make them less attractive. It would seem that competition, for them, implies that they are either aggressing against, or attempting to dominate, the opponent; for other women, either competition does not have this implication or they are not afraid of being seen as dominant (Maccoby and Jacklin, 1974, p. 254).

The present author suspects that this "disregard" for masculine competition may be generated by the motivational orientation of high-esteem women. If this is so, the hypothesis that differences

between safety-oriented and esteem-oriented groups is due to a focusing upon externally derived cues, may have to be discarded or at the minimum reexamined.

In a study which had as its primary aim the discernment of the relationship between social structure and motivation level, Wilson (1973) generated three major hypotheses to be tested. Briefly, these were:

- (1) Group productivity will be less when a social structure is imposed which is incongruent with the motivational orientation of the group than if the imposed structure is congruent with the group's motivational orientation;
- (2) When there is incongruency between the imposed social structure and the group's motivational level, there will be less cohesiveness, less task satisfaction, and more anxiety. When there is congruency between the two variables, there will be greater task satisfaction, cohesiveness, and less anxiety; and
- (3) "When subjected to a social structure that is incongruent with the predominant motivational orientation of group members, there will be an attempt to change it in the direction of a more congruent one. For safety-oriented groups this will be hierarchical and for esteem-oriented groups, egalitarian. If the social structure is congruent with the predominant motivational orientation of the group members there will be no attempt to change it" (Wilson, 1973, p. 34).

Wilson, using 144 male and female subjects formed 24 three person groups of each motivational orientation; homogeneous on sex and motivational orientation, 12 groups under a hierarchical condition, and 12 under an egalitarian condition. Similar to the Messe' et al. (1972) study, Borgatta's (1962) IPS system was employed, and the ratings were transformed into proportion scores. Measures of cohesiveness, task satisfaction, and anxiety within each group were also taken. This instrument, the Personal Reaction Inventory (PRI) was an adaptation of the PRI developed by Anderson (1972). Additionally, the

researcher employed some pre-measures of IQ and cognitive complexity, to provide a check against these variables intervening in the analysis.

The most important finding of this study with regard to the present study revolves around the third hypothesis. The third hypothesis investigated behavioral activity within groups in which the social structure was incongruent with the group's motivational orientation. It was expected that there would be efforts by the groups to change the social structure so that it would be compatible to the group's motivational orientation. These efforts toward change imply a concentration of task-oriented leadership acts in fewer members within safety-oriented groups as such groups prefer hierarchical social structures, and an equal distribution of task-oriented leadership acts among all members within esteem-oriented groups as such groups prefer egalitarian social structures. It was found that safety-oriented groups were significantly more hierarchical than esteem-oriented groups on the distribution of task-oriented activity. Moreover, the distribution of task-oriented activity was more hierarchical for males than for females for some categories of leadership acts. In fact, Wilson (1973, p. 64) reported that the results of the female subjects were not significant at all. His explanation for this finding was that the nature of the task was male-oriented, and thus was essentially a function of the socialization process in this country. Although the results for the females were insignificant, the means for the two motivation groups were in the direction opposite to prediction: esteem-oriented female groups tended to be more hierarchical in the distribution of task-oriented activity while safety-oriented female groups tended to

have a less hierarchical distribution of such activity. Wilson's explanation of the finding is at best incomplete.

Megargee (1969) was interested in determining how social sex-role prescriptions influence the expression of leadership behaviors by high dominance men and women. Level of dominance was determined by scores on the Dominance (Do) scale of the California Psychological Inventory, Gough, (1957). There were four groups of subjects, the groups important here being composed of High Do females-Low Do males (3), and High Do females-Low Do females (4). In Group 4, 70% of the High Do females took the leader role, dominance being congruent with the role prescriptions. In Group 3, however, dominance apparently conflicted with sex role: as expected, this inhibited the assumption of leadership by the High Do females. Only 20% assumed the leadership role over the Low Do males (Megargee, 1969).

The task of the above experiment was masculine-oriented. Megargee repeated the same procedures in a second experiment. This time, subjects were presented a sexually-neutral stimulus (i.e., a color board) and still, the same outcome occurred. That is, the assumption of leadership was decreased significantly when High Do women were paired with Low Do men. Megargee concluded that this phenomenon of High Do women yielding to Low Do men is not limited to highly masculine tasks.

Of the studies reported, only the Megargee study looked at interactions with dyads. A question that must be dealt with is why different results, in terms of the females' assumption of the leadership role, have been found when investigating dyads and larger groups (e.g.,

the Megargee (1969) and the Messe' et al. (1972) studies)? It will be recalled that Messe' et al. found that esteem-oriented females emitted proportionately as many leadership acts as did the esteem-oriented males, whereas Megargee found that high dominance females tended to yield the leadership role to low dominance males. Granted, esteem orientation encompasses much more than the notion of dominance but there should be some correspondence between the responses of an esteem-oriented group and a high dominance group. Perhaps Megargee could have provided more information had he included a cell with high dominance males paired with high dominance females. Had the results of this pairing produced equal amounts of leadership role assumption between the two groups, then more consideration would have to be given to the Messe' et al. conclusion that external cues play a major part in role differentiation within mixed-sex groups, at least for low dominance and safety-oriented groups.

Research on Motivation and Power

There will be only two studies reported on in this section; they are important, however, so they are elaborated upon quite extensively. The initial study is by Cohen (1959). Cohen prefaces his study by pointing out a persistent problem in studying human behavior, that begin the specification of the links between social structure and personality. According to Cohen, power is ideally suited for this purpose because "power is essentially a structural concept, referring to certain central aspects of the functional arrangements of any social system, and, at the same time, it necessarily deals with the motivations of individuals" (Cohen, 1959, p. 35).

This study concerned itself with some of the conditions under which power becomes a threat to the individual over whom it is exercised and some of the reactions stemming from this threat. The first of these concerns evolved from an earlier study of power and an individual's "self-feelings." That is, that it appears that a person's reaction to being under the power of another depends to a large extent upon the person's view of himself (i.e., upon his level of self-esteem). The second concern centered around the nature of the social structure, or more specifically, the structure of the role situation.

Threat for this study was defined as "that state of the individual in which he feels inadequate to deal with a given situation and to satisfy his needs" (Cohen, 1959, p. 36). Structure here refers to the degree to which a social situation provides the individual with clear and accessible cues so that he may behave in a goal-directed and need-satisfying manner. By this definition of "structure," Cohen is setting up a model similar to the clear-ambiguous evaluations-model employed by Walster (1965) and more indirectly he parallels Anderson's (1972) notion of goal-path clarity, the difference being that Anderson (1972) focused upon task-oriented behaviors while Cohen (1959) is focusing upon need gratifications. In substantiating the present author's understanding of his notion of structure, Cohen points out that structure is composed of the (1) Degree of clarity of paths to goal; and (2) Degree of consistency of the power figure's behavior.

In discussing self-esteem, Cohen states that an individual with high self-esteem "may be expected to show behavior that is more organized, effective, realistic, consistent, and meaningful than that

of a person with low self-esteem. He, therefore, should feel more able to deal with a task and be less threatened when confronting another person who has potential control over his need satisfaction. In contrast, a person with low self-esteem should feel confident of reaching his goal, more readily anticipate failure, and experience threat in any situation where someone else has power to determine his goal achievement" (Cohen, 1959, p. 38, emphasis, the author). The emphasis was added to point out that the present author does not agree totally with Cohen's conceptualizations as to how the high self-esteem person and the low self-esteem person respond to their environment, from a theoretical perspective (see Maslow, 1970), and more implicitly, from an empirical perspective (Messe' et al., 1972).

Three hypotheses were advanced: (1) The more ambiguous a situation in which the power is exercised over an individual, the more threat he will experience. (2) The lower the esteem of an individual over whom power is exercised, the more threat he will experience. (3) The strongest effect on threat should be observed when both self-esteem and structure are varied simultaneously.

The study employed a 4 (structure: clarity of paths, consistency of powerholders) \times 3 (levels of self-esteem) design. Eighty-eight subjects were employed; the report here presents only a 2×2 analysis. The experiment was conducted within a field setting, with a confederate serving as a supervisor in two-person groups.

The findings suggested that (1) variations in the power structure do affect the degree to which the person over whom power is exercised experiences threat; (2) the second hypothesis did not receive

substantiation, only one subhypothesis (social aggression) attaining significance; (3) self-esteem and structure together are strong determinants of threat-oriented reactions to a power laden situation ($p < .01$, and beyond).

