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Distributive Fairness: An Exploration of Male-Female Differences in Allocation Behavior

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**DISTRIBUTIVE FAIRNESS: AN EXPLORATION OF MALE-FEMALE
DIFFERENCES IN ALLOCATION BEHAVIOR**

by

Daryl G. Kelley

**A Thesis
Submitted to the
Faculty of the Graduate College
in partial fulfillment of the
requirements for the
Degree of Master of Arts
Department of Sociology**

**Western Michigan University
Kalamazoo, Michigan
December, 1981**

DISTRIBUTIVE FAIRNESS: AN EXPLORATION OF MALE-FEMALE
DIFFERENCES IN ALLOCATION BEHAVIOR

Daryl G. Kelley, M.A.

Western Michigan University, 1981

Previous research has shown that males and females follow different strategies in allocating rewards for unequal performance on a team task: Males tend to utilize an exploitive allocation strategy, while females tend to be more accommodating in their allocations. Research has also shown that allocation strategies may differ depending on whether the allocation of rewards is to be made public or is known only to the allocator. Public reward allocations of males tend to be more exploitive than females, while this difference is reversed for private allocations. The present study sought to replicate and extend previous studies, using a factorial experiment which examined the effects of performance and disclosure on allocation decisions, and studied the effects of sex role and the masculinity and femininity of identity on allocation. The results were interpreted as consistent with self-presentation theory which suggests that males and females will enact public behaviors congruent with their sex roles.

ACKNOWLEDGEMENTS

I wish to thank the Graduate College of Western Michigan University for the grant which made this project possible.

I am grateful to the members of my committee for thier guidance and suggestions to the solution of problems which arose throughout the course of this project. I wish to express my gratitude to Paul Wienir who has continuously supported and encouraged me in my endeavors as a graduate student. I with to thank Linda Rouse for sharing her expertise in the area of equity theory with me. Finally, I want to thank Robert Wait for the many office discussions which clarified my theoretical conceptualization of the problem, and for the time and great care he took in his editing suggestions which made the thesis a better manuscript. Of course, all are absolved, for any errors or omissions which appear in the thesis. I alone am responsible for the final product.

I wish to express my gratitude to the instructors who kindly offered their students as possible volunteers for the experiment. Also I wish to express my gratitude to those who volunteered to serve as subjects in the pretest.

I wish to thank the sociology graduate students as a group whose heartfelt support encouraged me to overcome problems. For their help in different aspects of the project, I wish to thank: Rosamond Robbert, Delores Jones, Tim Goodman, and Keith Woods. In particular I with to thank Denise Tyiska who kept me from

becoming weary and Kathy Tiemann who so freely shared her knowledge and skills with me.

I wish to thank the secretaries in the sociology department for the patience, concern, and help, they extend to graduate students. Also I wish to thank Agnes McColley for typing the thesis and making the last step less painful.

I wish to express a special thanks to my friends: John Graft for his love and support, and Fran McCrea whose confidence in me helped me grow intellectually and personally.

Finally, I wish to thank Ruth Kelley, my mother, who helped alleviate the pressure when I could no longer meet my financial obligations.

Daryl G. Kelley

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CHAPTER I

Introduction

In studying the phenomenon of human behavior as social exchange, interest has been generated in the problem of what standards individuals utilize in deciding how to distribute rewards. In some situations the participants in the exchange have differential contributions, which can make the division of rewards problematic. When an individual is placed in a situation where rewards are to be distributed, the person must resolve a moral dilemma between personal desires for the highest possible reward for self and allocating others their due. The dilemma faced by the individual reflects the relationship between the individual and the group or society. On the one hand a person experiences pleasure and enjoyment from high rewards while at the same time the person is obligated, as a member of a social group, to enact relations which are deemed fair by the group.

Hobbes assumed humans are naturally motivated to act in their own self-interests and are not concerned with the interests of others. Hence, each person would seize as many goods as possible and protect them from others whose own interests mandate them to take goods from their possessors. Valuable resources, such as time for making weapons and standing guard are lost when people must protect their possessions from others; thus an agreement is reached where members respect the property of others. Through a social contract

members of a society are entitled to the fruits of their labor; without such an agreement, life would be "solitary, poor, nasty, brutish and short" (Hobbes, as quoted in Tinder, 1974, p. 24). A social contract assures each individual that others will respect the rights of members to their earned outcomes, which creates a stable society. Hence, a social contract may be viewed as a standard of distributive fairness. However, the contract may vary from society to society in the specification of how goods should be distributed. The agreed upon solution where members receive their due is deemed a standard of fairness, which is used by members to decide if they are treated in a fair manner.

An important part of the problem of fairness is the fact that resources are generally limited. There are a number of ways in which the interests of all parties may be taken into account in allocating scarce resources. In different realms of life in American Society, various manifestations of fairness are found. In economic relations, rewards are distributed in accordance with the contributions of the members involved in the exchange. In our political system there is a theoretically equal division of resources where each adult member of society is allocated one vote. Families often allocate resources according to the needs of their members.

Different rules of fairness are employed in different societies and by different groups within a society. The social psychological problem involves how individuals learn rules of fairness, how fairness is perceived on a day-to-day basis, how fairness is negotiated interpersonally, and how it is enforced by individuals. Different

groups of individuals may possess and utilize somewhat different conceptions of fairness. The purpose of this paper is to investigate differences in the ways in which males and females allocate rewards in interpersonal interaction under conditions of unequal contribution to a common task.

Leventhal and Lane (1970) conducted a fairness experiment to determine if males and females allocate rewards differently. After completing a math task, subjects were given an assigned performance score which was either better or worse than the score assigned to a partner (hypothetical) who supposedly completed the same task, and asked to divide a team reward between themselves and the other member of the dyad. The results of the experiment indicated that men and women do allocate rewards in a different manner. Males were considered to use an equitable strategy where they divided rewards in accordance to their partner's performance. Thus, high performers gave themselves more than half the reward and low performers kept less than half the reward. Females were thought to use an accommodation strategy, since high performing women gave their partners more of the reward than high performing males, and low performing females kept less of the reward for themselves than low performing males.

Leventhal and Lane concluded that men and women internalize different standards of fairness due to the differential socialization practices experienced by each sex. Recent literature (cf., Kahn, O'Leary, Knulewitz, & Lamm, 1980) suggests that men are trained to be competitive and task oriented and females are taught to be more

concerned with the needs and feelings of others, and that this will affect the manner in which males and females will determine fairness. Males will tend to maximize outcomes for themselves while females will allocate rewards in such a manner as to promote harmonious group relations.

Kidder, Belletier, and Cohen (1977) conducted an experiment which studied male-female differences in allocation behavior only under the condition of high performance, but extended the Leventhal and Lane experiment by adding a private-public disclosure condition. Subjects assigned to the private condition were assured that a secretary would be the only person aware of the allocation, while subjects in the public condition were told that they would discuss their allocation decision with their partner and the experimenter at the end of the session. The results in the public condition agreed with the Leventhal and Lane experiment, but the private allocation displayed a reversal of the expected pattern: in private, women gave more to themselves than males. The experimenters suggested that when men and women are relieved of their respective sex role expectations, as in the private disclosure condition, they will opt for the allocation strategy denied them in public. Thus, males will use an accommodation strategy while females will use an equitable strategy when privately allocating rewards.

There is an apparent contradiction between the reasons given by Leventhal and Lane (1970) and by Kidder et al. (1977) as to why males and females allocate rewards differently. Leventhal and Lane (1970) hypothesized that males and females internalize different standards of

fairness. If this is the case then there would be no difference between the public and private disclosure conditions by sex. Kidder et al. (1977) postulated that the allocation made by males and females is contingent upon the presence of sex role expectations. Thus, in public males and females will allocate rewards in a way that reflects the social expectancies attached to their respective sex, while in private they will utilize different standards than the ones available to them in public.

The present study will attempt to reconcile the findings of the Leventhal and Lane study with those of the Kidder study. A crucial experiment was devised in which subjects were asked to divide a team reward after completing an editing task with hypothetical partners. Males and females were either assigned to a low or high performance condition as in the Leventhal and Lane study. Also, subjects were either assigned to the public or private disclosure condition as in the Kidder experiment. The purpose of this thesis is to clarify whether or not males and females have different standards in determining fairness.

In addition to resolving questions raised by past research, this study will attempt to extend our knowledge of allocation behavior by examining the relationship between gender identity and allocation when the other experimental variables are controlled. Gender identity refers to the masculine and feminine traits which people perceive themselves as possessing, where masculine traits are agentic and task oriented and feminine traits are communal and other oriented. If allocation is related to the orientation internalized by a

person as suggested by Kahn et al. (1980), then these traits of a person's gender identity may be expected to predict allocation behavior independently of sex.

CHAPTER II

Review of the Literature

The theory and research in the area of distributive fairness (for review, see Kahn et al., 1980) has delineated a set of assumptions about why people strive for fairness and how they determine fairness. This chapter will begin with a general discussion of the underpinnings of distributive fairness, and the specific justice standards of equity and equality. Then an overview of allocation experiments will be given, and finally the discussion will be narrowed to the explication of the Leventhal and Lane (1970) and Kidder et al. (1977) studies. The variables contained in these two studies will be considered in terms of their relationship to distributive fairness.

Leventhal (1976, p. 2) states that distributive fairness exists, "when Person believes receivers are getting outcomes they deserve." The judgment a person makes in determining if fairness has been achieved involves a process of comparison between the outcomes people receive and the outcomes Person feels that people ought to receive.

Many theorists (cf. Leventhal, 1976) assume that an individual is motivated to make fair allocations. Lerner, Miller, and Holmes (1976) argue that allocation behavior is grounded in the belief in a "just world." This premise assures individuals that members of a society will enact relations with a sense of fairness. The knowledge that people obtain what they deserve in the long run creates a

stable environment which allows people to forego short term desires for long term deserved rewards.

Though individuals are motivated to maintain justice, the computation of justice will differ depending on the individual and the situation. There are contribution, equality, needs and legal rules which a person can utilize in determining deservingness. A person's interpretation of a situation will dictate which justice rule or combination of rules is appropriate in determining what is fair. The two standards used for determining fairness which have received the most attention and will be reviewed here are equity (contributions) and equality (cf. Kahn et al. 1980; Leventhal, 1976; Berkowitz & Walster, 1976).

Equity

Equity theory was formulated by Adams (1963) who built on the concepts of relative deprivation (Stoufer, Suchman, DeVinney, Starr, & Williams, 1949), distributive justice (Homans, 1961), and cognitive dissonance (Festinger, 1957). According to Adams (1965, p. 280), "Inequity exists for Person whenever he perceives that the ratio of his outcomes to inputs and the ratio of Other's outcomes to Other's inputs are unequal." This definition will be clarified by defining the components of the definition and presenting the definition in a computational schema constructed by Adams.

In equity theory (Adams, 1965) inputs are any attributes or services which a person perceives to be his or her contribution to an exchange. In order for an attribute to qualify as an input, the

possessor must recognize the attribute as an input, and believe the attribute is relevant to the exchange. For example, a male college student may generally perceive his education to be an input when taking a job. However, if he would accept a summer job as a dishwasher in a restaurant, he would probably not consider his training in biology as relevant to the exchange between employer and employee.

According to the rules of equity, the inputs which people contribute to an exchange entitle them to receive outcomes. Outcomes are what a person receives in a relationship, and may be positive or negative in their nature. The characteristics of recognition and relevance apply to the definition of outcomes as well as inputs. For example, if a person receives respect from a supervisor for performance on the job, the person must recognize that respect has been paid and consider such respect to be relevant in the employer-employee relationship.

According to equity theory, people develop sets of normative expectations of what constitutes a fair relationship. Adams (1965, p. 279) states:

The expectations are formed--learned--during the process of socialization, at home, at school, at work. They are based by (sic) observation of the correlations obtaining for a reference person or group--a co-worker or colleague, a relative or neighbor...

Thus, the calculation of fairness is a comparison process between what a person obtains in a relationship and what others obtain.

Adams (1965) assumes that the other with whom a person compares himself has at least one attribute in common with Person.

Adams (1965) believes that people experience inequity when either their outcomes are less, relative to their inputs, than other persons' ($\frac{O_p}{I_p} < \frac{O_a}{I_a}$) or when their outcomes are greater, relative to their inputs, than other persons' ($\frac{O_p}{I_p} > \frac{O_r}{I_r}$). The comparison ratio between self and other indicates that justice is obtained when rewards are distributed in proportion to contributions. Thus, people with high inputs into an exchange expect high outcomes, and people with low inputs expect lesser outcomes.

If inequity exists, then tension will be experienced which will motivate the person to restore equity. When a person receives rewards which are excessive in relation to contributions, then the individual will experience guilt. If a person is denied an expected outcome then the person will experience anger. In either case the individual is motivated to initiate some action, either behavioral or cognitive, which will restore the appropriate input-outcome ratio.

Equity is one of several standards which people may select to determine deservingness. Reis and Gruen (1976) argue that people are more apt to define a situation as being one where the enactment of the equity rule is appropriate when the exchange is focused on concerns for employment and productivity. An underlying dimension of employment and productivity is competition, in which people compete to sell their skills on the market. In past experiments (e.g., Leventhan & Lane, 1970) where equity has been studied, competition has been an integral part of the situation. Examples of cues for competition which have been used in experiments are the use of bonus grade points and the simulation of business and industry conditions.

Competition is an important factor promoting the use of the equity rule, but it may not be the sole determinant of such a judgment. Any factor which would highlight differential contributions may encourage an equitable distribution of rewards.

Equality

The use of the equality norm came to the attention of researchers who were testing the equity theory of Adams (Kahn et al., 1980). Sampson (1975, p. 49) states that the equality solution to the distribution problem is "based on a principle that divides resources equally, arguing that differential investments do not provide a legitimate basis for making claims to differential outcomes..." Simply stated "Everyone deserves much the same." In equity experiments, subjects are said to make an equality choice when they make an even split of rewards despite differences in inputs.

Deutsch (1975, p. 146) postulated that the equity rule is "disruptive of social relations because it undermines the bases for mutual respect and self-respect necessary for enjoyment of such relations." The equality rule may be more conducive to promoting harmonious relations. Reis and Gruen (1976) found support for this proposition when they found that relationships which are focused on a concern for members of the group result in a more equal distribution of rewards. The equality standard has also been used by allocators who were instructed to reduce conflict between members of a group (Leventhal, Michaels, & Sanford, 1972). These findings suggest an equality justice rule is utilized by people when the concern

for cooperation and interpersonal harmony is a salient feature of the situation.