Cohen concludes that "no longer can it be said flatly that people of high self-esteem find a challenging power situation less threatening than people of low self-esteem" (p. 49). Additionally, as stated above, structure and self-esteem together act as determinants of threat reactions to power situations.

The presentation of the above study, though not considered a conceptually "tight" nor methodologically the soundest piece of research, is considered important to the present study, in that it clearly raises the issue of the ambiguity of social interactions. Most research concerned with social structure or group structure impose the structure rather than allowing the structure to emerge. In informal groups emerging social structure is the natural occurrence, yet researchers continue to impose the structure (there are some exceptions, e.g., Aronoff and Messe', 1971; Messe', Aronoff and Wilson, 1972). Though natural, emergent social structure does present a problem: ambiguity. This social ambiguity, which Cohen (1959) attempted to measure, exists because no shared rules are active during specific social interactions such as when two people interact for the first time. More will be said of this social ambiguity generated by emergent social structure.

The second study has to do with the perception of power within the context of newly formed social relationships. There were two

questions being raised by this research: To what extent do different kinds of interpersonal information affect a group member's power perceptions? What is the relation between his perception of other members and his behaviors toward them?

Levinger (1959) defined social power as an individual's potentiality for influencing one or more other individuals. He reveals a point that often is taken for granted; for an individual's power to become established, others must perceive his ability to make available and to withhold resources.

Five hypotheses were presented. Only the first pair will be listed as they are more immediately relevant to the proposed study:

(1) The individual's perception of the magnitude of his power will be positively associated with the favorableness of the initial information concerning his relative resource potential in the group.

(2) The individual's perceptions of the magnitude of his power will be positively associated with the relative amount of the resources he demonstrates in comparison with others during the group's interactions.

The task involved two-person groups. These presented 25 pictures of city plans, each having to decide where certain buildings (i.e., church, school, firehouse, etc.) should be located. After making private decisions, the subjects (actually one subject and a trained confederate) had 90 seconds to reach agreement on each placement. There were three dependent indices for power-relevant behavior: (1) influence attempts; (2) resistance; and (3) assertiveness.

Results supported the hypotheses. These results were seen as providing support to Kelley's (1950) findings. The main thrust of the discussion was the tremendous effect that initial information had upon subjects' perception of their power. Also, the results were seen as in accord with Bruner's (1951) assertion that an individual's hypotheses become more resistant to revision the longer they are held. "This finding implies that as a power relationship develops over a period of time -- in an otherwise stable setting -- it requires a progressively stronger input of contradictory information in order to revise the growing perception of the persons involved" (Levinger, 1959, p. 95).

The research by Levinger (1959) is a demonstration as to how the "powerholder" experiences his power; that is, the phenomenological experience of power as felt by the powerholder.² Analogously, it should be possible to conceptualize this experience from the perspective of the power recipient. Specifically, if one conceptualizes the experience of power from the recipient's viewpoint as being, to a large extent, reciprocal to the experience of the powerholder, then a review of the pertinent literature (e.g., Levinger, 1959; Kipnis, 1974) should provide, at least, clues to tapping the development of power relationships, the actors' reactions to such developments (which actually helps in forming these relationships), the consequences accruing to the disturbance of

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It is more accurate to assert that the initial information exerted a persisting effect upon the Ss' structuring of the relationship, despite the objectively identical behavior of their partners (Levinger, 1959)! As an aside, the present research indirectly tested if there were differential reactions to initial contact with another based on the motivational level of the subject.

these relationships, and subsequently what leads to the exertion of power.

Before elaborating upon the hypotheses generated by the above theoretical considerations and research, several research studies which are outside the realms of motivation or social structure concerns, but which provide further support for studying their interactions and subsequent effects upon behavior, will be reported.

In discussing characteristics of leaders, Gibbs (1954) talks of those personality traits that have been studied as keys to what makes a leader. One of these characteristics has been self-confidence. Gibbs states:

To be a leader in any situation, an individual group member must appear to make positive contributions to group locomotion. There can be little doubt that self-confidence and self-assurance contribute to this type of valuation of him (i.e., the leader). Thus, it is expected that self-confidence will bear a positive relation to leadership...The general implications of these findings is that leaders, more or less consistently, rate higher than followers in self-confidence. Such findings make it abundantly clear that individual personality cannot be left out of the leadership picture (Gibbs, 1954, p. 218).

Although the esteem-orientation as posited by Maslow is not limited to self-assurance, self-assurance is certainly a component of the esteem-orientation. It can be inferred then, that the esteem-oriented person, by definition, will strive to express competency and therefore should emit more behaviors characteristic of leaders. When the esteem-oriented person is prevented from expressing his/her competency, it seems reasonable to assume that increased efforts in this direction will ensue; that is, that efforts toward the expression of his/her competency will increase and also leadership acts will increase.

This assumption is vital to the understanding of small group processes wherein esteem-oriented people are interacting with others.

Levinson (1970), in discussing situational factors as they can be viewed from a personality perspective, states:

Just as social structure presents massive forces which influence the individual from without toward certain forms of adaptation, so does personality present massive forces from within which lead him to select, create, and synthesize certain forms of adaptation rather than others. Role definition may be seen from one perspective as an aspect of social reality, to define his place within it, and to guide his search for meaning and gratification (p. 480).

The most immediate question that comes to mind here is, what happens if roles are not clearly defined? According to Levinson (and also Aronoff and Messe', 1972; Messe' et al., 1973), the individual's personality and/or motivational orientation will lead him/her to define the role structure. What if efforts to structure role relationships in accordance with one's motivational orientations are blunted? Wilson (1973) looked at the effects of congruency and incongruency between motivational orientation and social structure, but this study examined imposed social structure so that some order was established from the start of the experiment. Hence, the question has to be considered unanswered.

Finally, the second part of a study concerned with the amount of learning occurring at an NTL (National Training Laboratories) session produced findings congruent with the research reported here on the relationship between motivational orientation and social structure. Harrison and Lubin (1970) after identifying NTL participants as either task-oriented or person-oriented, had the two types work in T-groups, homogeneous with respect to orientation, then later work in experimental

groups (E-groups) that were either high-structure (task-oriented) or low-structure (person-oriented) or mixed. The findings included the fact that E-group members tended to attempt shaping the groups to be congruent with their "personality" structure.

In summary, the present chapter has covered briefly the topical areas interrelating motivation and interpersonal attraction, social structure, and power. As far as can be determined, there has been no research taking into consideration the interactions of motivation and social structure (e.g., emergent social structure) and their effects upon attraction, nor upon the perception of power relationships within two-person groups. The reason behind this apparent lack of concern with the study of the relations between individual factors and social factors is that the study of personality and the study of social systems have been treated as orthogonal. This, however, is not the case in reality; it is time for social scientists to address questions about the "real" world by conducting research that approximates the situation that exists in the "real," everyday world. The only means of accomplishing this goal is through the consideration of both situational and individual factors. To this end, the present research is directed. The goal of the present research was the determination of the effects of motivational level and the type of apparent emergent social structure (within which the interaction occurs) upon the subject's attraction toward another; additionally, the effects of these two variables upon the subject's perception of the power relationship within a dyad also were investigated. Hypotheses generated by the research mentioned above and the theoretical considerations cited in the last chapter are now presented.

Hypotheses

Hypotheses Concerning Attraction (Liking). Interpersonal attraction has been viewed as both an independent variable (Lott, 1961) and a dependent variable (note the studies of D. Byrne and his associates). In the present context, attraction or liking is a dependent variable. In the Messe' et al. (1972) study it was predicted and supported that within safety-oriented groups, males would exhibit a tendency to become leaders more often than females in the safety-oriented groups or males in the esteem-oriented groups. This finding was explained in terms of norms present in the society at large: specifically, within mixed-sex groups, males are expected to fulfill the role of leader. Within the Maslovian framework, the research of Aronoff (1967; 1970), Aronoff and Messe' (1971), and Messe' et al. (1972) indicates that the above should not present any difficulties for the safety-oriented male who is occupying the superordinate role within a two-person, mixed-sex group, nor the safety-oriented female who is occupying the subordinate role within two-person, mixed-sex group. Problems should not arise because in both cases the norm governing behaviors in mixed sex groups is not violated; additionally, the role assignments are congruent with the motivational orientation of the individuals involved. Because of these factors -- the congruence between social structure and motivational orientation, and the maintenance of the societal norm -- it is expected that safety-oriented males and females occupying the superordinate and subordinate role, respectively, should experience attraction toward their partners. The question may be raised as to why congruence (between motivational orientation

and social structure) and conformity to norms influence interpersonal attraction. There are several sources that indirectly address this question. Anderson (1972), in an examination of the combined effects of interpersonal attraction and goal-path clarity on the cohesiveness of task-oriented groups, noted that if ambiguity (unclear goal-path) and feelings of tension and hostility (produced by such ambiguity) can be associated with interaction one has with group members, then any positive regard initially experienced toward these people will diminish. However, if this ambiguity is not present, positive regard may be expected to be maintained at initial levels or increase. Donelson (1973) reports on several determinants of anxiety. Anxiety may be defined as subjective, consciously-perceived feelings of tension and apprehension generally associated with arousal (Spielberger, 1972). These determinants of anxiety as reported by Donelson include response indecision (i.e., unclear stimuli: What does one respond to? Incongruence or societal norm?), difficult discrimination, conflict (i.e., clear stimuli but responses are incompatible), collative stimuli, and interruption, control, and predictability. Deviation by someone else from what is expected of them (i.e., deviation from the behavioral norm) may increase anxiety. Wilson (1973) states that social situations which are ambiguous, unstructured or lacking in normative prescriptions may increase the arousal level of safety-oriented subjects whereas too much structure produces similar increases in arousal level (because of the inhibiting nature of structure upon the expression of competency) for esteem-oriented subjects. It should be apparent that congruence and conformity to norms will influence attraction because there is not undue

arousal as behavior within the group is predictable, role uncertainty is minimized or reduced, and anxiety associated with the initiation of new relationships is reduced. The comfortable atmosphere of such a group should generalize to all aspects of the group: the room, the task (i.e., task satisfaction), and most importantly, the other group members (i.e., attraction). Any group situation that increases anxiety should create generalization also; such generalization, however, should be negative. Hence, if congruence and conformity to norms are present, greater attraction will be experienced toward group members; the lesser the congruence and conformity to norms, lesser will be the attraction experienced toward group members.

The safety-oriented female's responses to various conditions of social structure will vary and, likewise, the degree of attraction toward another will also vary. When involved in a relationship that is egalitarian, she is cognizant of the incongruence between her motivational orientation and the social structure. Also, the role assignment causes her to violate the societal norm. The same situation exists when she occupies the superordinate role; the role assignment here is further from the assignment that she has come to expect from past experience, and should be more outstanding for her than when she is in an egalitarian relationship. Similarly, the awareness of violating the societal norm should be greater when she occupies the superordinate role. Based on these considerations, the following hypotheses are proposed:

- 1a. When the apparent emergent social structure requires that she occupies the superordinate role, the safety-oriented

female will express the least liking toward her male partner.³

- 1b. When the apparent emergent social structure requires that she occupies the subordinate role, the safety-oriented female will express the most liking toward her male partner.
- 1c. When the apparent emergent social structure requires that she occupies an egalitarian role, the safety-oriented female will express liking toward her male partner which is intermediate to that of the safety-oriented female in the subordinate social structure and in the superordinate social structure.

Similar considerations must be explored to determine the responses of esteem-oriented females to various social structures. Research to date has not delineated clearly behavioral expectations held by esteem-oriented females. One point is clear: esteem-oriented individuals, particularly males, tend to prefer egalitarian social structure. Whether this is the case for esteem-oriented females remains a question (see Messe', Aronoff and Wilson, 1972; Wilson, 1973) to be answered empirically. For the present, it is assumed that the esteem-oriented female responds in a manner that parallels her male counterpart. It becomes apparent that the most preferred social structure should be the superordinate social structure in that it provides the greatest opportunity for her to express her competency. A problem arises, however, in that she is placed in a position in which she violates the norm for behavior in mixed-sex groups. How does she

³Before anyone concludes that the author is expressing a chauvinistic bias in stating this prediction, it should be pointed out that there exists empirical support for the contention that females tend to acquiesce in a superior position (Peplau, 1973; Magargee, 1969) when participating in mixed-sex groups. They apparently are keenly aware of the expectations that society holds for them in the context of mixed-sex groups.

handle such a situation? On one hand she violates the norm if she accepts the role assignment, but she finds the social structure compatible to her motivational needs; on the other hand, if she rejects the role assignment, she does not violate the norm but she deprives herself of need gratification. The esteem-oriented female, thus is facing a conflict situation. There are several plausible routes she could utilize to minimize the conflict. One which is preferred by the author employs the notion of personal responsibility in the context of dissonance theory (Abelson et al., 1968; Donelson, 1973). As the esteem-oriented female is able to place the conditions of the experiment upon the experimenter -- that is, these conditions, events, etc., are under the control of the experimenter and not under the control of the subject -- she is able to function under the particular social structure. Still, she experiences the awareness of the social structure, this accounting for differential responding in terms of liking male partners. The esteem-oriented female faces a similar problem when she occupies a subordinate role: here, it is the incongruence between her motivational orientation and the social structure which induces the conflict in that she will want to alter the social structure (Wilson, 1973) and this action necessarily leads to her violating the social norm. Likewise, a similar solution will be employed. The following hypotheses, generated from the discussion above, are forwarded:

- 2a. When the apparent emergent social structure requires that she occupies the subordinate role, the esteem-oriented female will express the least liking toward her male partner.
- 2b. When the apparent emergent social structure requires that she occupies the egalitarian role, the esteem-oriented female will express more liking (than when occupying the subordinate role) toward her male partner.

- 2c. When the apparent emergent social structure requires the she occupies the superordinate role, the esteem-oriented female will express the most liking toward her male partner.

Hypotheses Concerning the Perception of Power

Scanzoni (1972) in Sexual Bargaining, states:

If we think of roles as consisting of expectations of rights and duties, then we may say that historically men saw to it that in their roles, both in and out of the home, they themselves possessed most of the rights or privileges. At the same time they made sure that women's roles were structured chiefly in terms of duties or obligations. Throughout these epochs of history, therefore the relationship between male and female was essentially a coercive one...But, coercion by itself does not necessarily imply conflict, particularly if the subordinate group is content (or simply acquiescent [author's note]) to remain passive vis-a-vis the dominant group (p. 31).

In the above paragraph, Scanzoni (implicitly) has cited two major consequences of interpersonal interactions between two or more persons. These consequences occur, irrespective of sex. The first is that power relationships do occur when people interact. The second consequence centers around the perception of these power relationships; more accurately, the perception of differential power within a relationship. As stated, the perception of differential power is based essentially upon whether or not the power structure is congruent or incongruent with one's expectations. If these perceptions are congruent with one's expectations, one should not experience frustration within the relationship; however, should incongruency between the actual power structure and the expectations about the power structure exist, conflict will ensue. Such conflict at times may bring about a dissolution of the relationship.

An immediate question, then, is what are these individual expectations based on? Moore (1954) conceptualizes social structure employing a social system definition such that the interrelationship of individual roles (and the behavioral expectations comprising these roles) derive from the specific role assignments of the individual within the structural context. Further, there exists empirical support (Aronoff, 1967; Aronoff and Messe, 1971; Wilson, 1973) for the contention that, as the emergent social structure is mediated by one's motivational orientation, then expectations about the power relationship also must be mediated by one's motivational orientation.

Levinger (1959) investigated the development of the perception and subsequent behaviors in newly formed social power relationships. To assess the perception of power (i.e., influence) of each subject during the experiment, he asked the subjects to rate in terms of percentages (from 0 - 100) the amount of influence they had exerted during each preceding trial. He used the means of these ratings ($N = 25$) as an indicator of power perception. Such procedures for demonstrating that people perceive the nature of power relationships are sufficient when the task requires multiple, consecutive measurements; it is inappropriate, however, when the task requires that only one measurement (as in the present study) of subject's perception is made. Some means, therefore, must be employed to tap these perceptions.

Research in person perception has two major directions. One deals with the process of perceiving or forming impressions of others -- the characteristics of perceiver and object which contribute to the judgment made -- and the other with the outcome or veridicality of the

judgment -- its accuracy (Tagiuri, 1960; Crano and Brewer, 1973). The concern here is with the former. The issue at hand is how can a subject's perception of differential power be measured? The solution used was the employment of semantic differentials whose scales have high loadings on the potency factor (Osgood et al., 1957). It was believed that, if subjects are placed in an interactive situation where the power relationships are manipulated and are then asked to rate themselves and their partners in terms of their behaviors within the experimental context, that differences in ratings will occur as a function of the discrepancies or incongruencies between a subject's actual behavior and the behaviors which that subject has, over time, come to expect of himself/herself. These differences in ratings, thus, serve as an indicator of the subject's perception of the power relationship.