Allocation Experiments

Social psychologists have employed various research designs, the most prevalent being the allocation experimental paradigm, in attempting to understand the relationship between equity and social phenomena (cf., Adams & Freedman, 1976; Walster, Walster, & Berscheid, 1978). Kahn et al. (1980) listed four types of experimental paradigms used in allocation research: performance following inequity, allocations to self and others, allocations to others, and group allocations. In the performance following inequity paradigm, subjects are asked to perform a task and are told what they will be paid in relation to other subjects. The experimenters then observe the subjects' performance of the task to see if a differential in payment will affect subjects' contributions. In the other three paradigms, the subjects are asked to divide rewards among subjects. In the allocation to others paradigm, the subject allocates the reward among members involved in an exchange in which the subject is not a participant. In the allocation to self and others paradigm, the subject is a participant and receives a share of the reward. Finally, in the group allocation paradigm all of the participants discuss how the reward should be distributed and make a group decision on how to divide the reward.

The early equity studies (e.g., Adams & Rosenbaum, 1962; Adams & Jacobsen, 1964) utilized the performance following inequity ex-

perimental paradigm where the researchers attempted to create a situation which would produce a feeling of inequity within subjects in the treatment condition. Subjects were referred by a university job placement center to the experimenter. Upon meeting the experimenter, the subjects assigned to the experimental condition were told that they were not qualified for the job, but would be hired anyway since the employer was in a bind. The subjects who were assigned to the control group were told that they were qualified for the job. The experimenters hypothesized that the unqualified workers would produce more work for the same pay as the qualified workers, since their inputs (i.e., job experience) were less. This allowed the experimenters to see how the subjects would react to inequity. Research in this paradigm tests whether people use a proportional standard in determining if the division of rewards enacted by the experimenter is fair.

By allowing subjects to allocate rewards, as in the self and other experimental paradigm, the experimenter can observe what outcomes subjects deem to be fair. Lane and Messé (1971) assert that by allowing subjects to allocate rewards, the investigator can examine how people act so that inequity is not created. People do not desire to experience guilt or anger, therefore they will enact relations which they deem to be fair. An important point to be noted here is that the research question has changed from how subjects respond in an inequitable situation to how people define fairness in situations. The latter question concerning persons' conception of fairness is to be addressed in the present study.

In the self and other experimental paradigm, subjects perform a task as part of a team effort with a hypothetical partner. Subjects are informed how well they and their partners performed the task and are asked to divide a reward between themselves and their respective partners. The dependent variable is the amount of reward that is allocated to partner in relation to self. Kahn et al. (1980) delineated three general characteristics of this design: (1) high self-interest for subjects, since they will receive a share of the group reward, (2) control over the distribution of rewards, since each subject is assigned the role of allocator, and (3) moderate interpersonal relations between subjects, since they are often promised future social interaction with their partners though this is often a deception.

The self and other experimental paradigm can be utilized to determine the influence of situational and personal factors on the computation of justice by varying the situation or the characteristics (of subjects) examined in the experiment. One personal characteristic which has been studied using the self and other paradigm is sex (Leventhal & Lane, 1970; Kidder et al., 1977). These studies have found a male-female difference in the resolution of the distributive fairness problem.

An early study which utilized the self and other paradigm in studying male-female differences was conducted by Leventhal and Lane (1970), using a 2 x 2 factorial design where sex of subject and assigned performance (superior or inferior) were the independent variables. Subjects were asked to complete a math task and were told

that the task was part of a team effort. After completing the task, subjects were given a score for their own performance and a performance score for partner (partner was hypothetical and scores were randomly assigned). Subjects were asked to distribute a team monetary reward between themselves and their partners.

Leventhal and Lane (1970) found that men allocated rewards in an equitable manner, distributing in proportion to performance, where males with high scores kept more than half the reward and males with low scores gave more than half of the reward to their partners. Women also took performance into account when they allocated rewards, but they used a more accommodating strategy where they gave more than a strictly equitable share to their partners. In the high performance condition, females took more than half of the reward but less than males with the same performance. In the low performance condition, females took less than half of the reward and less than males in the low performance condition.

Kidder et al. (1977) extended the Leventhal and Lane study by creating a public and private disclosure condition. Subjects in the private condition were instructed to drop their pay envelope in a box in a secretary's office. They were told that the allocation results would not be known to either the subject's partner or the experimenter. Subjects in the public condition were told that they would openly discuss their allocation with their partners and the experimenter at the end of the session. In the public disclosure condition males allocated a greater share of the reward to themselves than females. This is congruent with the results obtained in the

Leventhal and Lane study under the high performance condition. Since the Kidder study did not utilize a low performance condition, the difference between males and females in this condition could not be compared. In the private disclosure condition of the Kidder study, there was a reversal in the allocation pattern: women gave more bonus grade points to themselves than men. The researchers concluded that the reversal was caused by subjects being relieved of sex role expectations which allowed them to choose the strategy denied them in public. However, the reversal may have been due to the procedures employed by experimenters rather than a desire of males or females to choose the forbidden strategy.

In addition to subjects being assigned to only a superior performance condition in the Kidder study, there were other differences between the Kidder study and the Leventhal and Lane study. The Kidder study used a manual task rather than a mental math task. Also, the dependent variable was the amount of bonus grade points allocated to subjects instead of money allocated to self as in the Leventhal and Lane study. Finally, subjects in the Kidder study met and interacted with their partners before making the allocation.

The Kidder and the Leventhal and Lane experiments have contributed to a better understanding of male-female differences in allocation behavior. Leventhal and Lane (1970) found that males and females with the same performance divided rewards differently. The Kidder study further suggested that allocation behavior is influenced by disclosure of the allocation decision. The remainder of this chapter will review studies which have contributed to our under-

standing of the meaning of performance, disclosure, and male-female behavior. This will help provide a better grasp of how individuals solve the distributive fairness problem.

Performance

Performance was introduced into equity experiments as a way to control the amount a subject contributes in an exchange relationship (Adams & Jacobsen, 1964). Thus, performance is the operationalization of a subject's inputs. In a post experimental questionnaire, Leventhal and Lane (1970) found that subjects do take the difference in performance into account when distributing rewards.

In the allocation to self and other experimental paradigm, subjects are randomly assigned either a high performance score or a low performance score, and are asked to divide a team reward between themselves and their partners. Subjects are given differential performance scores under the assumption that they will use the scores as inputs in determining fairness (Lane & Messé, 1971). Thus, subjects are expected to allocate themselves a share reflecting their proportion of inputs to team outcomes.

Studies utilizing the self and other paradigm indicate that individuals generally take performance into account when dividing rewards. However, studies within the paradigm which report the mean allocation by performance condition indicate that subjects do not use an exact equity rule in dividing rewards (Leventhal & Lane, 1970; Mikula, 1974; Shapiro, 1975; Reis & Jackson, 1981). The allocation

mean for high performers is always less than the allocation outcome predicted by equity theory.¹

In comparing these studies, the allocation means of low performers are somewhat inconsistent. In general, the allocation means suggest that low performers tend to take more than an equitable share. The allocation means of females assigned to the low performance condition in the Leventhal and Lane (1970) and Mikula (1974) studies indicated allocations to self which were less than equitable.² However, a study by Reis and Jackson (1981) found that females as well as males assigned to the low performance condition gave themselves more than an equitable amount. In all of these studies, the allocation mean for males assigned the low performance score was greater than the score predicted by equity theory.

Lane, Messé, and Phillips (1971) conducted an experiment in which subjects were the medium input member of a triad, thus one member had a better performance score and the other had a worse performance score than the subject. Subjects were asked to vote for the member of the triad besides themselves who they would like to divide the team reward. They found subjects were more likely to vote for the high input member. The researchers postulated that subjects preferred allocators who had high inputs, since they could allocate in a proportional manner and still receive the largest share of the reward. Whereas, a low input individual would receive a small share of the reward if they distributed in a proportional manner. Thus, being equitable is perceived as being easier for a high input individual than a low input individual. The difficulty of low input

members in making equitable allocations is demonstrated by the mean pattern where low performers tend to take more than an equitable share.

In a questionnaire constructed by Kahn, Lamm, and Nelson (1977) subjects rated the appropriateness of hypothetical allocators in the low and high performance conditions. They found subjects preferred allocators who divided rewards equally when the allocator had high inputs and equitably when the allocator had low inputs. This suggests that individuals prefer allocators who will maximize the outcomes for the recipients. When the subjects were asked how they would themselves distribute rewards in the high and low performance situations, subjects were more likely to indicate an equal allocation if they had high inputs and an equitable allocation if they had low inputs. Thus, the solution to the distributive fairness problem may be influenced by the performance the allocator has achieved or been assigned.

The finding that people with high performance should allocate equally (Kahn et al., 1977) appears to contradict the finding of Lane and Messé (1971) who suggest high performers allocate equitably. This contradiction may be resolved by considering these findings with the pattern of allocation means resulting from experiments which utilized the allocation to self and other paradigm where high performers are more than equitable and low performers are less than equitable to their partners. Since the allocation of high performers is less than equitable to themselves and in the direction of equality, allocators may be deemed to act more equally. On the other

hand, high performers may be labeled as acting more equitably to partners when their allocations are compared to the allocation of low input individuals who take more than an equitable amount. Thus, the description of the allocation of high performers in equity experiments will depend on whom/what the allocator is being compared. The allocation of high performers may be called equitable since they give their partners more than an equitable amount. If the researcher examines the distribution of allocations to self, the high performer may be labeled equality since the allocations will fall between an equal division and an equitable division of rewards.

The more than equitable allocation of high performers and less than equitable allocation of low performers to their respective partners may reflect a conflict between standards held by the allocator. These standards may be other fairness standards or social standards. Allocators may experience conflict between equity and equality standards, or possibly conflict between equity and a desire to reduce status differences between themselves and their partners which could be caused by the performance differential. The pattern of allocating more than equitable share by high performers and less than an equitable share by low performers to their partners has not been simultaneously discussed in past equity research.

In this section, performance was conceptualized as an input used by individuals to help them determine fairness. However, the pattern of allocation by performance found in previous studies suggests that different justice rules may be used depending upon performance. These issues will be further discussed in the final chapter and the

meaning of performance will be further explicated.

Male-Female Differences

A familiar aspect of social life is that males and females are different in their behavior, interests and goals. Differences between the sexes exist in early childhood and extend throughout the lives of men and women. Sex role socialization is a concept defined by social psychologists as the process by which boys and girls are taught the nature of their roles and the types of people they should become.

Sex Role Differences. In reviewing studies attempting to delineate sex differences, Frieze, Parsons, Johnson, Ruble, and Zellman (1978) found many results to be inconclusive and contradictory.³ Over-all, moderate differences have been found in the areas of dependency, nurturance, emotionality and self-esteem, where the direction of the results agree with the social stereotypes held for men and women. These stereotypes define males as being active and task oriented and females as being passive and oriented toward caring for others. The only strong consistent finding in sex differences is in the area of aggression where males are more physically aggressive than females.

Laboratory experiments studying the formation of coalitions (e.g., Uesugi & Vinacke, 1963), in which members of a triad can form a partnership by agreeing on the division of a reward, have provided some evidence validating sex stereotypes. Coalition research (for

review see, Vinacke, Mogy, Powers, Langan, and Beck, 1974) found that women were more apt to bargain for agreements which would result in harmonious personal relations, while men tended to aggressively employ a more exploitative strategy which would enhance their personal rewards at the expense of other group members. The different bargaining strategies employed by men and women exemplify the differences in male and female orientations toward interpersonal relationships.

The different orientations found in the coalition studies reflect the reasoning of Bakan (1966, pp. 14-15) who proposed that there were "two fundamental modalities in the existence of an organism as an individual, and communion for the participation of the individual in some larger organism of which the individual is a part." Individuals with a strong sense of agency strive to achieve self-rewards and display such traits as assertiveness and competitiveness. Individuals who have a communal orientation approach situations with a concern for others as well as themselves so they enact behavior which will facilitate warm and harmonious social relationships. Though qualities of agency and communion exist within each individual, Bakan (1966) concluded that males are socialized to develop a more agentic orientation and females a more communal orientation. Through a process of differential socialization, males and females develop differential sets of core personality traits which are captured respectively by Bakan's agency and communion concepts.

On the basis of the coalition studies and Bakan's theoretical work, several writers (Kahn et al., 1980; Sampson, 1975; Austin &

McGinn, 1977) have argued that the allocation behavior of men and women differs due to the sex role socialization processes each experiences which creates a communal orientation in females and an agentic orientation in males. Because of their orientation, males would be more apt to choose an equity strategy which entitles them to rewards proportional to their individual performance while females would be more apt to enact allocation behavior which reflects a concern for equality which will render harmonious social relations. Within this framework the results of the Leventhal and Lane (1970) study, in which females were more generous to their partners than males, can be explained by the different social orientations internalized by males and females.

Kidder et al. (1977) argued that the male-female differences in allocation behavior are due to the role expectations attached to sex rather than the internal dispositions of males and females. They postulated that differences would disappear or even reverse when allocation was private and people were relieved of their sex role burden. In Kidder's (1977) formulation, the contents of sex role expectancies correspond to Bakan's (1966) agentic and communal orientations; the major difference is that expectancies apply solely to public behavior whereas the orientations which are internalized should influence public and private behavior.

Garnets and Pleck (1979) believe males and females have a conception of how members of their own sex should behave which they label as the "same-sex ideal." The ideal can be conceptualized as the social expectations perceived by the person as pertaining to

their gender (i.e., the traits which are attached to a person's sex role). The same notion of a set of psychological traits and behavioral correlates stemming from the traits which differentiate the sexes is called a sex role stereotype by Ashmore and Del Boca (1979). They argue that the stereotypical differences between the sexes are exaggerated to form distinct categories for males and females. Furthermore, Ashmore and Del Boca (1979, p. 225) postulate that individuals incorporate sex stereotypes into their own "implicit personality theory" whereby they hold "structured sets of inferential relations that link personal attributes to the social categories female and male."⁴

Both works suggest that there are separate standards of behavior for males and females which are shared by members of a culture. In our culture these standards are captured by Bakan's (1966) concepts of agency and communion. Individuals are aware that these standards may be employed by others in judging the appropriateness of behavior displayed by individuals, where behavior which agrees with the sex role standard will be approved and incongruent behavior will be negatively sanctioned. Since social approval is an important motivator, people may first conceptualize how they should perform in order to gain approval for appropriate sex role behavior and on this basis, act in accordance to their sex roles. Herein, the term sex role identity will refer to the imaginative view a person has of self as a person enacting behavior in relation to their sex role (McCall & Simmons, 1966).

Since a person's sex role identity is tied to social expectations, the consideration of self in terms of these expectations may only be relevant when behavior is witnessed by an audience. Furthermore, if stereotyped sex differences are exaggerated, as suggested by Ashmore and Del Boca (1979), then performance may also be exaggerated. Thus, a difference between public and private behavior is expected where in public males and females are expected to enact performances which will reflect agency and communion, respectively. In private, these behavioral differences may disappear.

Research comparing the behavior of family groups (Leik, 1963) or married couples (Schoeninger & Wood, 1969) with ad hoc groups composed of strangers demonstrated that intimacy between members of the group will influence the behavior of the members.⁵ While discussing the solution to family problems in the Leik study, members of ad hoc groups were more apt to display behavior which was congruent with sex role stereotypes than members of groups which consisted of real families. This indicates that people will enact sex role expectations to make a proper impression on strangers, but that sex roles are not utilized to as great an extent with familiar others. In the Schoeninger and Wood (1969) study, ad hoc groups tended to bargain more competitively in a mixed motive conflict game than married couples. Though group decision time was observed rather than individual strategies, the difference may have been due to males not maintaining as an aggressive strategy when interacting with their wives as with strangers.

These two studies of ad hoc groups indicate that males and females do not use sex role expectations to as great an extent in an intimate relationship as when interacting with members of the opposite sex for the first time. Since their roles are not enacted across situations, the basis of sex role performances may not be internalized dispositions. Rather, sex role expectations may only be learned images which people project in public to gain social approval. Sex role expectations would be used in intimate relationships. For example, the assignment of household duties would probably be on the basis of sex. However, the exaggerated images of sex roles would be played down in interpersonal communication, since these images may hamper dyadic intimate relationships.

A series of studies employing a pseudo lie detector known as a bogus pipeline has demonstrated that people will behave differently in public than in private (e.g., Jones & Sigall, 1971). In using the bogus pipeline, experimenters have found that when their responses are expected to be public, subjects are more likely to feign guilt in equity studies (Rivera & Tedeschi, 1976), that they rate an obnoxious partner more unfavorably (Sigall & Page, 1972), and that they are more prone to confess to having prior knowledge of test questions (Quigley-Fernandez & Tedeshi, 1978). These studies demonstrate that people forego personal desires in public to enact behavior which is appropriate in the eyes of others. The possibility exists that sex differences are not internalized to the extent suggested by social definitions of male and female, but that expectations are often enacted in public in order to gain social

approval and avoid negative sanctions.

Sampson (1975) and Kahn, Nelson and Gaeddert (1980) postulate a relation between personal orientation and sex role socialization practices in the U.S. which leads women to enact communal behavior and men to act in an agentic fashion. In solving the distributive fairness problem in public, women are more apt to seek an equality solution which will facilitate warm group relations and men are more inclined toward equitable relations where individual inputs count. The determination of the influence of sex role expectations will hopefully lead to a better understanding of why males and females differ in their public allocations.

Gender Identity Issues. In the previous section the argument was made that males and females enact behavior which is congruent with their respective sex roles. The same reasoning was constructed by McCall and Simmons (1966, pp. 6-7) who stated: "Role-performance then consists of conforming behaviorally to those (role) expectations, with the goal of attaining positive sanctions from those holding the expectations or of avoiding their negative sanctions." If males and females continuously enact differential behavior the question arises as to whether or not the traits attached to their performance become internalized, thus creating a masculine or feminine personality. One body of research built on Bakan's (1966) concepts of agency and communion has attempted to define different sex types that are distinguished by the psychological traits which constitute personalities (Bem, 1974; Berzins, Welling, & Wetter,

1978; Spence, Helmreich, & Stapp, 1974).

Traditionally, measures of masculinity and femininity have assumed a bipolar continuum with masculinity and femininity defining opposite ends.⁶ Thus, the more masculine a person is, the less feminine, and the more feminine a person is, the less masculine. Recent measures have agreed with Bakan (1966) that agentic (masculine) and communal (feminine) traits constitute separate dimensions which a person can possess simultaneously. A person may exhibit traits from one dimension to a greater, lesser, or equal extent than the other (cf. Bem, 1974).

The Personal Attributes Questionnaire (PAQ) was constructed by Spence et al. (1974) to tap the psychological dimensions of masculinity and femininity. Spence and Helmreich (1978, p. 3) state that the dimensions are: "...clusters of socially desired attributes stereotypically considered to differentiate males and females and thus to define the psychological core of masculine and feminine personalities." The traits employed to capture the masculine personality are agentic (e.g., independent, active, competitive, self-confident), and the feminine personality traits are communal (e.g., helpful to others, aware of the feelings of others, understanding of others). The masculine and feminine personalities measured by the PAQ are conceptualized as being independent dimensions and a person can possess qualities characteristic of each dimension.

Spence and Helmreich (1978) devised the split-median technique as a method for assigning people to masculine and feminine catego-

ries. The method is implemented by determining the median scores of the masculine and feminine scales for a total sample.⁷ The median scores for the masculine and feminine scales act as an axis point which creates a four quadrant classification or a 2 x 2 classification scheme. Four sex typed categories are created by their scheme: masculine (high masculine, low feminine), feminine (high feminine, low masculine), androgynous (high masculine, high feminine), and undifferentiated (low masculine, low feminine). By this method a masculine person is defined as one who conceives of self as more masculine and less feminine than the other respondents. A feminine person reports self to be more feminine than others and lower on masculine traits. An androgynous person possess masculine and feminine traits to a greater extent than half the sample on both dimensions. Finally, the undifferentiated person falls below the median on the dimensions of masculine and feminine traits.

The research on masculine-feminine personalities has been held to promise a greater understanding of individual behavior. Lenney (1979, p. 713) stated:

The great predictive utility of personality assessment can be greatly increased if one takes account of the pattern of characteristics within an individual, of the unique meanings of stimuli and expectations of reinforcement contingencies which moderate the person's behavior across different situations.

By delineating the behavioral correlates associated with psychological traits contained within each of the four sex typed categories, Spence and Helmreich (1976) argue that the prediction of behavior will be increased.

Masculinity-femininity research conducted in the mid-seventies which correlated masculinity-femininity with standardized tests (e.g., self-esteem, Machavellianism) has been plagued with inconclusive results.⁸ The major hypothesis generated has been that an androgynous person who possess masculine and feminine qualities will be mentally healthier than the other sex types since such a person should have more behavioral options to choose from in any given situation. However, Jones, Chernovetz, and Hanssen (1978) have found that masculinity is generally a better predictor of psychological adjustment and mental health than androgyny.

The method for categorizing people into a sex type has been criticized and the results stemming from this procedure have been strongly questioned (Kelly & Worell, 1977; Kelly, Furam, & Young, 1978; Downing, 1979; Sedney, 1981). A comparison between the split median technique with other sex typing schemes has demonstrated that subjects in the same sample will be classified in different categories depending upon the classification technique utilized by the researcher (Kelly & Worell, 1977). Sedney (1981) argues that split median classifications are essentially useless since samples characterized by different medians cannot be compared.

In the face of disappointing results and muddled conceptions, Locksley and Colten (1979) have called for a theoretical reassessment of the concept of androgyny and the combining of masculine and feminine traits. Olds and Shaver (1980) charge that Bem (1974) and Spence et al. (1974) created their sex typing scales as a reaction to the traditional bipolar conception where individuals were cast

to be masculine or feminine in a world where masculinity was more valued than femininity. The new era of sex role research developed in a highly charged milieu in which the attempt was made to create a place for feminine values by creating a world where the challenge to individuals would be to combine the desirable traits of masculinity and femininity in the form of androgyny. The time has arrived where researchers must step back from this noble goal and consider what methods are truly possible.

An alternative approach utilized in this paper is to consider masculinity and femininity as separate dimensions and look at the effect of each on behavior of males and females. This will allow us to see the influence of the agency and communion as distinct personality variables upon the behavior of those who hold these orientations.

Another problem associated with sex typing scales is that masculinity has been found to be more correlated with self-esteem than femininity (Jones et al., 1978; Spence & Helmreich, 1978). Frieze et al. (1978) contend that masculine characteristics are more socially valued than feminine qualities in our society. People who view themselves as having more masculine qualities may therefore value themselves more than people who see themselves as possessing few of the masculine traits valued by society. Thus, the attribution of sex type to one's own behavior may be confounded with the level of one's self-esteem. In this study the effects of self-esteem will be controlled in order to examine the effect of masculinity and femininity on allocation behavior.

Gender Identity. Identity is a concept employed by social scientists to describe how individuals think about themselves and identify themselves as entities distinct from other people and objects. Though Spence and Helmreich (1978) describe their sex typing scale as measuring an internal variable which represents the core attributes of masculinity and femininity, when subjects are asked to define what type of person they are, they are being requested to define their identity in a generalized way, apart from any specific social situation or role. This section will view the PAQ as a measure of masculinity-femininity and make a theoretical connection between this scale and the concept of identity.

McCall and Simmons (1966) have developed a role identity model which conceptualizes the components of identities and addresses the issue of whether an individual has one image of self or multiple selves. Individuals have multiple roles corresponding to the different social situations in which they operate.⁹ In each of their positions people have imaginative views of how they should be and act as an occupant of that position. These images are labeled the person's role identities.

In any social situation, a person conceives of self in the appropriate role in order to determine the appropriate role performance. Role performance, in turn, legitimizes the role identities held by the person. A person will have many concepts of self, each determined by a role which is relevant to a particular situation.

The multiple role identities possessed by each individual composes a global conception of self for each person which enables a

person to have a single concept of self across all situations. The global self-concept a person holds will be referred to as the generalized identity which organizes and connects the multiple identities into a single entity. A role identity will answer the question, "What kind of person am I in this particular social position?," whereas the generalized identity will answer the global question, "What kind of person am I?." Thus, the generalized identity contains the traits the person uses to describe the kind of person he or she is across situations.

Bakan's (1966) notion of agentic and communal orientations may be two separate dimensions of the generalized identity, relating to how agentic and how communal a person conceptualizes self as being across different situations and roles. As noted earlier, males and females in our culture are socialized to respectively accept agentic and communal orientations. Though males or females can adopt either agentic or communal qualities, the term gender identity will be used to reflect the relation between sex role expectations and the sets of traits contained in these two dimensions of the generalized identity. A masculine identity is the extent to which a person conceives of self as possessing traits characteristic of the agentic dimension of the generalized identity; a feminine identity is the extent to which a person conceives of self as possessing traits typifying the communal dimension of the generalized identity.

From the above discussion, gender identity can be defined as agentic and communal aspects of a person's generalized identity which have been formed by the individual in interaction with others and

legitimated through past role performances across all situations. Public behavior will reflect the agentic and communal aspects of the generalized identity; however it is to be expected that public behavior will be strongly influenced by the sex role expectations held by relevant audiences. In private the person acts as own audience and should enact a performance which will legitimize the psychological traits the person believes is contained in his or her generalized identity; however, private behavior should not be strongly influenced by sex role expectations, which are only made salient in specific social situations.

The PAQ measures the masculine-feminine aspects of an individual's generalized identity, which should influence the role performance enacted by individuals in all situations.¹⁰ In private behavior, when the person is the only observer of performance, the behavior enacted is expected to be congruent with the person's generalized identity, allowing the person to validate his or her self-concept. In public behavior, when others view a person's performance, behavior should be determined by sex role expectations. However, with each disclosure condition the generalized identity should explain variation in allocation if the performance is composed of what others expect of the person and what the individual expects of self.

In summary, in public the major determinant of behavior will be sex role expectations. Sex role expectations may be a source of information which is organized into a person's sex role identity which will be manifested in public role performance. In private,

when the person is the only observer of the behavior then the performance should legitimize the person's generalized identity. Gender identity, the imaginative generalized view of self as possessing masculine and feminine qualities is likely to determine the behavior to be enacted.

Public and Private Behavior

The allocation experiments conducted by Leventhal and Lane (1970) and by Kidder et al. (1977) obtained similar results under conditions of high performance of subjects relative to their partners and public disclosure of the subject's allocation of rewards for performance: males tended to utilize an equity standard, allocating rewards in relation to performance, while females allocated rewards more equally. In the Kidder experiment, where subjects were promised anonymity regarding their allocation of rewards, this pattern was reversed: women tended to favor themselves more for their high performance, and allocated more unequally than men. The explanation which Kidder provided for this reversal of results relies on the assumption that in private men and women are relieved of the expectations of their sex roles. This in turn allows men and women to choose allocation strategies which are denied them in public.

Based upon previous research (Costrich, Feinstein, Kidder, Mereck, & Pascale, 1975) Kidder et al. (1977) argue that males and females are punished for performing contrary to their prescribed sex roles. Males are socialized to be more competitive and females

to be more cooperative, therefore males act equitably and females act equally. However, Kidder et al. (1977) do not convincingly explain why females would act equitably and males equally when promised that their allocation decisions would not be known to others. If differences in reward allocation are related to the presence or absence of sex role expectations, a more likely prediction would be that the allocation strategies of males and females would differ in public, where sex role expectations are relevant, but that private behavior which is not subject to such expectations would be similar.

One feature of the Kidder study which might have been responsible for the anomalous male-female differences found in the private condition is the scoring procedure utilized in the calculation of equity scores for subjects. Subjects were asked to separately allocate bonus grade credits to themselves and to their partners where subjects could give themselves a maximum of five points and their partners could also receive up to five points. From the allocations, the experimenters computed an equity score for each subject by subtracting the number of points given to partner from the amount allocated to self.

Equity scores represented the difference between the allocation to self and partner without taking the amount of the allocation into account. For example, an allocation of five points to self and four points to partner, and an allocation of three points to self and two points to partner would both receive an equity score of one. Obviously the two allocations are not the same, the first is much more

generous to self and partner. Scores may be the same in magnitude but have different value meanings.