Just as Scanzoni (1972) points out, coercion does not in itself imply conflict; in a similar vein, differences between the behaviors one expects of himself and the behaviors which one carries out does not necessarily create conflict. It is only when the discrepancy between expected behaviors and actual behaviors is large that conflict should arise. To minimize this conflict, the person must make his attitude concerning the behavior consistent with his actual behavior. Since the behavior has already been carried out (during the experimental session) the only component which can be altered is the attitude, and it is the alteration of the attitude about the behavior which will be reflected in the semantic ratings.

As safety-oriented individuals tend to prefer hierarchical social structure -- which is inherently a power relationship -- and as

esteem-oriented individuals tend to prefer egalitarian social structure (Aronoff and Messe', 1971; Wilson, 1973), along with considerations cited above, the following hypotheses are proposed:

- 3a. Esteem-oriented females will express a greater perception of differential power when the social structure requires that they are subordinate in the relationship than when the social structure requires that they are superordinate in the relationship.
- 3b. Safety-oriented females will express a greater perception of differential power when the social structure requires that they are superordinate in the relationship than when the social structure requires that they are subordinate in the relationship.

Research should be addressed to several issues for it to be a meaningful endeavor. Among the issues addressed by this study was the relationship between expressed liking for another and the perception of differential power between oneself and the other. It was felt that a discernment of this relationship would have many implications for interpersonal attraction, particularly marriage. As stated earlier, the perception of differential power is based on deviations from one's expectations for the power structure within a relationship. That is, if one's expectations for the power structure are met, then one will not be cognizant of differential power. This effect is best understood in terms of the notion of "social distinctiveness" (McGuire and Padawer-Singer, 1976). Incongruence between expectations for a situation and the actuality of a situation is experienced as aversive because behaviors within that situation are unpredictable, resulting in the arousal of anxiety. A situation that is anxiety-arousing produces a spillover effect, resulting in negative affects associated with the situation becoming associated with the several aspects of the situation,

including other individuals. Based on these considerations the following hypothesis is proposed:

4. The degree of liking is inversely related to the perception of differential power within mixed-sex dyads.

CHAPTER III

METHOD

Subjects

Subjects (Ss) were selected from a pretested population of 230 female students enrolled in introductory psychology courses during the Spring term, 1976, at Michigan State University. From this population, 70 Ss were selected on the basis of scores on the Aronoff Sentence Completion Test (SCT) (1971). The sample, comprised of the upper 15% and the lower 15% of the total population's distribution, was composed of 35 esteem-oriented (or low safety) females and 35 safety-oriented (or low esteem) females.

Confederates

To maintain control of extraneous variables (e.g., physical attractiveness) and to insure the development of the social structure within the temporally-limited experimental sessions, three male confederates (Cs) were trained with respect to the types of behaviors to be emitted under each condition of social structure. Cs were trained to maintain a specific posture throughout each session; thus, if a confederate assumed a superordinate role (which automatically assigned the female subject to a subordinate role), he remained in that role throughout that particular session. All confederates were trained and assumed the appropriate role for each condition of social structure.

Though trained in role-playing, confederates remained naive with respect to the characteristics of each subject, and also to the purpose of the study.

Materials

Four instruments were employed in the study. To determine Ss motivational orientation the Aronoff Sentence Completion Test (SCT) (1971) was used (see Appendix A). This test is a technique for the measurement of a number of motives proposed in Maslow's (1970) theory of personality dynamics. Aronoff has designed the test to tap two of the motives proposed in this theory, that of safety and esteem. The SCT is composed of forty sentence stems (the first few words of a potential sentence) or sentence fragments (a few words in the middle of a potential sentence) that stimulate people to write sentences that are expressive of their motivational orientation (Aronoff, 1971). Ss are handed the instrument and are instructed to read and complete the 40 incomplete sentences.⁴

There were three dependent measures, two gauging the subjects' liking of their partners, and a third assessing the perception of differential power between each subject and her partner.

The first measure, labelled "Reflections and Feedback," was composed of 13 statements concerning the S's partner and five statements pertaining to the task. Each statement was scored on a seven-

⁴The SCT was scored by five trained rater. Inter-rater reliability coefficients were computed for pairs of coders. The coders, scoring approximately an equal number of tests, attained reliability coefficients ranging from .83 to .97, with mean correlations of .88 for both safety and esteem.

point scale ranging from "Strongly Agree" to "Strongly Disagree." Subjects were instructed to respond to each statement as it best described her feelings. Only items about the partner were scored; items about the task were included to provide a mask, to an extent, about this aspect of the testing session. The items of this scale were modifications of items from the Personal Reaction Inventory, devised by Anderson (1972), the Liking Scale, developed by Rubin (1973), and a Friendship Scale, produced by Wright (1969) (Appendix B).

On a second dependent measure Ss were told to respond to the statement: (My partner was) a VERY LIKEABLE PERSON, on a semantic differential comprised of 16 bipolar scales. Only those scales loading high on the evaluative dimension of the semantic space as outlined by Osgood et al. (1957) (N = 6) have been scored for analysis (Appendix C).

The final measure was also a semantic differential. Subjects were instructed to first rate their partner and then rate themselves along 14 dimensions. Only those scales loading high on the potency dimension (N = 5) were scored for analysis. The semantic differentials were employed to assess whether subjects perceived a power differential between themselves and their partners. Both the second and third measures were labelled the "Reaction Inventory" (Appendix C).

Design

The present study employed three independent variables. One, conditions of emergent social structure, consisted of three levels or

conditions: subordinate, egalitarian, and superordinate.⁵ There have been several studies (reported earlier) that have investigated social structure both as an independent variable and as a dependent variable. Many of these studies have looked at social structure as an imposed condition and not as an emerging process. Additionally, social structure has been treated as only a two-condition variable: Hierarchical and egalitarian. Thus, the social structure was treated as an emergent process, and it was treated as a three-condition variable in this study.

The second variable, confederates, served a dual purpose. It was deemed imperative that a measure of the females' responses to an opposite-sex partner had to be gained without sacrificing the naturalness of the process occurring during the experiment; this meant essentially that the social structure had to be manipulated such that the subjects would be unaware of the manipulations. Secondly, it was seen as necessary to provide controls for physical attractiveness since it has been shown to be very important in interpersonal attraction. The utilization of three male confederates, trained in role-playing behaviors appropriate to each condition of social structure, was viewed as a solution to both of these problems. With the confederates facing an equal number of subjects, the effects of physical attractiveness should average out over the total sample. In a similar vein, using

⁵ Although social structure was manipulated in this experiment (through behaviors of the confederates), it was considered as emergent rather than ascribed since the experimenter did not designate a behavioral set for both members of the dyads; consequently, subjects were limited in their behaviors only by the nature of the interactions within dyads. Were the social structure ascribed or imposed, these behaviors would also be limited by the instructions given.

confederates as opposed to naive male subjects allowed for more rapid development of the social structure; also, the confederates were able to maintain a particular role posture which should have accentuated the impressions formed of the confederates within the limited time frame of the experiment.

The third variable employed was motivational orientation. There were two levels of motivational orientation: safety-orientation and esteem-orientation, as espoused by Maslow (1970). Subjects' level of motivation was determined on the basis of scores on the Aronoff Sentence Completion Test (1970).

The present study, therefore, utilized a 3 (emergent social structure: superordinate, egalitarian, and subordinate) \times 3 (confederates) \times 2 (motivational orientation: safety and esteem) factorial design.

Procedures

Pre-experimental session. During this session subjects were given preliminary notions about the experiment. They were informed that it was an effort to see how well women and men work together. Further, they were told that they would work on a project with a male student who might not be from the same class they were enrolled but, like themselves, were enrolled in one of the introductory psychology courses. This was to allay suspicions that the purpose of the task was not genuine.

The Sentence Completion Test (1971) was administered during this session. Shortly before administration, subjects were told that this session was for the purpose of screening students for potential participation in the experiment later in the term.

Experimental session. Subjects were brought into the experimental room and introduced to their partners; it should be clarified that each session involved only a subject, a confederate, and the experimenter (E). The experimenter reintroduced himself to both participants. E then proceeded with the general overview of the experiment:

"Today (or Tonight) we are going to conduct a brief experiment, the purpose of which is to see how well women and men can work together on a task while under stress. As you probably know, industry in both public and private sectors, are increasingly hiring women for positions which heretofore have been reserved for men. We feel that such practices are commendable, yet, at the same time, we realize that some problems can arise with these practices. This is particularly true if there is stress associated with the job. Our purpose, then, is to seek some means to ameliorate these problems by actually observing men and women working together under time pressures.