Without a baseline describing the amount allocated to self and partner a comparison between cells is ambiguous. The difference between the public and private means could have been caused by either a change in one of the allocations made by the subject or by both. For example, in the private condition women could have used the same standard for self and allocated less to partner, or they could have given more to self and the same amount to partner. Either of these strategies would indicate that females increased their outcomes in private, but the meaning attached to each would be different. The first may indicate a shift in the perception of justice and the second may indicate self-interest being taken into account. Thus, the scoring procedure employed in the Kidder experiment was not adequate in describing how men and women allocate rewards.

A more complete understanding of the Kidder study will be achieved by reviewing studies concerned with public and private behavior. Past research (Morse, Gruen, & Reis, 1976; Reis & Gruen, 1976; Rivera & Tedeschi, 1976) has studied differences in behavior under the private and public disclosure conditions, but has not tested for sex differences. Overall, this research has found subjects behave and respond differently in the public disclosure condition than in the private condition. These findings suggest that an individual's concern with a proper self-presentation to others will influence their choices in behavior.

A perspective which attempts to account for behavioral differences under public and private conditions is self-presentation theory. According to Arkin, Appelman, and Burger (1980, p. 23) the concept of self-presentation refers, "to the manner in which individuals plan, adopt, and carry out strategies for managing the impression they make on others." The perspective is grounded in a belief that individuals desire to make the best possible impression on others in order to gain social approval and avoid disapproval. To make an impression on others assumes that a person's behavior will be observed by others, hence the theory is explicitly concerned with explaining public behavior.

Arkin et al. (1980) further assume that people spend a considerable amount of time and effort studying the reactions of others to their behavior in different situations in order to discern what will influence the impression they make on others. Thus, people develop notions of what others deem to be appropriate behavior within the context of a situation and enact behavior which is congruent with the expectations of others, thereby insuring social approval.

Within similar situations at different times, the same individual may decide to present different images of self. One factor which will influence a person's self-presentation is the amount of information the person possesses concerning the expectations held by the audience. Knowledge of personal expectations held by an audience will influence the actor's presentation in a manner which will be congruent with the personal likes of others.

Jellison and Gentry (1978) conducted an experiment which implicitly supports the contention that personal knowledge of others will shape a person's self-presentation. In their experiment subjects were invited to interview for a job with a personnel manager. When subjects arrived for the interview, they were assigned to one of two groups. One group was informed that the manager hired individuals whom he liked and the other group was told the manager usually hired those he disliked. The subjects were given some information about the attitudes of the manager and asked to complete an attitude survey indicating how they felt. The researchers found that the attitudes of subjects in the group where the manager hired people he liked were similar to the manager's attitudes and the subjects in the group where the manager hires those he disliked were different than the manager's attitudes.

The Jellison and Gentry experiment did not directly examine the self-presentation of subjects. However, the congruency between subjects' attitudes and information concerning the manager's hiring practices suggests that subjects would project the self-image which would increase their chances of securing the job, if given the opportunity for face-to-face interaction. If this is true, then people will use personal information concerning the audience in constructing their self-presentation.

The presentation of self will also be influenced by the amount of information the person perceives the audience possesses about his or her past actions. Though a person may desire to present an image which is approved by others, the person can possibly receive dis-

approval if the presentation is not consistent with the person's previous behaviors and stated attitudes. For example, if a person who is known to profess to be an atheist has lunch with a devout Christian, the atheist may be perceived as being insincere if the self-presentation indicated a strong belief in God. Thus, people are motivated to maintain a consistent projection of self in order to avoid social disapproval.

In the Kidder experiment, the experimenters assumed sex roles to be the salient concern in a subject's computation of fairness. However, subjects obtained a considerable amount of knowledge of their partners through interaction. Furthermore, the confederate who served as the subject's partner in the Kidder experiment was degraded by the experimenter. In study III of the Kidder experiment the confederate would arrive late in which the following script was enacted between the confederate and the experimenter in the presence of the subject:

Con.: I'm sorry I'm late. I forgot about the appointment. Is there anything I can do?

Exp.: You could help this person sort the rest of these cards here... you know, I couldn't use the data from (subject's name) unless all these cards were sorted, so (subject) started to do your deck for you (Kidder et al., 1977, p. 77).

In study II, which basically used the same procedure, the experimenter greeted the confederate saying:

You must be (Joan). You know you're about 20 minutes late. That's very unfair of you to be here so late, after the other subject has done most of the work for you, and then expect to receive credit (Kidder et al., 1977, p. 77).

Though the tone and demeanor is left to the imagination, the excerpts from the experimental script suggest that the experimenter degraded the subject's partner. The degradation of the partner by itself may have had an impact on the allocation decision in the private disclosure condition. The personal knowledge from the interaction and the degradation of the partner could have confounded the results obtained. The determination of what specific knowledge a subject utilized in the justice decision is unclear. But there is a chance that the behavior was not enacted on the sole grounds of sex role expectations, since personal knowledge may have influenced the allocation.

In most allocation experiments, subjects are promised interaction with an unknown partner at the end of the experiment. In such a case, the allocation will probably reflect an image of self to be presented upon meeting the partner. Up to this point most of the examples have illustrated how a person projects an image of self through verbal and non-verbal behavior in face-to-face interaction. Self-presentation is also a concern when a person's behavior will be revealed to others at a later time, since others will infer what kind of person the actor is from the behavior.

If an actor has no information concerning the personal expectations of the audience to be met, as is often the case in allocation experiments, then the basis for the self-presentation would be the social expectations present in the situation and the status of the actor. An actor will discern what behavior is appropriate from the situation. In a competitive situation where rewards are attained

by the best performance an individual is expected to strive for the best performance possible. A person will employ societal norms in determining the appropriate self-presentation. However, if a situation is ambiguous then different norms may be chosen by different actors.

Social expectations also refers to the expectancies a person perceives others attaching to the person's status or role. For example, when a new graduate student enters a university different from the one attended as an undergraduate, the student will use the expectations that past instructors have held to determine what the new set of instructors will expect of him or her. An individual's self-presentation will employ the notions of what others in the past have expected from him or her when the only information available about the present audience is the status of participants.

An ascribed status which has been found to effect the public disclosure allocation of subjects when no other information is available to person is sex (e.g., Leventhal & Lane, 1970). As discussed earlier, males are expected to enact equitable relations, whereas women are expected to be accomodative. Males and females utilize these social expectations in distributing rewards when their performance will come under the scrutiny of others.

Private behavior is assumed to reflect the personal concerns of the individual. When others do not have the opportunity to observe the actions of an actor, the person is not concerned with what others deem to be appropriate behavior. Rather the person enacts behavior which he or she believes to be proper.

The personal concerns of an individual are not generally unbridled desires for high rewards, but social expectations internalized by the person which are adopted as his or her own standards for judging appropriate behavior. Thus, in an allocation to self and other experiments, subjects assigned to the private disclosure condition would be expected to allocate rewards in a manner which they deem to be right. What a person holds to be right is strongly influenced by the values stemming from experiences which have taken place within the context of a culture.

The contradiction between the Leventhal and Lane (1970) and Kidder et al. (1977) studies is embedded in the assumptions these studies make concerning what standards are internalized by males and females. Leventhal and Lane postulated that through childhood socialization practices, males and females internalize separate standards of fairness. While Kidder et al. (1977) implicitly assumed that males and females do not accept the contents of sex role stereotypes as their own, but use these expectations when enacting behavior in order to gain social approval.

In summary, it has been found that the social expectancies attached to sex influence the allocation decisions made by males and females in public. Males act competitively while females make decisions which take the interests of the group into account. When allocations are not disclosed to others, males and females allocate rewards in a manner which reflects their personal standards of fairness.

Hypotheses

From the discussion of performance, sex differences, and disclosure a set of hypotheses can be derived for the crucial experiment designed to clarify the contradiction found between the Leventhal and Lane (1970) and the Kidder et al. (1977) studies. The experiment in this study will use the self and other experimental paradigm where males and females will be asked to complete a common task, be assigned a high or low performance score, and asked to divide a team reward between themselves and their partners.

When performance has been manipulated in the past, subjects have considered performance to be an input and allocated rewards according to performance, with high performers receiving more than low performers. Furthermore, high performers have a tendency to take less than an exact equitable share and low performers take more than an exact equitable share. Thus, hypothesis 1 can be stated as follows:

- (a) High performers will take more than half the reward, but less than an equitable share.
- (b) Low performers will take less than half the reward, but more than an equitable share.

Assuming that males and females do not internalize sex role expectations, the self-presentation perspective predicts that there will be an interaction between sex and disclosure. In public, a positive self-presentation for males will be one which is agentic, which demands an allocation reflecting individual achievement; a

positive female self-presentation will be communal in nature, taking the feelings of others into account when allocating rewards. In private, there will be no difference between the allocations of males and females, since internalized sex roles are not invoked by the social situation. Thus, hypothesis 2 can be stated as follows:

There will be an interaction between sex and disclosure on allocation where:

- (a) In the public disclosure condition, males will give more to themselves than females in both performance conditions.
- (b) In the private disclosure condition, there will be no male-female difference in allocation behavior.

The experiment will attempt to extend knowledge of allocation behavior by examining the relationship between the masculine and feminine dimensions of subjects' generalized identities and allocation while controlling for performance, sex, and disclosure. Since there has been no empirical work which has tested the relationship, this analysis is exploratory in nature and no formal hypotheses are offered. However, the nature of traits which compose these two dimensions of the generalized identity would suggest that the more agentic a person is the smaller the allocation and the more communal the person is the greater the allocation. Within each experimental condition, allocation should be related to gender identity since the extent to which individuals possess the agentic and communal dimensions will vary.

CHAPTER III

Method

The purpose of this research is to replicate and extend the studies conducted by Leventhal and Lane (1970) and Kidder et al. (1977). In investigating sex differences in allocation behavior, both studies utilized differential and experimental methods in their designs. Differential methods examine differences which exist naturally, as opposed to being created by the investigator (cf., Hyman, 1964). In the two previous studies the experimenters employed a differential method by comparing the allocation behavior of males and females assigned to the same experimental conditions. The present study also uses the differential method to test for differences between the allocation behavior of men and women when the experimental variables, disclosure of allocation and task performance, are varied.

Though both previous studies utilized the experimental method, the experiments were not designed to observe the same experimental variables. Leventhal and Lane (1970) assigned subjects to either an inferior or superior performance condition and did not utilize the disclosure treatment, while the Kidder experiment subjects were assigned to either a private or a public disclosure condition, but subject's performance was not varied. The present study is designed to observe how men and women allocate rewards when both disclosure and performance are varied. The purpose of combining the two ex-

perimental variables is to resolve unanswered questions about the effects of differences in experimental treatments. Furthermore, knowledge of male-female differences in exchange relations will be extended by considering the effect of the internal cognitive variable of gender identity and self-esteem on the distributive fairness decision.

The Leventhal and Lane (1970) and Kidder et al. (1977) studies utilized what Kahn et al. (1980) called the self and other experimental paradigm where subjects enact the role of the allocator by dividing a reward between themselves and their partners after performing a task. Also, within this paradigm subjects are often promised future face-to-face contact with their partners. In this study only the subjects assigned to the public disclosure treatment were promised social interaction with their partners. Subjects in the private disclosure condition were explicitly promised anonymity with regard to their allocation decision. However, all subjects allocated the reward to themselves and their partners. This was done to see what fairness standards were enacted by males and females when faced with the distributive fairness problem.

Overview

In order to determine how rewards are allocated, an experiment using a $2 \times 2 \times 2$ factorial design was employed where sex of subject, disclosure of allocation, and performance were the independent variables. The subjects performed an editing task and then a creative task. Performance scores for the editing task were randomly

assigned, and given to subjects upon completion of the creative task. Subjects were supplied with scores for themselves and their partners, and asked to allocate reward tokens between themselves and their partners. Subjects in the public disclosure condition were promised social interaction with their respective partner, while subjects in the private disclosure condition were assured that their allocation would be known only to an assistant. The value of the tokens allocated to partner was the dependent variable of the study.

Subjects

Two hundred and thirteen volunteers were recruited from seven introductory courses in Sociology and General Studies. In three of the seven classes subjects were offered a small amount of extra credit for their participation. Due to scheduling problems, broken appointments, and drop-outs, forty-six subjects did not complete the experiment. In addition, three subjects were excluded because their poker chips were accidentally placed in their partner's pay envelopes, making the assessment of the dependent variable impossible. The final subject group consisted of sixty-six males and ninety-eight females.

Operationalization of Variables

Allocation of tokens to partner was the dependent variable. After completing the creative task, subjects were given an envelope containing five white, three red, and four blue poker chips. White represented \$.10, red represented \$.50, and blue represented \$1.00

apiece. Subjects were instructed to count the poker chips, set aside the tokens allocated to themselves, and place their partner's share back in the envelope. The value of the poker chips found in the envelope was the measure of allocation to partner.

Sex of the subject constituted the differential independent variable in the study.

Subjects were assigned to one of two disclosure conditions. In the public disclosure condition, subjects were informed that they would meet their partners at the end of the experiment and hand them the envelope containing the tokens. Subjects in the private disclosure condition were promised anonymity. Thus, they were told that the tokens would be removed from the envelope and tallied by an assistant who would then give just the tokens to their respective partners.

As in the Leventhal and Lane experiment, subjects were also assigned to a high or low performance condition. When subjects were given the pay envelope containing the tokens, there were two performance scores written on the outside of the envelope indicating how the subjects and their partners had performed on the editing task. Subjects assigned to the high performance condition were given a score of 46 and their partners were assigned a score of 31. The scores were reversed for subjects assigned to the low performance condition. Each subject also received a team score of 77, representing the sum of both partner's scores.

The preceding variables were used by either Leventhal and Lane (1970) or Kidder et al. (1977) in one form or another. In order to

extend our understanding of allocation behavior, gender identity and self-esteem were also measured, to determine their effect on the distribution decision when disclosure, performance, and sex are held constant.