E then asked, "Are there any questions?" After responding appropriately to questions, E handed each subject a copy of the Behavioral Research Project (see Appendix D) and then left the room. The Behavioral Research Project was the instruction sheet outlining for the subjects the task they had to complete, and the time limits imposed. On the table in front of the subjects were three sketch pads and coloring pencils. Subjects were instructed to each use one of the smaller pads and draw individually a living-learning dormitory. Such facilities are common at Michigan State University. After initial sketches, subjects were to discuss their drawings and reach an agreement as to how the dorm was to be designed, and draw the agreed-upon dorm on the larger sketch pad. All work was terminated in fifteen minutes.

E, at the end of the experimental session, instructed the confederate to move to a separate room to complete a reaction inventory

while the subject completed the same in the experimental room. The confederate did not complete the inventory; it was felt that removal of the confederate would facilitate the subject's responding to the inventory.

After completing the inventory subjects were thanked for their participation in the study, and compensated for their time.

CHAPTER IV

RESULTS

Hypotheses 1a-c, and 2a-c were concerned with the elaboration of the relationship between conditions of emergent social structure, females' motivational orientation, and liking. Hypotheses 1a-c predicted that the safety-oriented female would express the least liking toward her male partner when she was forced to occupy the superordinate role in the relationship (1a), and the most liking when she was forced (by the social structure) to occupy the subordinate role (1b). Under egalitarian conditions the safety-oriented female was expected to express a degree of liking that was intermediate to that observed under the superordinate and subordinate conditions of social structure (1c).

Hypotheses 2a-c were comparable predictions about liking by esteem-oriented females. It was predicted that when esteem-oriented females were required to occupy the subordinate role, they would express the least liking for their male partner (2a). When required to occupy a peer role (i.e., an egalitarian role), there would be more liking toward their partner (2b); however, the most liking expressed toward male partners would occur when she was required to occupy the superordinate role (2c).

To test these hypotheses, two $3 \times 3 \times 2$ analyses of variance were conducted. In the first ANOVA (see Table 2) the cell data were responses to a Likert scale of Liking. The second ANOVA (see Table 3)

utilized responses to the statement: (My partner was) A VERY LIKEABLE PERSON, on a semantic differential measure consisting of 16 bipolar scales; the summation of responses to six of these scales that loaded high on the evaluative factor (Osgood et al., 1957) serving as cell data. The result of these analyses are presented below.

Table 2
Summary of Analysis of Variance of Responses to the
Likert Measure of Liking

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Emergent Social Structure (A)	202.187	2	101.094	< 1
Confederates	22.697	2	11.349	< 1
Motivational Orientation	6.10	1	6.10	< 1
A × B	775.440	4	193.860	1.215
A × C	357.783	2	178.892	1.121
B × C	193.230	2	96.615	< 1
A × B × C	489.602	4	122.401	< 1
Error	8299.834	52	159.610	-----

A review of the ANOVA summary table reveals that there was no statistical support for the hypotheses forwarded concerning liking as manifested in responses to the Likert scale of liking.

Table 3

Summary of the Analysis of Variance of Responses to
Semantic Differential Measure of Liking

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Emergent Social Structure (A)	17.181	2	8.591	< 1
Confederates (B)	10.700	2	5.350	< 1
Motivational Orientation (C)	4.678	1	4.678	< 1
A × B	331.755	4	82.938	2.448*
A × C	21.033	2	10.517	< 1
B × C	181.748	2	90.874	2.682**
A × B × C	45.544	4	11.386	< 1
Error	1761.667	52	33.878	-----

* $p < .10$

** $p < .07$

Table 3 reveals two marginally significant interactions in the semantic differential items on liking. One, an A (emergent social structure) × B (confederates) interaction ($p < .10$), was an unexpected finding. A test of simple effects for the A × B interaction as suggested by Winer (1971) was conducted. A marginally significant simple effect was found, revealing that confederate #2 (B2) elicited lower liking responses irrespective of condition of social structure ($F = 2.749$, $df = 2, 60$, $p < .05$). Additionally, the analysis indicated that confederates were

least liked under conditions in which they occupied the superordinate role (i.e., when the subjects were forced to accept the subordinate role) ($F = 2.294$, $df = 2, 60$, $p < .11$). See Table D4 for a table of mean response scores to the semantic differential measure of liking.

The second significant interaction found with the analysis of the semantic differential measure of liking was the B (confederates) \times C (motivational orientation) interaction ($p < .07$). A test of simple effects was conducted; this revealed that esteem-oriented subjects expressed significantly less liking toward confederate #2 while safety-oriented subjects expressed significantly more liking for the same confederate ($F = 6.523$, $df = 1, 60$, $p < .02$) (see Table D2 for summary table of simple effects). These differences were outstanding as evidenced by multiple comparisons utilizing the Dunn technique for multiple comparison (Kirk, 1968). Presented below is the BC summary table of means.

Table 4

Confederates \times Motivational Orientation Means Summary Table
of Semantic Differential Measure of Liking

Motivational Orientation	Confederates			
	B ₁	B ₂	B ₃	Total
Esteem (C ₁)	102.25	90.5	104	296.75
Safety (C ₂)	97.75	105.75	97.92	301.42
Total	200	196.25	201.92	598.17

As is evident, there are differences between mean liking scores for B1 and B2, and B3 and B2. For the esteem-oriented subjects (C1), these differences were significant beyond the $p = .01$ level

$[t'_{D_{3,60}}(X_1 - X_2) = 4.841; t'_{D_{3,60}}(X_2 - X_3) = 5.667]$. For the safety-oriented subjects, (C2), the level of significance surpassed was the $p = .05$ level $[t'_{D_{3,60}}(X_1 - X_2) = 3.364; t'_{D_{3,60}}(X_2 - X_3) = 3.226]$. In neither case, with esteem-oriented subjects nor with safety-oriented subjects, did the mean difference between B1 and B3 attain significance; in fact, both comparisons were less than 1.0. It seems apparent that subjects' responses to B2 may have erased any effects which had been predicted. The line of research generated by Aronoff and his associates (1967; 1970; Aronoff and Messe', 1971; Messe', Aronoff and Wilson, 1972) suggests that B2 perhaps maintained a superordinate posture while B3 maintained an egalitarian posture. The rationale for stating this position is that the research mentioned clearly reveals that esteem-oriented individuals prefer egalitarian social structure while safety-oriented individuals prefer hierarchical social structure.

Hypotheses 3a and 3b centered around the conditions under which an individual's perception of differential power between herself and her male partner would be enhanced. Specifically, the hypotheses were:

- 3a. Esteem-oriented females will express a greater perception of power when the social structure requires that they are subordinate in the relationship than when the social structure requires that they are superordinate in the relationships.
- 3b. Safety-oriented females will express a greater perception of power when the social structure requires that they are superordinate in the relationship than when the social structure requires that they are subordinate in the relationship.

Implicit in both hypotheses is the contention the egalitarian social structure should provide a situation in which the power relationship is as it would be expected -- for the esteem-oriented females -- and is not too discrepant from expectations of the power relationship -- for the safety-oriented females.

To test these hypotheses a 3 (emergent social structure) \times 3 (confederates) \times 2 (motivational orientation) analysis of variance was conducted, utilizing difference scores of Partner-Self ratings on semantic differential measure. Summary of the ANOVA is presented in Table 5.

Table 5

Summary of Analysis of Variance of the Semantic
Differential Measure of Power Perceptions

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Emergent Social Structure (A)	252.301	2	126.151	2.007
Confederates (B)	367.240	2	183.620	2.921*
Motivational Orientation (C)	0.0328	1	0.0328	< 1
A \times B	119.880	4	29.970	< 1
A \times C	99.839	2	49.920	< 1
B \times C	57.059	2	28.530	< 1
A \times B \times C	2.567	4	0.642	< 1
Error	3269.584	52	62.877	-----

* p < .05

As can be seen, there was a significant main effect -- confederates ($p < .05$) -- but the hypotheses did not receive any support. Despite the absence of expected interactions, it was felt that individual comparisons would provide a much more direct test of the hypotheses. The emergent social structure \times motivational orientation summary table of means, less the second level of social structure (i.e., the egalitarian condition) is presented in Table 6.

Table 6

Emergent Social Structure \times Motivational Orientation Summary Table of Responses to the Semantic Differential Measure of Power

Motivational Orientation	Emergent Social Structure		
	(A ₁) Superordinate	(A ₃) Subordinate	Total
Esteem (C ₁)	9.92	0	9.92
Safety (C ₂)	9.75	8.09	17.84
Total	19.67	8.09	27.76

A glance at Table 6 reveals that the mean semantic ratings for the esteem-oriented subjects (C₁) are in the predicted direction (i.e., $A_1 > A_3$); the same, however, cannot be said about the mean semantic ratings for the safety-oriented subjects: these ratings are contrary to prediction (i.e., $A_1 > A_3$ and not $A_3 > A_1$). The planned comparisons indicated no significant differences.

The last hypothesis predicted an inverse relationship between the degree of expressed liking and perceived differential power. The

hypothesis was not supported; in fact, the correlation was in the opposite direction (i.e., there was a positive relationship between expressed liking and the perception of differential power) ($r = .467$; $p < .001$). The magnitude of the correlation makes it extremely tempting to suggest that women, at least those in the present sample, tend to like men more when the men possess the greater influence in the relationship than when the women themselves possess that influence; however, other factors must be investigated before accepting such a conclusion.

CHAPTER V

DISCUSSION

The present study represents an exploratory investigation of the effects upon interpersonal attraction of interaction between individuals' motivational orientation and the nature of the (apparent) emerging social structure in which they interact. Also investigated were the effects of this interaction upon the individual's perception of differential power between herself and her opposite-sexed partner. Nine hypotheses were proposed. Four hypotheses -- 1a, 1b, 1c and 3b -- concerned themselves with the responses of safety-oriented females to three levels of social structure, in terms of the degree of liking expressed for another and also the extent to which differences in power (i.e., influence) is experienced. Four hypotheses -- 2a, 2b, 2c and 3a -- were parallel predictions for esteem-oriented females. Hypothesis nine was a prediction about the directionality of the relationship between degree of liking and the perception of differential power. None of the hypotheses received statistical support. Despite the absence of support, the data provide some clues as to what occurred during the experiment, and, at the same time raise some interesting questions concerning not only the line of research initiated in this study but other, more established lines of research. First, however, the hypotheses and results of analyses are presented; then tentative explanations about the outcomes of the present research, and lines of future research follow.

Hypotheses Concerning Liking (Likert Scale Data)

There were two measures of liking. The first, discussed here, was a 13-item Likert scale (see Appendix B). Table 2 presents the results of the 3 (emergent social structure) \times 3 (confederates) \times 2 (motivational orientation) analysis of variance employed to test H: 1a, 1b, 1c, 2a, 2b and 2c. As stated, there were no significant results. This analysis was particularly disappointing in light of previous research (e.g., Aronoff and Messe', 1971) which suggested that safety-oriented individuals prefer an hierarchical social structure whereas esteem-oriented individuals prefer an egalitarian social structure. When speaking in terms of preference for one item or condition over another item or condition, one is in essence stating that a greater positive evaluation is being attached to the former than to the latter. In short, one is stating a greater liking for the one over the other. It seemed logical to assume that the liking associated with the condition would generalize to persons associated with that condition. A review of the AC means summary table suggests an explanation for the absence of effects. Table D3 (see Appendix D) shows that (1) esteem-oriented subjects and safety-oriented subjects both exhibit a trend in the predicted direction. Esteem subjects expressed the least-liking in the superordinate condition (i.e., the condition in which Ss were required to occupy the subordinate role) but the greatest liking was expressed under the egalitarian condition of social structure and not the subordinate condition. It should be noted that the mean of condition A2 (egalitarian) is slightly different from the mean of condition A3 (subordinate) while the means of A2 and A3 both are clearly different

from the mean of condition A1 (superordinate) ($\bar{X}_{A1} = 29.83$, $\bar{X}_{A2} = 55.75$, $\bar{X}_{A3} = 52.5$). The means of the safety subjects were not different to the same degree as the esteem subjects ($\bar{X}_{A1} = 50.75$, $\bar{X}_{A2} = 49.75$; $\bar{X}_{A3} = 42.92$). The differences between esteem-oriented and safety-oriented Ss may reflect a (1) greater ability among esteem Ss to discriminate among stimulus person, (2) a need of safety Ss to act in a socially favorable way as they are themselves more sensitive to the opinion of others (Gergen and Marlowe, 1970), (3) the confederates may have responded differentially to the two groups of subjects, or (4) a combination of any of the three possibilities mentioned.

Hypotheses Concerning Liking (Semantic Differential)

A clearer picture is obtained by reviewing the analysis of the semantic differential on liking (i.e., Table 3). The ANOVA produced two marginally significant interactions, both involving the confederates. The confederates apparently behaved inappropriately under certain conditions of social structure. This may have been a result of (1) poor training (or perhaps insufficient training); (2) arousal of counter-productive motives -- such as competition -- especially with the esteem-oriented Ss; or, as the author suspects, (3) the lack of organization in assigning roles to confederates by the experimenter. This last point deserves some clarification. As stated in Chapter II, the number of Ss at the disposal of the experimenter was finite. Because of this the experimenter, when the last part of the study began, felt it imperative that an equal number of subjects from each motivational level be run under each condition of social structure; consequently, the confederates at the start of the experiment had to alter roles several

times during each day they participated. It is quite understandable, at least to this author, that slip-ups may have occurred. It is, nevertheless, regrettable that the confederates either were unaware of their errors or simply failed to acknowledge such to the experimenter.

There were several "results" which were perplexing, to say the least. One deals with the absence of effects of motivational orientation, either as a main effect or in interaction with social structure. Its perplexity stems from the evidence provided by earlier studies (e.g., Wilson, 1973), which indicates a preference for social structure by the two motivational groups. Most of this evidence has focused upon the degree of satisfaction with one's task performance, and not upon satisfaction with persons making up the group which essentially was the question posed here. Still, if the individual is satisfied with his task performance, in part, because the social structure is congruent with the individual's motivational orientation, then it would appear a viable assumption that the positive evaluation ascribed to the task situation should generalize to the member or members of the group that shared in that task. In attempting to solve this issue, the author has come to the conclusion that, with the knowledge accumulated via the analyses of data -- and the subsequent contention that the confederates, for whatever reasons, did not always occupy the appropriate role for the appropriate condition of social structure -- the subjects did not necessarily find working on the task very satisfactory; thus, they apparently did not experience attraction to their partners as had been predicted. Perhaps, if the Ss had enjoyed the task, there may have been more of an alignment between the present research and previous research relating social structure and motivation.

Hypotheses Concerning Differential Power

Hypotheses 3a and 3b were concerned with the issue of the perception of differential power within two-person, mixed-sex groups. The aim of these hypotheses was the discernment of conditions under which the perception of the developing power relationship may occur, since such perceptions, it is believed, have a profound effect upon interpersonal relationships. The analysis of the data did not support the hypotheses, but there was a significant main effect -- confederates.

Once again the confederates employed in the study proved to be a larger factor than had been anticipated. Some plausible reasons as to why the factor "confederates" has cropped up as important have already been explored. The major reason, however, has not yet been elaborated. Despite all of the precautions taken which the author felt had to be taken into consideration for the study to be successful, there was one consideration which was totally overlooked: the motivational orientation of the male confederates. This oversight was probably a function of two things: (1) the experimenter's intense concern over other facets of the experiment, and (2) possibly, at an unconscious level, there existed in most likelihood, a keen awareness of the complexities and potential complications of predicting such interactions. The next attempt at this study will conceptualize the effects of the social structure upon the male partner vis-a-vis the female partner.

A point of concern rests with the responses of the safety-oriented Ss. Again, these Ss apparently did not differentiate between their possession of influence, or they utilized denial (especially, when they were occupying the superordinate role). Upon initially

reviewing the data, it was believed to be a question of the amount of information females need before forming an impression of people or of situations; however, it appears that esteem-oriented females had little trouble in assessing the situation. This may represent a phenomenon specific to safety-oriented persons, and not just the safety-oriented woman. Looking at the data on liking, in conjunction with the Jacobs et al. (1971) study, it would appear that impressions had in fact been formed. Why the safety-oriented female failed to acknowledge her influence in the experiment is best left to empirical investigation.

Hypothesis Relating Power Perception and Liking

It was predicted that an inverse relationship exists between the degree of expressed liking for another and perceived differential power. This prediction was not supported; in fact, there was a high positive correlation between the two.