Gender identity includes masculine and feminine components. A masculine identity was conceptualized as the degree to which a person conceives of self as possessing traits which are commonly associated with masculinity.¹¹ A feminine identity was conceptualized as the degree to which a person conceives of self as possessing traits which are commonly associated with femininity.¹² When volunteering for the experiment, subjects completed the short form of the Personal Attributes Questionnaire (PAQ) developed by Spence et al. (1974), which consists of eight masculine and eight feminine items. The items are traits characterized as being positively related to masculinity and femininity. A masculine and feminine score was computed for each subject by adding together the masculine and feminine items, respectively.

Self-esteem was measured by summing each subject's responses on the ten-item self-esteem scale devised by Rosenberg (1965) which subjects completed in class.

Procedure

A four page questionnaire (see Appendix A) was distributed to students during a regular class session. On the cover page the subject was asked information concerning: name, sex, class rank, major, and a schedule of times the subject could participate in the

experiment and be reached by telephone. On the second page was the Rosenberg self-esteem scale consisting of ten items. The third page was the short form of the Personal Attributes Questionnaire (PAQ) which was constructed by Spence et al. (1974). The last page contained a modified version of the Least Preferred Coworker (LPC) scale (Fiedler, 1967) which was not used in the present study.

A case number was assigned to each in-class instrument completed. Subjects were contacted by telephone and an appointment for the experiment was scheduled. The subject's case number was placed on the schedule. If a subject was a female then the number was underlined, and if the subject was a male then the case number would be circled. Case numbers were used to help eliminate the possibility of experimenter bias when assigning performance scores during the experiment, and to insure the confidentiality of subjects.

Eight subjects were scheduled for each session of the experiment. The subjects were divided into two groups of four. Over the telephone, subjects were told to report to one of two rooms one flight up from the social psychology laboratory. Two male and two female subjects were to be met by a female co-experimenter in each room. However, the number of subjects per session varied from four to seven due to broken appointments. The co-experimenters would escort the subjects to the lab five minutes after the appointed time.

The social psychology lab is partitioned into three connecting rooms. The middle room was used by the experimenter to place the tokens into the pay envelopes and assign performance scores. One group of subjects was assigned to each of the far rooms. In each of

the two experimental rooms, there were four tables and chairs situated so that subjects would perform their tasks with their backs facing each other; this was done so that they would not distract one another or see materials passed out to fellow subjects.

After seating the subjects the co-experimenters would excuse themselves and report to the middle room to inform the principal investigator of the number of subjects in each room. If the number of subjects differed in the two rooms, the principal investigator would wait a minute and then enter each experimental room and tell a cover story so that subjects would believe that there was an equal number of subjects. In the room with an additional subject, the experimenter would state that a subject had just arrived and in the room lacking a subject the experimenter stated that a subject in the other room had been sent home. The deception was told to insure the subjects belief that they were being matched with a partner. If subjects felt there was an uneven number, then they would not believe that they had been given a partner.

The co-experimenters would then begin to slowly read a set of instructions asking subjects to follow along (see Appendix B). As in the experiment conducted by Leventhal and Lane (1970) subjects were told that the experiment was a simulation of conditions found in business and industry. In this particular experiment, subjects would perform the same kind of work as editors in the publishing industry. Subjects were told that the experimenters were interested in finding out how workers would construct a pay scale if given the opportunity. Thus, they would be asked to allocate reward tokens between them-

selves and partners. A set of four cards, lettered from A to D, were shuffled by the co-experimenters and handed to a subject to pass around in each room.¹³ Subjects selected a letter which identified their team. Subjects were asked to fill in information (team letter and social security number; and name in the public condition) on a 6 x 10 envelope which would later contain the tokens. Subjects were told that the participants in their room had been selected to divide the tokens between themselves and their respective partners. However, subjects did not actually have partners, and subjects in both rooms made the allocation decision.

Each editing task was concealed in an envelope with a letter printed on the outside. The envelope with the letter, which matched the card previously drawn by the subject was given to him or her. Subjects were told that their partners had been given the exact same editing task, but the participants in the same room had been given different tasks of equal difficulty. Actually, all subjects were given the same task. Subjects were told the tasks were different in order to minimize competition within the room. Since subjects were seated back to back, they could not compare the tasks.

The subjects were told they would have ten minutes to complete the editing task. A cover page listing the types of errors to expect in the five page editing task was read to the subjects. Once the co-experimenter instructed the subjects to begin, she left the room for ten minutes.

Each co-experimenter returned after ten minutes, told the subjects to stop, and collected the editing tasks. The tasks were

passed through the door to the experimenter in the middle room. The co-experimenter then distributed a creative task which was a picture of two clasped hands, and asked the subjects to write a short story concerning the picture. The subjects were given ten minutes to work on the creative task. This allowed for the passage of enough time to make the grading of the editing tasks credible. During this time subjects were randomly assigned performance scores.

After the ten minutes for completing the creative task had passed, the co-experimenters would enter each room with the allocation envelopes. They would collect the creative tasks and then distribute the envelopes containing the tokens by calling out team letters. Subjects were told each envelope could contain up to \$7.00 in poker chips; white=\$.10, red=\$.50, and blue=\$1.00 apiece. Subjects were told that the amount of reward in each envelope would depend on how well the team performed the task. However, every envelope contained \$6.00 in tokens so that the allocations would be comparable.

Subjects in the public condition were told that they would meet their partners at the end of the experiment, and hand them the allocation envelope. Subjects in the private disclosure condition were instructed to seal the envelope and place it in a box. The tokens would be taken out by an experimenter in the other room who would give just the tokens to their partners.

After everyone finished the allocation, a four page questionnaire designed to tap how and why subjects made their allocation decisions was distributed. After the questionnaire was completed by everyone, the subjects were debriefed. Subjects were informed of

the experimental deceptions, and the experimenter answered any questions asked after briefly describing the purpose of the experiment. Subjects were asked not to discuss the experiment with their classmates.

CHAPTER IV

Results

Allocation, the dependent variable in this study, was the value of the tokens found in the pay envelope for partner. The greater the value of the tokens subjects gave to their partners, the less they allocated to themselves. Each subject was given six dollars worth of poker chips to divide in any manner he or she desired. The subjects could choose to give more to self, more to partner, or divide the tokens evenly.

Before making the allocation decision, each subject was randomly assigned a performance score for self and partner. If a subject had been assigned to the high performance condition, then the subject was given a score of 46 and the partner was given a score of 31. The scores were reversed for subjects assigned to the low performance condition. Each subject was given a team score of 77 (the two scores added together). Subjects in the public disclosure condition were promised that they would meet their respective partners and hand them the pay envelope. In the private disclosure condition subjects were promised that the allocations would not be revealed to their partners.

The mean values of the reward tokens which subjects allocated to their partners in each condition are shown in Table 1. In order to determine if differences between the performance conditions were significant, a $2 \times 2 \times 2$ (sex x performance x disclosure) factorial

analysis of variance was computed. The classical design which automatically takes into account unequal cell size was employed (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

Table 1

Mean Allocation to Partner by Sex, Performance, and Disclosure

Sex	Low Performance		High Performance	
	Public	Private	Public	Private
Male	3.24	3.31	2.62	2.77
	n=16	n=17	n=18	n=15
Female	3.41	3.34	2.88	2.72
	n=24	n=27	n=24	n=23

The value of the tokens allocated to partners by both males and females in the low performance condition was greater than the value allocated to partners in the high performance condition. The main effect of performance on allocation was significant ($p < .001$). The mean values of the tokens allocated to partners by subjects in the low performance condition were all more than three dollars, ranging from 3.24 to 3.41. Whereas the mean values of the allocation by subjects in the high performance condition were less than three dollars, ranging from 2.62 to 2.88.

The main effect of sex on allocation, as reported by the analysis of variance, was significant at the .06 level. Disclosure did not have a significant main effect on allocation. However, the

interpretation of the effects of sex and disclosure on allocation must be qualified, since the interaction term between these two variables was significant ($p < .07$).

A comparison of the allocation means between the public and private disclosure conditions in Table 1 suggests that men and women divide rewards differently. Men gave their partners more in private (3.31 versus 3.24 in the low performance condition and 2.77 versus 2.62 in the high performance condition); while women gave more to their partners in public (3.41 versus 3.34 in the low performance condition and 2.88 versus 2.72 in the high performance condition). A comparison of means within each column indicates that the female-male difference is greater in the public disclosure condition than in the private disclosure condition.

Figure 1 depicts the allocation cell means for males and females by performance for the private and public disclosure conditions. In both public and private disclosure conditions, performance was important in deciding how to distribute rewards. Subjects assigned to the high performance condition allocated less to their partners than subjects in the low performance condition. In the public disclosure condition, sex had an effect on allocation. Given the same performance scores, female subjects gave more to their partners than did males. However, there was little male-female difference in the private disclosure condition. In public men and women within the same performance condition allocated the same amount of reward to their partners.

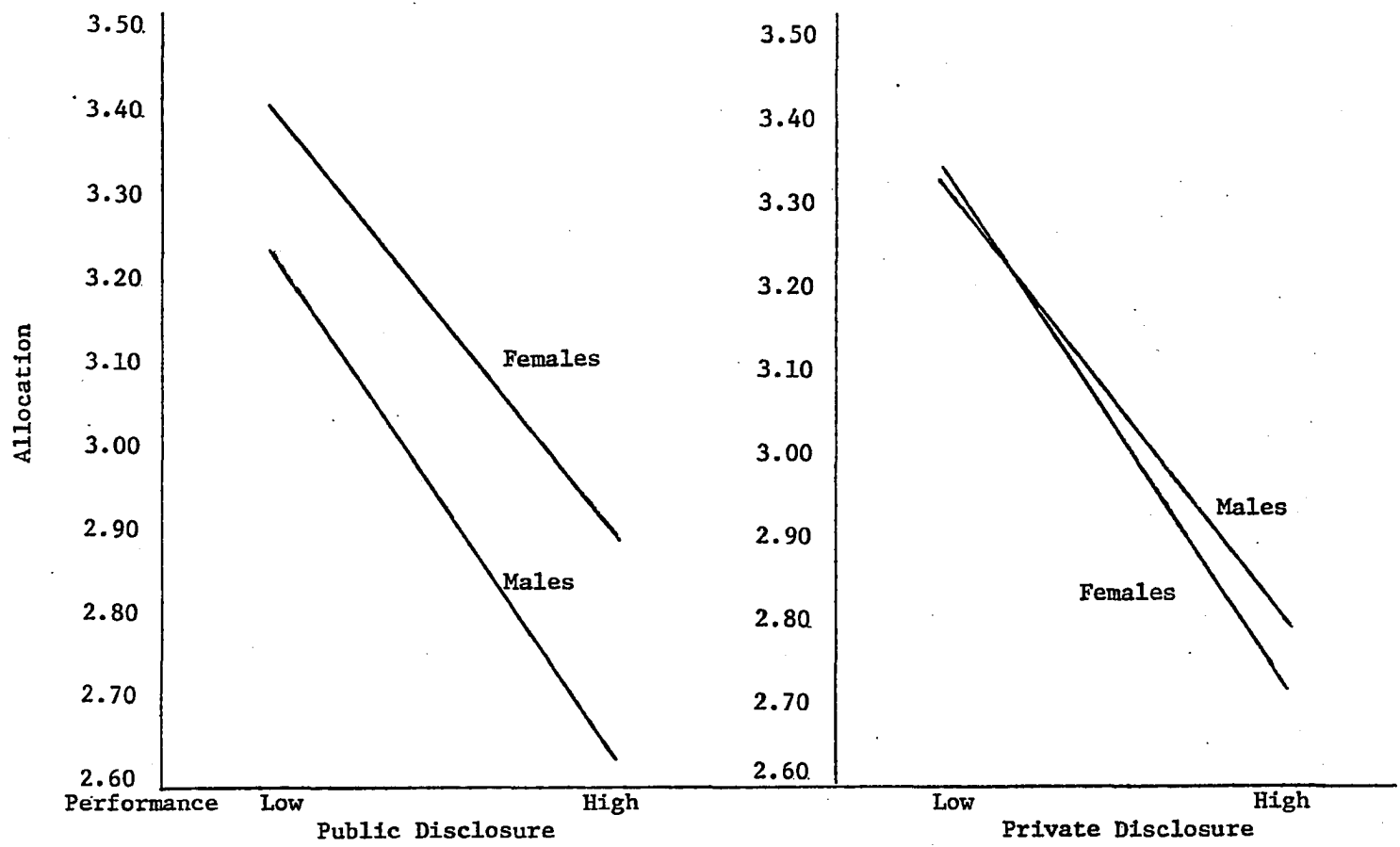


Figure 1. Plot of allocation means by sex and performance in each disclosure condition.

In order to test whether the differences suggested by Figure 1 were significant, the sample was divided into two groups by disclosure condition. A separate two-factorial ANOVA was computed for each group in order to ascertain the effect of sex and performance on allocation within each disclosure condition.

In the public disclosure condition the probability of the main effect of performance on allocation was significant ($p < .001$). Subjects in the high performance condition allocated less to their partners than subjects in the low performance condition. Furthermore, the main effect of sex on allocation was significant ($p < .01$). Thus, when males and females are told that they will publicly disclose information about their allocation decisions, females allocate more to their partners than do males.

In the private condition, where subjects were promised anonymity concerning their allocation, there was a significant performance effect ($p < .001$). However, the main effect of sex was not significant ($p > .05$). Thus, when told that their allocations would not be revealed to their partners, males and females allocated the same amount of reward to partners within the same performance condition.

A frequency distribution of allocation to partner by performance and disclosure was computed in order to gain a more precise understanding of the allocation pattern with regard to equity. An equitable allocation to partner was calculated by using the proportion of partner's inputs to team inputs (performance score of partner/team score) and multiplied by the amount to be allocated (\$6.00) to determine the outcome (value of tokens) the subject's partner

deserved. According to equity theory, subjects in the low performance condition should have given their partners \$3.60 (rounded from \$3.58), and subjects in the high performance condition should have allocated their partners \$2.40 (rounded from \$2.41). This assumes that the only relevant input in the computation of fairness was performance.