Just why the correlation ran counter to prediction is not altogether clear. One plausible explanation resides in the notion of the societal norm being adhered to. Thus, the women may simply feel more comfortable when the man is "in charge," so to speak. The liking expressed then represents the "comfortableness" of the relationship. Whether it is the comfortableness of the relationship is tentative but there is empirical evidence (Megargee, 1969) that women tend to give up positions of influence to their male partners. An interesting finding involved the safety-oriented females: while they acknowledged their influence during the subordinate condition (as reflected by the negative mean), they were even more aware of their partners' influence during the superordinate condition. There was not any substantial

differences in terms of their liking their partners under either condition of social structure. These results may reflect a general need for approval by the safety-oriented subjects. Further research is needed to gain a fuller understanding of this finding.

Other Thoughts on the Subject

It is felt that this study can, in the final analysis, be viewed as an experience which, not only the research personally involved in conceptualizing and conducting this research but any conscientious reader aspiring to conduct research, will find beneficial. What will be attempted here is an analytical review of aspects of the study that possibly could be improved or altered to increase the power of the design. The ordering of the items to be discussed does not reflect any form of ranking in terms of importance as all of these components are essential to the design just examined.

Type of task. The task employed in this study had been employed with a great deal of success (see Aronoff and Messe', 1971; Messe', Aronoff and Wilson, 1972; Wilson, 1973); essentially, the task consisted of Ss' completion of individual drawings of a living-learning dormitory; this, followed by a discussion of these drawings between group members (in the present study this meant discussion between dyadic partners), and through the discussions the group was expected to come to an agreement as to what the dormitory should look like. The agreed-upon dorm is then drawn to completion. In these earlier studies the time allotted was approximately 45 minutes while in the present study Ss were allowed fifteen minutes from start to finish. In the studies cited, the relationship between motivational

orientation and social structure was clear while in the present study, no relationship was discernible. Was this lack of a relationship a function in differences in time spent on the task? Possible, but doubtful. This assumption is doubtful because a different class of issues were being investigated: in the cited studies the focus was upon task-oriented behaviors (e.g., Wilson, 1973) investigated the effects of congruence and incongruence between social structure and motivational orientation upon group productivity) whereas the focus here was upon socio-emotional aspects of interpersonal interactions. Whether personal cognizance of task-related behavior and socio-emotional behaviors requires varying amounts of time is an unresolved issue, one that should be investigated empirically. If it should prove that more time is needed for the development of awareness of socio-emotional activity, then questions must be raised about the literature on impression formation. This literature would have us believe that we make judgements about people on minimal information about them. If research in the area of impression formation has any reasonable degree of validity to it, then the time allotted in the present study was more than adequate for Ss to make judgements. The author is unaware of research about the effects of motivation upon impression formation, but it does seem plausible that motivation would be a major determinant in an individual's impression formation. If the above conjecture is accurate, then one would have expected at minimum a marginal effect of motivational orientation in the analyses conducted. Future research should definitely focus upon the effect of motivation upon impression formation.

The use of the task for eliciting the class of information in this study is questionable also. Several of the Ss (approximately ten safety- and ten esteem-oriented Ss) were quizzed by the experimenter about their reactions to their experimental session as well as the task itself: Most felt that the task was not challenging to them; this was especially true for the esteem-oriented Ss (all 10 responded in this manner). Also, Ss tended to associate the task with drawing ability rather than in designing skills; hence, there were several instances in which Ss (even under subordinate conditions!) would do no more than accept the drawings of their partners. Reflecting upon this information provides speculation that such ascribing of competency -- in drawing -- to the confederates may be what is being reflected in the differential power scores of the safety-oriented Ss (you may recall the mean differential power scores: $\bar{X}_1 = 9.75$; $\bar{X}_2 = 9.25$; $\bar{X}_3 = 8.09$). Croner and Willis (1961) reported the finding that perceived differences in task competency does in fact mediate the perception of asymmetry in dyadic influence. This finding, however, does not allow for immediate adaptation to the present design because it requires that competency be ascribed from an external agent (i.e., the experimenter). Hence, the Croner and Willis (1961) study amounts to an ascribed social structure situation a la Wilson (1973). With the results at hand, it might be beneficial to digress and examine liking and the perception of power within an ascribed social structure framework. Unless subjects dissimulate, the result of the correlation between liking and perceived differential power should be more aligned with the predictions as stated in this study.

Subjects. The most obvious drawback of the present study was the inaccessibility of a larger population to test. Again, such a state of affairs was due mostly to seasonal variations in students' participation in psychological research. A view of the means concerning liking and power indicates that a larger N would doubtlessly have produced main effects, and perhaps the interaction effects sought.

The reader is reminded that the original design also called for male Ss and female confederates. A design employing sex of subject, as well as sex of confederate would be a more powerful design than that employed here. The original design could have provided answers to issues encountered with Megargee (1968) and Messe', Aronoff and Wilson (1973); specifically, the issue of the importance of externally-derived cues within-mixed-sex groups. Additionally, the larger N could possibly prove the inefficacy of Byrne's approach to interpersonal attraction which does not consider motivation as a factor.

One question which the author remains painfully aware of is the utility of the SCT for the measurement of motivational orientation. Let it be understood that the question of the validity of the SCT is not the issue; in fact, the author has extreme confidence in the SCT in terms of its measuring esteem-orientation and safety-orientation. The SCT, however, requires that one has a large N to test (for example, to get the upper 10% and lower 10% of a distribution such that $N = 120$, one needs 600 subjects!). Now that the SCT has shown itself to be a valid (Aronoff, 1967; 1970; Aronoff and Messe', 1971; Wilson, 1973; Price, 1976) instrument to measure motivational orientation, another ipsative scaling method might be employed to develop a paper and pencil

test which can be administered more easily. The method which appears useful to this end is the Q-sort. Discussion of the Q-sort may be found in Nunnally (1967), and in Crano and Brewer (1973); hence, a discussion will not be presented here. If it can be shown that the two motivational groups respond differentially to a Q-sort, then scales can be generated to quicken the identification of extreme-group members. To map out such a Q-sort is included in the future research plans of the author.

Confederates. The problems which surrounded the confederates have been thoroughly expounded upon. There are two aspects which deserve reiteration here. The most outstanding is the need to give utmost consideration to the motivational orientation of confederates. They are human just as are subjects, and as humans, they too have needs. To not consider the motives which perpetuate their behaviors, feelings, and emotions while considering the motives of subjects is, in the final analysis, a consideration of only half a paradigm. Without a doubt, considering half of the model makes the task much simpler; however, no total, complete answers can be obtained through such exercises.

The second aspect deserving mention is that of using confederates vis-a-vis subjects, versus subjects opposite subjects. There are many arguments on both sides. It is felt by the author that the advantages outweigh the disadvantages of employing confederates. This is especially the case when considering the manipulations used in an experiment: it would be extremely difficult to manipulate emergent social structure if subjects were matched against subjects, not within a single experimental session. With simulated designs the problem

may be alleviated to an extent. But simulated research requires substantial funding. Still, the notion of implementing simulated research in the area of interpersonal attraction should not be case aside as unfeasible.

The Alpha or the Omega? Future Research

The question eventually must be faced whether the line of research pursued here has reached an end road or provides insights into the problem investigated. With the results it is difficult to affirm strongly that insights have been secured; however, it is even more difficult to state that this research has no place to go. Unequivocally, this research does have a place to go. The problems associated with this study have been elaborated and future research will be strengthened with this knowledge in hand. Questions concerning the attribution of influence by safety-oriented females must be answered empirically. The issue of esteem-oriented females and their responses vis-a-vis males must be clearly determined; the Messe', Aronoff and Wilson (1972) and Megargee (1968) studies have touched upon the issue of role-assignment in mixed-sex groups, but the issue is not fully elaborated. So there remains many questions which can best be answered empirically. The author feels strongly that the predictions in this study -- with appropriate modifications (taking into consideration the motivational orientation of confederates) -- will prove accurate. Again, the results of the present study have been disappointing but useful research experience has been gained, and it is this experience which will provide the motivational impetus to see a refined study on the issues

investigated in the present study carried through to a successful completion.

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APPENDICES

APPENDIX A
ARONOFF SENTENCE COMPLETION TEST

THE SENTENCE COMPLETION TEST

Name: _____ Date: _____

Below are forty incomplete sentences. Read and complete each one. If the suggested word occurs in the middle of the line, place it wherever you wish.