Alternatives to an equitable allocation decision from which a subject could choose are: less than equity, more than equity, or equality. To allow for imprecision in subjects' calculations, equity was calculated as a \$.30 range of values, rather than as a single value. Thus, subjects in the low performance condition were defined as making equitable allocations if they gave their partners between \$3.50 and \$3.70. In the high performance condition an allocation between \$2.30 and \$2.50 was considered equitable. Subjects in the low performance condition who gave less than \$3.50 to their partners were classified as allocating less than equitably, and subjects in the high performance condition who gave their partners less than \$2.30 were categorized as providing a less than equitable allocation. Subjects were classified as allocating more than equitably when they gave more than \$3.70 to partners in the low performance condition or more than \$2.30 in the high performance condition. Subjects who divided the reward evenly (\$3.00 to self and partner) were classified as making an equality allocation. The percentage of males and females by performance and disclosure conditions who chose each allocation alternative is listed in Table 2.

Table 2

Percentage of Males and Females Whose Allocation to Partner
Was Less Than Equity, Equity, More Than Equity, and Equality,
By Performance and Disclosure Conditions

Sex	Allocation Choice	Low Performance		High Performance	
		Public	Private	Public	Private
Male	Less than equity	81.2	47.0	16.7	6.7
	Equity Range	18.8	23.6	22.2	13.3
	More than Equity	0.0	5.9	33.3	60.0
	Equality	0.0	23.5	27.8	20.0
	Total	100.0	100.0	100.0	100.0
	N	16	17	18	15
Female	Less than Equity	50.0	40.8	0.0	8.7
	Equity Range	29.1	33.3	20.8	26.1
	More than Equity	16.7	7.4	37.5	43.5
	Equality	4.2	18.5	41.7	21.7
	Total	100.0	100.0	100.0	100.0
	N	24	27	24	23

Twenty-one percent of the subjects decided on an allocation which fell within the equity range. Assigned performance, disclosure of allocation, or sex did not have a separate effect on the equity choice, since there was little difference between the percentages of subjects across conditions who made an equitable decision. The percentages ranged from 13.3 for males in the high performance, private disclosure condition to 33.3 for males assigned to the low performance private disclosure condition.

Males and females who were assigned the low performance score regardless of disclosure condition, were more likely to choose an allocation which was less than equitable where they gave themselves more than a fair share of the reward, than males and females in the same disclosure condition who were given the high performance score. In the low performance condition 81% of males assigned to the public disclosure condition allocated less than an equitable share to their partners and 47% of males in the private disclosure condition gave themselves more than a fair share. Of the female subjects given the low performance score, 50% and 41% respectively assigned to the public and private disclosure conditions chose to give themselves more than an equitable share of the reward. Both males and females in the low performance condition gave more than a fair share to themselves which could indicate either a trend toward equality or the employment of a self-interest strategy.

The tendency for subjects in the high performance condition was to allocate more than an equitable share to their partners, which is the opposite choice made by subjects assigned to the low performance

condition. For males the percentages of allocations greater than equity were 33 and 60 in the public and private conditions, and for females these percentages were 38 and 44, respectively. Allocating more than a fair share to partners in the high performance condition represents allocations toward equality. In the high performance condition the trend toward equality cannot possibly suggest a self-interest strategy since the allocators give themselves less than their due share.

Though the trend for subjects in both performance conditions was toward equality, the majority did not chose to divide the reward in an even manner.¹⁴ In the low performance public disclosure condition, none of the males and only 4% of the females made an equal allocation. When subjects were promised anonymity the percentages increased to 24% of the males and 18% of the females assigned to the low performance condition who made an equality choice.

There is little male-female difference between the percentages of subjects making an equality choice in the low performance condition regardless of the disclosure condition. But there was a dramatic increase in the percentage of males and females making the equality choice when assigned the public disclosure condition by performance. A greater percentage of males and females given the high performance score opted for the equality allocation. For males, the percentage increased from zero to 27.8% and for females the increase was from 4.2 to 41.7%. Thus, high performing subjects were more likely to choose an equality strategy when they made their decision public than subjects in the low performance public disclosure

condition.

In summary, the ANOVA and the plotting of the cell means of allocation by sex, performance, and disclosure demonstrates that subjects take performance into account when allocating rewards. The better a person performs a task, the more reward subjects believe that person deserves. Furthermore, when partners are to be aware of a subject's allocation decision, males and females allocate differently: females are more generous than males. When subjects' allocations are kept secret, there is no significant male-female difference. Results also indicate that subjects tend to deviate from equity in the direction of equality. Thus, subjects in the high performance condition tend to allocate more than an equitable share to partners, and subjects in the low performance condition tend to give less than an equitable amount to their partners. Finally, males and females assigned to the high performance condition were more apt to make an equality allocation than low performing males and females in the public disclosure condition.

Gender Identity

In this study, a masculine gender identity was conceived as the degree to which a person conceives of self as possessing agentic traits which are commonly associated with masculinity. A feminine gender identity was defined as the degree to which a person perceived of self as possessing communal traits which are commonly associated with femininity. Both masculine and feminine gender identity scores were computed for each subject by adding the values of

the masculine and feminine items, respectively, from the PAQ. The masculine scores ranged from 9 to 31, where the higher the score the more masculine the self-concept. The feminine scores ranged from 16 to 32 where the higher the score, the more feminine the self-concept. Since masculinity and femininity scores were defined independently, a subject could score high or low on both masculinity and femininity dimensions.

Since empirical research has not been conducted to establish the relationship between gender identity and allocation behavior, the analysis was exploratory in nature. The specific research question was: does gender identity add to our ability to account for allocation behavior after performance, disclosure, and sex have been taken into account?

In the preliminary analysis, self-esteem as measured by Rosenberg's (1965) self-esteem scale, was found to be correlated more highly with masculinity than with femininity for both males and females.¹⁵ Frieze et al. (1978) state that numerous studies indicate that stereotypically masculine traits are more valued by males and females than feminine traits. Thus, the conception of self as possessing traits which are highly valued by society, i.e. masculine traits, may be related to the person's high self-esteem, in addition to a masculine self-concept. Self-esteem by itself was not found in the present study to be significantly correlated with reward allocation. However, self-esteem may confound the relationship between gender identity and reward allocation, since it correlates with gender identity. Therefore, partial correlation was chosen as

the most appropriate technique for analyzing the relation between gender identity and allocation, controlling for self-esteem level. Table 3 presents the partial correlational analysis of the relationship between gender identity and allocation within each condition of disclosure and performance by sex while controlling for self-esteem. The analysis ascertained what additional predictability of allocation behavior can be gained from gender identity when performance, disclosure and sex are known.

Table 3

Partial Correlation of Masculinity and Femininity with Allocation
Within the Conditions of Sex, Performance, and Disclosure,
Controlling for Self-Esteem. (Partial r , Significance, size of n)

Sex	Gender Identity	Low Performance		High Performance	
		Public Disclosure	Private Disclosure	Public Disclosure	Private Disclosure
Male	Masculinity	-.249	-.082	-.616	-.055
		.185	.381	.004	.426
		n=16	n=17	n=18	n=15
	Femininity	.389	-.214	-.245	.0897
Female	Masculinity	.076	.213	.171	.380
		n=16	n=17	n=18	n=15
		.344	-.109	-.195	-.030
		.054	.299	.187	.447
	Femininity	n=24	n=27	n=24	n=23
		-.487	-.035	-.141	-.089
		.009	.432	.261	.348
		n=24	n=27	n=24	n=23

Male and female gender identities generally correlated with allocation in the public disclosure conditions (7 of the 8 relationships were significant at or below the .20 probability level), but in the private disclosure conditions the gender identities were not significantly related to allocation, regardless of sex and performance. When subjects are relieved of public expectancies, knowledge of masculine and feminine gender identities of males or females does not add to the predictability of allocation.

For males, the strongest relationship between gender identity and allocation was with masculinity in the high performance, public disclosure condition ($r = -.616$, $p < .01$). The more masculine a male subject, the less he allocated to his partner. Also in the public disclosure, high performance condition there was a weak negative relationship between femininity and allocation for males ($r = -.245$, $p < .20$) where the more feminine the identity the less he allocated to his partner.

For males in the low performance public disclosure condition, the masculine gender identity was inversely related to allocation where the more masculine the self-concept the less he allocated to his partner ($r = -.249$, $p < .20$). The relationship between allocation and a feminine identity for males in this condition was positive in direction where the more feminine the self-concept the more he allocated to his partner ($r = .389$, $p < .10$).

The direction of the relationship between gender identity and allocation for females in the low performance, public disclosure condition is the opposite of the direction for males with the comparable

gender identities in the same condition. The more masculine a female subject is, the more she allocated to her partner ($r=.344$, $p < .06$), while the more feminine a female subject is, the less she allocated to her partner ($r=-.487$, $p < .01$). In the public disclosure high performance condition, the masculine identity for females showed a weak negative relationship with allocation ($r=-.195$, $p < .20$), where the more masculine a female considered herself, the less she would allocate to her partner. The relationship between femininity of identity and allocation for females in the high performance public disclosure condition was not significant ($r=-.141$, $p < .26$).

To sum up, gender identity appears to have little effect on allocation in the private disclosure condition; however, gender identity is related to allocation in the public disclosure conditions. In the public disclosure, high performance condition, males with a high masculine self-concept allocated less to their partners than males with a low masculine self-concept. Males with a strong feminine self-concept gave more to their partners than males with a low feminine self-concept, but the relationship was weaker than the one between masculinity and allocation for males. In the high performance condition for females in the public disclosure condition there was a weak negative relationship between a masculine identity and allocation.

In the public disclosure, low performance condition, the masculine and feminine gender identities had the opposite effects on the allocation behavior of males and females. Masculinity for males and femininity for females were inversely related to allocation: the

stronger the gender identity the less the allocation. While femininity for males and masculinity for females was positively related to allocation; the stronger the gender identity the greater the allocation.

CHAPTER V

Discussion and Conclusion

The original purpose of this investigation was to resolve the seeming contradictions between the findings of the Leventhal and Lane (1970) and the Kidder et al. (1977) experiments. A crucial experiment was devised which incorporated the superior and inferior performance conditions of the Leventhal and Lane study and the public and private disclosure conditions of the Kidder experiment.

A second purpose of the thesis was to provide theoretical clarification of underlying assumptions made by experimenters of previous equity studies concerning the causes of sex differences in allocation behavior. Leventhal and Lane (1970) assumed that the differential behavior of men and women in allocating rewards reflected the differential socialization experiences of males and females which leads them to internalize different social orientations, whereas Kidder et al. (1977) posited that the behavioral difference was due to sex role expectations placed upon the behavior of males and females in public. A measure of masculinity-femininity (PAQ) was therefore included in the present study.

In the original formulation of equity theory by Adams (1965) in the mid-sixties, both males and females were thought to utilize equity standards in determining if exchange relations were fair. When Leventhal and Lane (1970) conducted their experiment using the allocation to self and other paradigm, they found that males and fe-

males divided rewards according to performance. High performers gave themselves more reward than low performers. However, males allocated more to themselves than females in both performance conditions. Thus, males were labeled as being exploitive in exchange relations and females were considered accomodative. By the mid-seventies the relationship between allocation and sex was seen as one where males tended toward equity and females were more apt to choose an equality strategy in dividing rewards (Sampson, 1975). Thus, recent research testing for sex differences in allocation behavior has been focused on whether males act in a more equitable manner and females in a more equal fashion when making allocations (Austin & McGinn, 1977; Kahn et al., 1980).

The conception of males acting more equitably and females more equally has only been demonstrated in the high performance condition (Leventhal & Lane, 1970; Mikula, 1974). In the low performance condition, the mean allocation of males is closer to equality than the mean allocation of females, since females tend to give more of the reward to their partners than males in the low performance condition. The exploitative-accomodative distinction as opposed to the equal-equity dichotomy may better describe the allocation styles of males and females, though these terms are laden with highly charged connotations. Since performance has an influence on how males and females solve the distributive fairness problem, the effect of performance on allocation will be discussed to alleviate some of the confusion created by discussing allocations which are more equitable and more equal.

The results of this study clearly demonstrate that both males and females take performance into account when distributing rewards. High performers take more than half the reward and low performers take less than half. This supports the proposition derived from equity theory that people will divide outcomes in proportion to inputs. However, neither males nor females divided the reward in an exact equitable manner, which indicates that most people do not strictly adhere to the formula for calculating fairness suggested by the input to outcome ratio devised by Adams (1963, 1965). Furthermore, high performers were more apt to allocate more than an equitable share of the reward to their partners while low performers were more likely to allocate less than an equitable share to their partners.

Lane and Messe (1971) noted the same pattern of high performers allocating in a more than equitable manner and low performers giving their partners less than an equitable manner. They argued that subjects in the superior performance condition will tend toward equity since such a strategy will maximize their own reward. Since the allocation of superior performers tends toward an equitable distribution of rewards, their allocations are referred to as equitable. Though subjects in the high performance condition allocate more than an equal share to themselves and tend toward equity in their allocations, they are not maximizing their outcomes in accordance to equity theory. If subjects in the high performance condition utilize an equity standard in determining fairness, then they are cheating themselves by that standard. A better approach to explaining this be-

havior than solely through an equity formula is through the examination of factors which influence performance but which are not of an economic nature.

One explanation for the obtained allocation pattern is that performers are attempting to reduce any status differences between themselves and partners which would make social interaction uncomfortable. Performance by itself may create status differences between the participants where the receiver of the high score would be perceived as the superior, more able partner and the subject assigned the low score would be perceived as the inferior, less talented performer. In enacting these roles the member of the dyad with high performance will assume a superior position and the low performer would be forced to fulfill a subordinate position which may be uncomfortable for the two subjects. Thus, the allocator may attempt to alleviate the difference in status by allocating toward equality where subjects assigned the high performance score will take less than an equitable amount, and subjects assigned the low performance score will take more than an equitable amount.

Another explanation of the allocation by performance pattern is that sentiments may be attached to performance, where a low performer experiences a feeling of shame and a high performer may experience pride if they take an equitable amount. To accept the equitable solution in the low performance condition would mean admitting that the person did very poorly on the task as compared to others. A poor performance might be rationalized as not being all that bad, so the person could accept more than an equitable amount. To take an

equitable share in the high performance condition may be to flaunt your achievement which would be construed as vanity by the person and others. If individuals monitor their own actions as others do then the sentiment explanation may hold in both the public and private disclosure conditions.

The tendency of subjects to deviate from a strict equity standard toward a more equal division of rewards indicates that equity theory needs to be supplemented by other principles in order to explain how people divide rewards. The tendency toward equality may reflect a conflict between justice standards which people possess. For example, a person may hold equity and equality standards of justice, and will enact allocations which reflect a compromise between these two standards. Further research is needed to explicate the standards by which people determine fairness.