1. I should like to
2. Most important
3. My appearance
4. _____ good mood
5. When I am not treated right, I
6. If I could only
7. My head
8. The people who work for me
9. The main driving force in my life is
10. Other people are
11. If I could change anything, I
12. For sure
13. _____ last
14. The more involved one gets
15. For me, the best

16. As a child, I
17. A friend
18. I will fight when
19. care
20. It's fun to daydream about
21. valuable possession
22. A stranger
23. When told to keep my place, I
24. Dormitory living
25. When an animal is wild,
26. If I were in charge
27. Being
28. People think I am
29. I don't like
30. What bothers me most
31. continually
32. To me, people
33. If I am put under pressure

34. I am happy when

35. broke , then

36. I want

37. The future

38. The people I like best

39. When I can't do something, I

40. Test like this

APPENDIX B
REFLECTIONS AND FEEDBACK
(LIKING MEASURE -- LIKERT SCALE)

REFLECTIONS AND FEEDBACK

Below are a number of statements concerning attitudes toward the task you've just completed and about your partner. Each statement is followed by a scale ranging from strongly agree at one end to strongly disagree at the other end. There is a midpoint (labelled "No Opinion Either Way"). You are to read each statement one at a time and respond to the statement by encircling the point on the scale which best describes your feelings or opinion about the statement: If you are strongly in agreement with a particular statement, then mark "Strongly Agree" (by drawing a circle about these words) on the scale beneath the statement; similarly, if you feel a slight disagreement with a statement mark your feelings (again, via a circle) on the scale. Try to avoid using the midpoint.

ABOUT YOUR PARTNER

(1) I found my partner to be very sociable.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(2) I found my partner to be a very responsible person.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(3) In general I enjoyed working with my partner on this project.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(4) I would not like to work on a similar project with the same partner.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(5) I think I would enjoy meeting my partner outside of a working context.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(6) I found my partner to be a stimulating individual.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(7) My partner did not provide any emotional support during the construction of our project.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(8) I found my partner to be a reliable individual.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(9) I think on the whole that my partner is a very likeable person.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(10) I don't think that many people would enjoy working with my partner.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(11) I would highly recommend my partner for a responsible job.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(12) In my opinion, my partner seems to be an exceptionally mature person.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(13) Most people would react favorably to my partner after a brief acquaintance.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

ABOUT THE TASK

(1) We made the best use of our time solving the task.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(2) My opinion was given adequate consideration.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(3) The atmosphere during the experiment wasn't very friendly.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(4) I had considerable influence in determining the final solution to the task.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

(5) If I was taking part in another experiment, I would like working with my partner.

Strongly	Agree	Slightly	No	Slightly	Disagree	Strongly
Agree		Agree	Opinion	Disagree		Disagree

APPENDIX C

REACTION INVENTORY
SEMANTIC DIFFERENTIAL MEASURES
OF LIKING AND
POWER PERCEPTION

Reaction Inventory

Below are three short phrases. Additionally, you will find a series of bipolar scales following each phrase. You are to rate the phrase on each of the bipolar scales, in the context of the experiment just completed. For instance, if you were to rate the phrase GOING TO COLLEGE on a dimension of beautiful-ugly, you might rate it as very beautiful; it would then be rated as follows:

Beautiful X:__:__:__:__:__ Ugly

If you were to rate it as extremely ugly, it would look like this:

Beautiful__:__:__:__:__X Ugly

If, on the other hand, you were to rate it as neither beautiful nor ugly your rating might appear like this:

Beautiful__:__:__X:__:__:__ Ugly

Be sure that you mark an "X" in a space and not between spaces. Rate all bipolar scales for each phrase.

A VERY LIKABLE PERSON

important: _____: _____: _____: _____: _____: _____: _____: unimportant
cold: _____: _____: _____: _____: _____: _____: _____: hot
pleasant: _____: _____: _____: _____: _____: _____: _____: unpleasant
dirty: _____: _____: _____: _____: _____: _____: _____: clean
passive: _____: _____: _____: _____: _____: _____: _____: active
unsociable: _____: _____: _____: _____: _____: _____: _____: sociable
kind: _____: _____: _____: _____: _____: _____: _____: cruel
obedient: _____: _____: _____: _____: _____: _____: _____: disobedient
hostile: _____: _____: _____: _____: _____: _____: _____: friendly
commonplace: _____: _____: _____: _____: _____: _____: _____: unique
fast: _____: _____: _____: _____: _____: _____: _____: slow
soft: _____: _____: _____: _____: _____: _____: _____: hard
unattractive: _____: _____: _____: _____: _____: _____: _____: attractive
successful: _____: _____: _____: _____: _____: _____: _____: failure
ugly: _____: _____: _____: _____: _____: _____: _____: beautiful
modest: _____: _____: _____: _____: _____: _____: _____: vain

NAME _____

PHONE # _____

PLEASE RATE

"YOUR PARTNER"

Assertive: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unassertive
 Bad: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Good
 Large: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Small
 Dependent: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Independent
 Hot: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Cold
 Unfriendly: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Friendly
 Obvious: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Subtle
 Powerful: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Powerless
 Responsive: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unresponsive
 Submissive: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Dominant
 Pleasant: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unpleasant
 Reasonable: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unreasonable
 Disreputable: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Prominent
 Influential: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Uninfluential

NOW, PLEASE RATE

"YOURSELF"

Assertive: _____: _____: _____: _____: _____: _____: _____: _____: Unassertive
 Bad: _____: _____: _____: _____: _____: _____: _____: _____: Good
 Large: _____: _____: _____: _____: _____: _____: _____: _____: Small
 Dependent: _____: _____: _____: _____: _____: _____: _____: _____: Independent
 Hot: _____: _____: _____: _____: _____: _____: _____: _____: Cold
 Unfriendly: _____: _____: _____: _____: _____: _____: _____: _____: Friendly
 Obvious: _____: _____: _____: _____: _____: _____: _____: _____: Subtle
 Powerful: _____: _____: _____: _____: _____: _____: _____: _____: Powerless
 Responsive: _____: _____: _____: _____: _____: _____: _____: _____: Unresponsive
 Submissive: _____: _____: _____: _____: _____: _____: _____: _____: Dominant
 Pleasant: _____: _____: _____: _____: _____: _____: _____: _____: Unpleasant
 Reasonable: _____: _____: _____: _____: _____: _____: _____: _____: Unreasonable
 Disreputable: _____: _____: _____: _____: _____: _____: _____: _____: Prominent
 Influential: _____: _____: _____: _____: _____: _____: _____: _____: Uninfluential

APPENDIX D
ADDITIONAL TABLES
AND INSTRUCTIONS

BEHAVIORAL RESEARCH PROJECT

INSTRUCTIONS

Please read these instructions through once before beginning.

In this study we are trying to find out what group structures best allow executives to produce creative solutions to problems which confront them. To do this, we are asking you to work with someone you have not worked with before. Below is an outline of the tasks we would like for you to do. You will find all the necessary materials in front of you.

The job you are to do is to design and sketch out a living-learning dormitory, using the paper pads and coloring pencils you will find on the table in front of you.

- a. Before you begin work as a group, take one of the smaller pads and spend about five minutes working out preliminary designs individually.
- b. Together decide on a design and then sketch it out, using the large paper pad on the table. Plan to spend about ten minutes deciding and sketching out this group design.

Your ultimate goal is to come to a decision and sketch a living-learning dorm on the large sketch pad.

Total time allotted for this project is fifteen (15) minutes.

Appendix D.2

Summary of the analysis of variance for $B \times C$
simple effects

Source	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
SS_B within C_1	138.694	2	69.347	2.047
SS_B within C_2	53.758	2	26.789	1
SS_C within B_1	13.028	1	13.028	1
SS_C within B_2	221.012	1	221.012	6.523**
SS_C within B_3	84.256	1	84.256	2.487*
Error			33.878	-----

**
p < .02

*
p < .11

Table D.3

Emergent Social Structure X Motivational Orientation
 Summary Table of Mean Liking Scores
 From the Likert Measure of Liking

Motivational Orientation	Emergent Social Structure			Total
	(A ₁) Superordinate	(A ₂) Egalitarian	(A ₃) Subordinate	
Esteem (C ₁)	29.83	55.75	52.50	138.08
Safety (C ₂)	50.75	49.75	42.92	143.41
Total	80.58	105.50	95.41	281.49

Table D-4

Table of Mean Liking Scores from the Semantic
Differential Measure of Liking

Motivational Orientation	Emergent Social Structure								
	Superordinate			Egalitarian			Subordinate		
				Confederates					
	1	2	3	1	2	3	1	2	3
Esteem	26	33	36	31.5	35	34	37.75	29.5	34
Grand Mean	31.667			33.5			33.75		
Safety	30.25	34	36.25	33	38.25	31	34.5	33.5	30.67
Grand Mean	33.5			34.08			32.89		

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