Another important finding of this research was that males and females divided rewards differently in the public disclosure condition, but there was not a significant difference between the allocation means of males and females assigned to the private disclosure condition. The findings in the public disclosure condition of the present study are congruent with the Leventhal and Lane (1970) study in which females allocated a larger share of the reward to their partners than males in each of the performance conditions. The self-presentation perspective is useful in understanding why the male-female difference in allocation occurred in the public disclosure condition but not in the private disclosure condition.

According to the self-presentation perspective, subjects in the public disclosure condition who were promised social interaction with their partners, are expected to enact behavior which will obtain social approval (Arkin, 1980). An additional assumption made here is that when people lack personal information about others, they will use stereotypes in discerning how to make a favorable impression. Thus, in the experiment where subjects had no information about their partners at the time of the allocation, subjects used the contents of their sex role stereotypes, which are the basis of sex role expectations, to determine what behavior would most likely obtain social approval. Since subjects assigned to the private disclosure condition are promised anonymity in regards to their allocation decision, social approval is not a relevant concern in their division of rewards. Thus, in the private disclosure condition males and females will not enact sex role expectations, and will allocate rewards in a similar manner.

The expectations attached to the sex role of women are communal in nature and the sex role expectations for men are agentic (Bakan, 1966; Kahn et al., 1980). In the public disclosure condition, men and women respectively displayed agentic and communal traits in making their fairness decisions. In the public disclosure condition of this study, females were more generous to their partners than males, which can be interpreted as women considering the feelings and desires of their partners in dividing the reward. The finding that males in the public disclosure condition allocated more to themselves in each of the performance conditions than females

suggests that males were influenced more by personal concerns rather than the desires of their partners. However, since the allocation strategies of males and females did not differ in the private disclosure condition, the difference in public can be attributed to the desire for social approval in enacting proper sex role behavior, rather than differences in the internal dispositions of males and females.

In the public disclosure condition, it is posited that subjects gain social approval by enacting behavior which is congruent with their sex roles. Thus, men distribute rewards in a manner which reflects personal concerns while women take the desires of their partners into account. In the private disclosure condition, subjects are not concerned with sex role expectations and divide rewards in a similar manner.

Gender Identity

In this study, gender identity was conceptualized as two dimensions of an individual's generalized identity. One dimension is composed of agentic traits and the other dimension consists of communal traits. A masculine gender identity was conceptualized as the degree to which a person conceives of self as possessing traits which are agentic, and a feminine gender identity is the degree to which a person conceives of self as possessing communal traits. Gender identity was examined in this study in order to explain some of the variance in allocation within each condition.

The most salient finding of this study was that gender identity is related to allocation when the allocation decision is disclosed to others, but has no effect when subjects are promised anonymity. Theoretically, the generalized identity should be utilized by subjects in all situations, if individuals are concerned with enacting behavior which reflects the kind of person they perceive themselves to be. The anomalous finding of no relationship between private behavior and allocation can be partially explained by the self-presentation perspective.

In the public disclosure condition, a person is concerned with a positive presentation of self and an individual may ask questions such as: "If I did this, what should I say? What would they say?" (Ungar, 1980, p. 82). In considering how others would react to each possible allocation strategy, the person's attention is focused upon the self. People will probably consider what kind of person they are and whether or not the enactment of personal traits will obtain social approval. Therefore, the traits contained in the person's generalized identity will be a relevant concern to the person when attention is focused on the self and how others will perceive the person.

If an individual does not need to be concerned with self-presentation, as in the private disclosure condition, then the person's attention may be centered on concerns other than what kind of person he or she is. For example, the person may concentrate on determining the appropriate rule behavior which should be enacted in accordance with the situation. The standards a person uses in

determining how rewards should be distributed when the allocation is anonymous needs to be explicated.

Though gender identity was related to allocation in the public disclosure condition, the relationship was neither consistent nor totally anticipated. A masculine identity, which is the agentic dimension of the generalized identity, was posited to be inversely related to allocation where the more masculine the self-concept the less reward allocated to partner. The more feminine the gender identity, the more the person was expected to take the feelings of others into account, and allocate a greater share to his or her partner. In the public low performance condition, males acted in the expected manner. The stronger the masculine gender identity, the less they allocated to partners, and the stronger the feminine identity, the greater the allocation to their partners. Males scoring high on the masculine dimension displayed agentic traits by utilizing a self-maximizing strategy while those scoring high on the feminine dimension allocated more reward to partner which would tend to promote harmonious social relationships.

The relationship between gender identity and allocation for females in the low performance, public disclosure condition was the reverse of the relationship for males in the same condition. The more masculine a female considered herself, the more she gave her partner, and the more feminine she considered herself the less she gave her partner. Thus, for females in the low performance condition, the relationship between both a masculine and feminine gender identity and allocation is the opposite of the predicted direction.

In the public disclosure high performance condition, allocation was inversely related to gender identity, the stronger the gender identity the less allocated to partner. Though consistent, the relationships were weak for feminine males, and both masculine and feminine females. The only strong relationship was between allocation and the masculinity of males, which is congruent with the literature postulating that masculinity is related to a competitive allocation strategy. The inverse relationship between a feminine gender identity and allocation was the opposite of what was expected.

There is a need for further research to explicate the relationship between gender identity and allocation. First of all, the failure of gender identity to add to the prediction of allocation behavior in the private disclosure condition is puzzling and has important implications for the concept of identity. McCall and Simmons (1966) posited that in the absence of others, an individual would act as his or her own audience and enact a performance which would legitimize the self-concept. The findings of this study failed to support this contention which leads to the enigma of what does account for private behavior. One explanation offered was that an individual's attention was not directed toward the self in the private condition, and thus the generalized identity was not invoked by subjects. A clarification of why the generalized identity was not utilized in the private disclosure condition is needed.

Secondly, the inconsistent findings between gender identity and allocation in the public disclosure condition needs clarification.

One way to clarify the relationship is to determine the meaning of allocation by asking subjects why they allocated the way they did. This may lead to an understanding of the anomalous results.

Limitations of the Study

All research methods are limited in what they can tell the researcher about the world. In this study, as in most social psychology experiments, a convenience sample composed of student volunteers was employed which limits our confidence of generalizing the results to the general population of men and women. However, comprehensive reviews of sex role studies which examine different age and location samples across the nation indicates that sex role socialization is a pervasive and shared experience of men and women in the U.S. (see, Maccoby & Jacklin, 1974). Though there was no random sample, there is reason to believe that the sample represents the general population due to the sharing of similar sex role socialization experiences.

The greatest strength of the experimental method is the ability of the experimenter to control the independent variables in order to examine any changes in the dependent variable. This allows the experimenter to attribute any difference in the dependent variable as being caused by the independent variable, unless artifacts are introduced into the experiment. Care was taken to exclude any artifacts from the experiment by two means.

The first step in avoiding artifacts was to insure that subjects encountered the same experience in the experiment by reading

the same script word for word in each session. Regardless of the performance or the disclosure condition to which subjects were assigned, the same script was read until immediately prior to the allocation task. At this point subjects were read one of two different scripts depending on whether they were assigned to the public or private disclosure condition. Furthermore, the scripts for the public and private disclosure conditions were the same in organization, but the public stressed future social interaction with partner and the private promised anonymity.

The second means employed in controlling for artifacts was the random assignment of males and females to the experimental conditions. In assigning subjects a performance score the pay envelopes were shuffled and drawn where the first drawn was given the low performance score and the second was given the high performance score. The procedure of randomly assigning performance scores was hoped to insure that the group characteristics of the sample would be the same except for those measured by the independent variables.

The use of two female co-experimenters as readers may have been one possible source of an alternative hypothesis. Silverman, Shulman, and Wiesensthal (1972) demonstrated that a significant difference in results were obtained in an experiment when the sex of the experimenter who read the instructions was varied. Two females were employed so that the difference could not be attributed to difference of sex in the experimenters. However, if two male readers would have been used the results may have been different. Replication of the experiment with male readers would test this alterna-

tive hypothesis.

One final limitation which should be noted is the nature of the allocation. The subjects were requested to divide the reward between themselves and their partners, so the more subjects gave their partners the less they gave themselves. If the situation would have been one where rewards could have been maximized for both members of the dyad then the allocations might have been different.

New Directions and New Variables

Gerald Leventhal (1980), a prolific contributor to the equity literature, has called for a reconceptualization of equity theory which will be more comprehensive in scope. In this study the term distributive fairness was used to describe the male and female solutions to how rewards should be divided when there is a difference between partners' inputs. In utilizing the self and other experimental paradigm the assumption was made that individuals were free to resolve the distribution problem in any manner they desired. Thus, the allocation choice made by subjects is an outcome of the process enacted by them which reflects what they feel justice is. However, the outcome does not describe the nature of the underlying process by which they arrived at a decision.

Leventhal (1976, 1980) postulates that justice is a multi-dimensional concept where individuals combine different rules in their computation of fairness. Leventhal (1980) conceptualizes the determination of deservingness as a four stage process of weighing rules, estimating fairness, combining rules, and evaluating outcomes.

Through this process, an individual determines fairness by considering many different justice standards. A description of this process would entail a formula which assumes people have both complex cognitions and multiple standards which serve as determinants of fairness.¹⁶

Whether or not individuals use a complex formula in calculating fairness remains an empirical question. Investigations are needed to determine the process through which people calculate fairness. The frequency distribution of allocations in this study and the mean allocation in previous studies (e.g., Leventhal & Lane, 1970) suggests that though people take performance into account, equity theory alone does not provide the best predictive model of allocation behavior. In order to understand allocation behavior, research needs to be conducted which studies the process by which people determine fairness rather than just examine the allocation outcomes under various circumstances.

Furthermore, the results of this study indicate that the meaning of a subject's public or private performance, and the identity which a subject is attempting to maintain will influence the allocation decision. In constructing a comprehensive theory of distributive fairness, personal and social variables need to be taken into account. The process which an individual uses may be different depending upon both personality and the situation.

In developing a distributive fairness theory, three additional factors which may influence the distribution of rewards are: the moral orientation of the allocator, the degree of intimacy between

members, and the sex composition of the group.

Moral orientation is a cognitive construct which may be related to an individual's solution to the distributive fairness problem. Kohlberg (1969) conceptualized morality within a developmental model composed of six stages. The model proposes that individuals pass through each stage in sequential order without skipping any stage. Each stage is built on the previous ones and involves an increasing degree of cognitive complexity. As an individual masters a stage, a new moral orientation will be acquired for solving problems. The lower levels of morality are concentrated on following rules, but at the higher levels the individual develops a personalized morality based on principles which transcend rules. A person who has achieved a higher level of morality may allocate rewards in a manner different than that prescribed by societal rules.

The question of fairness concerns "what ought I do?", which is subsumed under the rubric of moral concerns. An individual's level of morality should play an integral part in determining what self and others deserve. The integration of morality into the distributive fairness literature will add to our understanding of how people solve the problem of distributing rewards.

Gunzburger, Wegner, and Anooshian (1977) have empirically tested the relationship between moral development and distributive fairness for high school students. The level of morality possessed by subjects was assessed by the Defining Issues Test (Rest, 1976). Subjects were asked to complete an hour long questionnaire as part of a team effort. Inputs were varied by informing subjects of the

difference in the amount of time each team member put into the task. The investigators found that equity appeared in the lower stages, where rules are important in making decisions; social responsibility was the dominant fairness rule in the higher level stages of morality. Social responsibility was defined as an allocation which considers both intended (how long members wanted to work) and actual (amount of time worked) inputs.

In the experiment subjects were told that some team members were constrained by the experimenters to working 25 minutes even though the member wanted to work the full hour. If the allocator gave the constrained member more than an equitable amount, then the allocator was classified as using a standard of social responsibility. The researchers assumed that the allocation of more than equitable share to the constrained member was due to the allocator's consideration of the member's intentions as well as his performance.

A second factor which may influence the distributive fairness solution is the degree of intimacy which exists between members in an exchange. As discussed previously, the Leik (1963) and Schoeninger and Wood (1969) studies indicated that members of ad hoc groups composed of strangers are more likely to enact behaviors which are congruent with sex role expectations than members of intimate groups. In intimate relations people desire to feel close, share experiences, and minimize differences; thus, they would enact allocation behavior more on an equal or needs basis. Furthermore, the distribution of rewards would tend to be negotiated and mutually agreed upon rather than being the sole purview of one member. Thus,

in intimate relations, as opposed to non-intimate groups, people are still concerned with self-presentation, but the image projected by individuals would be more apt to reflect personal concerns rather than social expectations.

The third factor which might influence allocation is the sex composition of the group. In most of the studies utilizing the allocation to self and other paradigm, the subjects never meet their partners and the only information subjects are given is a performance score for themselves and their partners. In two recent studies, subjects were informed of the sex of members in their group. Kahn, Nelson, and Gaeddert (1980) formed hypothetical groups of three persons and informed the subject of the performance and sex of members by writing the information on the pay envelope. They found that when a female was the low input member the allocator would divide the reward more equally than when a male was the low input member.

Reis and Jackson (1981) varied the sex composition of dyads and used two identification tasks where one was considered to be a feminine task and the other a masculine task. They found that both males and females tended to allocate more equitably with a same sex partner than with a partner of the opposite sex when the dyad worked on a task congruent with the allocator's sex. Sex by itself is not what influences the allocation decisions of subjects. People attach meaning to the category of sex and make fairness judgements which take these meanings into account. People may attempt to es-

establish different types of relationships depending on the sex of the person involved.

In conclusion, the experiment in this study utilized the self and other allocation paradigm in which subjects were asked to distribute rewards in public and in private. Subjects took performance into account: High performers took more than half of the reward and low performers gave themselves less than half of the reward. Furthermore, the mean allocation of high performers was less than equitable to themselves and the mean allocation of low performers was more than equitable to themselves. In both performance conditions the allocation deviated in the direction of equality. When subjects were told that they would publicly meet their partners, the subjects responded to sex role expectations in dividing the reward, but there was no male-female difference in allocation when they were promised anonymity in regards to their decision. Gender identity was explored to account for variation in allocation within each condition, but was found not to be related in the private disclosure condition. While gender identity was found to be related to allocation in the public condition, allocations did not systematically conform to the prediction that the more agentic a generalized identity the greater the allocation to self and the more communal the generalized identity the more would be allocated to others. Further research is needed to determine the relationship between gender identity and allocation and to study the judgments used by individuals in determining fairness.

FOOTNOTES

1. An equity score was not presented in most of the studies and was calculated by dividing the subject's performance score by the team score and multiplying it by team reward.
2. In both of these studies the means were less than four percentage points below the equity score.
3. David Tresemer (1975) argues that social scientists are more attuned to the discovery of significant differences than to finding similarities, which has led to an exaggerated depiction of differences between the sexes.
4. Implicit personality theory as the concept used by Ashmore and Del Boca refers to hypothetical mental constructs which are used to infer relations between attributes and action through a non-conscious process.
5. An ad hoc group is composed of strangers having the same status characteristics as the group being investigated. In the Schoeninger and Wood study mixed sex dyads were used as the ad hoc analogous groups to married couples. Leik used triads of appropriate age and sex to represent a family of father, mother, and daughter.
6. For a review and critique of traditional measures see Constantinople (1973).
7. The masculine and feminine scales are composed of 8 bipolar traits which are scored 0-4.
8. For a review of correlates see Kelly and Worell (1977) and Spence and Helmreich (1978).
9. In the language of Mead, "selves" refers to different views of the "me" where a different view of "me" is perceived for each role or social situation.
10. The PAQ will only depict an individual's internal disposition if the respondent enacts private behavior in completing the questionnaire. The assumption was made that students believe that standardized questionnaires are confidential and fall in the realm of private behavior.

11. The traits stereotypically considered masculine are: independent, active, competitive, makes decisions easily, self-confident, feels superior, and stands up well under pressure.
12. The traits stereotypically considered feminine are: emotional, able to devote self to others, gentle, helpful, kind, aware of feelings of others, understanding, and warm in relations with others.
13. In groups which consisted of less than four subjects, the bottom card or cards would be excluded depending upon the number in the group.
14. Overall, twenty percent of the subjects made an equality allocation where they gave \$3.00 to themselves and \$3.00 to their partners.
15. Pearson's r between self-esteem and a masculine gender identity for males equalled .474 ($p=.00003$) and .493 ($p=.00001$) for females; and the relationship between self-esteem and a feminine identity for males was .161 ($p=.097$) and for females .206 ($p=.0209$).
16. Leventhal (1980) feels that the contributions and needs of recipients are taken into account as well as equality through a computational scheme, which he delineates as:

$$\begin{aligned} \text{Deserved outcomes} = & w_c D_{\text{by contributions}} + w_n D_{\text{by needs}} \\ & + w_e D_{\text{by equality}} + w_o D_{\text{by other rules}} \end{aligned}$$

In this computation the D represents deservingness and w stands for weight that is importance of rule. The subscripts c, n, e, o respectively stand for contribution, needs, equality, and other rules.

APPENDIX A

Hello, my name is _____. I am going to serve as the experimenter for your group.

I have a set of instructions that I will read to you. I'm reading them so that everyone who participates in the experiment will receive the same set of instructions. The instructions have been tested so that they are as clear as we can make them, but you will have to listen carefully: I can read the instructions only once.

This experiment has been designed to simulate - that is create conditions found in business and industry. When employed by a company you would be expected to perform some type of task or service in exchange for the payment you would receive. The task you will be performing in this experiment is to edit a few pages of material, correcting as many mistakes as you can. You will be doing the same kind of work that many people do in the publishing industry.

In most industrial settings management sets a pay scale for their employees. However, we are interested in how a pay scale would be constructed by the people who do the actual work. Later in the experiment you will be given some tokens to distribute. We would like you to pretend that the tokens are real money, and act as if you are distributing real money.

You will distribute the tokens between yourself and someone in the other room that you are working with. Your partner will be

randomly selected to work with you. You will be working with a partner for two reasons. First, work is often done as part of a group effort rather than by individuals. In the publishing industry, more than one person will edit the same manuscript in order to correct as many mistakes as possible. Second, we would like to see how payment would be distributed by workers between themselves and other workers. In short, we want to see how you would construct a pay scale for yourself and others.

The participants in this room have been selected to divide the tokens. Each of you will have a partner in the other room working on the same task. Your team payment can be up to \$7.00 in tokens. The payment your team actually receives will depend on how well both you and your partner perform the task, and it is likely that your team will receive less than the full \$7.00.

The lab is divided into three rooms. Two of the rooms are being used to work on the task [point to the other two rooms]. Your partner is in the far room. The middle room will be used by a team of judges who will calculate how you and your partner performed the task.

The quality of your editing performance is important, but we will not be observing how you do the task. Thus, I will leave the room once you begin working on the task. Your actions will not be observed in any manner. There are no one-way mirrors or recording devices, so we will not be watching or listening to you.

In order to give you an idea of what is expected of you, I will give you an overview of the experiment. The experiment will consist

of four phases. In the first phase you will be given the editing task. The task is rather lengthy and you may not complete it, but finish as much as possible. In the second phase you will be given a creative task. While you are working on the creative task the judges will be computing the performance scores for the editing task. In the third phase you will be asked to divide tokens between yourself and your partner. In the final phase, you will be given a questionnaire concerning the experiment. Afterwards, we will be happy to answer any questions you have about the experiment.

Each person in the other room will draw a card like this [hold up cards] with a letter which will denote the team you belong to. At this point each of you will draw a card and pass the remaining cards to your left. [Hand the deck to a subject--shuffle first]. The person in the other room who selects the card with the same letter as yours will be your partner.

These envelopes [hold up] will later contain the tokens. Please fill in your social security number, [public only: your name], and your team letter in the space provided. [pass out envelopes] Please pass the envelopes forward.

I. [The Editing Task]

I am about to pass out the editing task. Please do not open the task until I say begin. The same editing task is being distributed to your partner in the other room. Though each team will work on the same editing task, each person in this room will have a different manuscript of equivalent difficulty. Your performance

score will be determined by both the number of errors found and the number correctly identified. The reason you and your partner, in the other room, have been given the same task is that in the publication industry you will find multiple editors for one manuscript.

[pass out the task by calling out team letters] Remove the task from the envelope but do not turn the page until I say to begin. The cover page lists examples of the type of errors you can expect to find within the booklet.

[Read the cover page]

You have ten minutes. Begin.

[Leave room--be sure to bring envelopes]

II. [Creative Task]

Stop. Place the task back into the envelope and hand me the envelope. [Give the envelopes to me through door]. In this part of the experiment you will work on a creative task for ten minutes. You will be given a picture and asked to write a short story about the picture. Your story can be about anything. Spend a couple of minutes thinking about the picture and then write a story with a beginning, a middle, and an end. You will have ten minutes to complete the story, so try not to write a story that is too long or too short. We are more interested in your creative ideas than in the form of your essay, so do not be concerned about neatness or grammatical errors. Please do not talk to others, even if you finish your task early. Do not start until I say begin. [Pass out the

task]. Be sure to write your social security number on top of the page. [Knock on door]
Begin. [Leave]

III. [Allocation]

In most industrial settings management sets the pay scale for employees. We would like to see how workers would divide payment when given the opportunity. In this part of the experiment we would like for you to divide tokens between yourself and your partner. The participants in this room have been randomly selected to distribute the tokens for their respective teams. Due to lack of funding we are forced to use poker chips in place of real money. However, we would like for you to pretend that the poker chips are money, and act as if you are distributing real money. Before you divide the chips be sure to count and find out how much your team received.

You can divide the poker chips in any manner you desire. However, you will be given a performance score indicating how you and your partner performed the editing task in order to help you with your decision. Raise your hand as I call your team letter. [Call out letters].

On the outside of the envelope you will find your performance score, the score of your partner, your team score, and the value of the chips listed. Inside the envelope you will find up to 10 poker chips. The blue chips represent \$1.00, the red chips represent \$.50, and the white chips represent \$.10. You may have up to \$7.00

in tokens to divide between you and your partner depending on your team performance.

[Public]

Keep the tokens that you have decided to give yourself, set them off to the side, place them in your bag, pack, or pocket. Place the remaining chips that you have allocated your partner in the envelope. On the outside of the envelope write down the amount you gave your partner. Keep the envelope on your table. After everyone has finished the questionnaire, we will go into the middle room. You will meet the other participants in the experiment, and give your partner the envelope with his or her tokens. Your partners will find out how much you allocated them, and they will meet you. As soon as you have finished the allocation, come up and tell me what your team letter is and how much you gave your partner, so I will know how much you allocated to your partner.

Remember; set aside how much you have chosen to give yourself, place your partner's share in the envelop, write down how much you allocated your partner, and tell me how much you allocated your partner. Before you meet your partner there is a questionnaire to complete.

IV. [Questionnaire]

We would like you to respond to some questions concerning the experiment. Upon completion, pass the questionnaire to me. Your responses will be kept confidential. After everyone has finished

the questionnaire and the groups have been combined we will answer any questions about the experiment.

[Private]

Keep the tokens that you have decided to give yourself, set them off to the side, place them in your pack, bag, or pocket. Place the remaining chips that you have allocated your partner in the envelope. Seal the envelope and put it in the box. I will not know how much you allocated to your partner. The envelopes will be given to an assistant in the next room who will tally how much was contained in each envelope in order to determine a group average. This information will be used to calculate the type of pay scale which was devised by the group. The assistant will then take your partner's tokens out of the envelope which you have used and give the tokens to your partner. Your partner will not know who you are. Thus, your allocation will be kept private.

Remember; set aside how much you have chosen to give yourself, place your partner's share in the envelope, seal it, and place the envelope in the box.

IV. [Questionnaire]

We would like you to respond to some questions concerning the experiment. Upon completion, pass the questionnaire to me. After everyone has finished, we will answer any questions about the experiment.

APPENDIX B

Name _____

Social Security # _____

Please answer the following background questions:

1. sex: ____ male ____ female

2. Class rank: ____ freshman ____ sophomore ____ junior ____ senior
____ other (specify)

3. Major: _____

Please check the times you will be available this week and next. If you have a preference number them with one being your first choice.

	9-10	11-12	1-2	3-4
MON				
TUES				
WEDN				
THURS				
FRI				

I will need to contact in order to set up an appointment:

Phone: _____ When you can be reached: _____

Indicate how you feel about the following statements.

Circle the best choice.

- | | Strongly agree | Agree | Disagree | Strongly disagree |
|---|----------------|-------|----------|-------------------|
| 1. I feel that I'm a person of worth, at least on an equal basis with others. | 1...2...3...4 | | | |
| 2. I feel that I have a number of good qualities. | 1...2...3...4 | | | |
| 3. All in all, I am inclined to feel that I am a failure. | 1...2...3...4 | | | |
| 4. I am able to do things as well as most other people. | 1...2...3...4 | | | |
| 5. I feel I do not have much to be proud of. | 1...2...3...4 | | | |
| 6. I take a positive attitude toward myself. | 1...2...3...4 | | | |
| 7. On the whole, I am satisfied with myself. | 1...2...3...4 | | | |
| 8. I wish I could have more respect for myself. | 1...2...3...4 | | | |
| 9. I certainly feel useless at times. | 1...2...3...4 | | | |
| 10. At times I think I am no good at all. | 1...2...3...4 | | | |

The items below inquire about what kind of a person you think you are. Each item consists of a pair of characteristics, with the letters A-E in between. For example:

Not at all Artistic A...B...C...D...E Very Artistic

Each pair describes contradictory characteristics--that is you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would circle A. If you think you are pretty good, you might circle D. If you are only medium, you might circle C, and so forth.

Circle the best response:

Not at all independent	A...B...C...D...E	Very independent
Not at all emotional	A...B...C...D...E	Very emotional
Very Passive	A...B...C...D...E	Very active
Not at all able to devote self completely to others	A...B...C...D...E	Able to devote self completely to others
Very rough	A...B...C...D...E	Very gentle
Not at all helpful to others	A...B...C...D...E	Very helpful to others
Not at all competitive	A...B...C...D...E	Very competitive
Not at all kind	A...B...C...D...E	Very kind
Not at all aware of feelings of others	A...B...C...D...E	Very aware of feelings of others
Can make decisions easily	A...B...C...D...E	Has difficulty making decisions
Gives up very easily	A...B...C...D...E	Never gives up easily
Not at all self-confident	A...B...C...D...E	Very self-confident
Feels very inferior	A...B...C...D...E	Feels very superior

Not at all under-
standing of others

A...B...C...D...E

Very understanding
of others

Very cold in relations
with others

A...B...C...D...E

Very warm in relations
with others

Goes to pieces under
pressure

A...B...C...D...E

Stands up well under
pressure

Please think of the person with whom you can work least well. This should be an actual person that you have encountered in some past situation or group or someone you know now. This person should be someone with whom you would have the most difficulty getting some job done, regardless of how much you like or dislike the person. Please describe this person by placing an "X" in one of the seven spaces between each pair of descriptive words.

	Extremely	Quite	Somewhat	Neither	Somewhat	Quite	Extremely	
Friendly	___	___	___	___	___	___	___	Unfriendly
Responsible	___	___	___	___	___	___	___	Irresponsible
Rejecting	___	___	___	___	___	___	___	Accepting
Unpleasant	___	___	___	___	___	___	___	Pleasant
Reliable	___	___	___	___	___	___	___	Unreliable
Helpful	___	___	___	___	___	___	___	Frustrating
Cold	___	___	___	___	___	___	___	Warm
Relaxed	___	___	___	___	___	___	___	Tense
Lazy	___	___	___	___	___	___	___	Hard-Working
Unenthusiastic	___	___	___	___	___	___	___	Enthusiastic
Cheerful	___	___	___	___	___	___	___	Gloomy
Competent	___	___	___	___	___	___	___	Incompetent
Distant	___	___	___	___	___	___	___	Close
Uncooperative	___	___	___	___	___	___	___	Cooperative
Intelligent	___	___	___	___	___	___	___	Unintelligent
Supportive	___	___	___	___	___	___	___	Hostile
Boring	___	___	___	___	___	___	___	Interesting
Inefficient	___	___	___	___	___	___	___	Efficient
Self-Assured	___	___	___	___	___	___	___	Hesitant
Harmonious	___	___	___	___	___	___	___	Quarrelsome
Guarded	___	___	___	___	___	___	___	Open

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