

FOR REFERENCE

NOT TO BE TAKEN FROM THIS ROOM

PREFERENCE FOR THE EQUITY OR EQUALITY NORM  
BY PRESCHOOL CHILDREN IN REWARD DISTRIBUTION

A.Hikmet Bilsel

B.S., İstanbul Üniversitesi, 1974

Submitted in Partial Fulfillment of the Requirements  
for the  
Degree of Master of Arts  
in  
Social Psychology

Bogazici University Library



39001100375032

14

Department of Social Sciences, School of Administrative Sciences

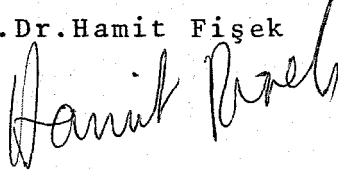
Boğaziçi University

1983

This thesis, submitted by A.Hikmet Bilsel to the Department of Social Sciences of Boğaziçi University in partial fulfillment of the requirements of the Degree of Master of Arts is approved.

Thesis Advisor

Doç.Dr.Hamit Fişek



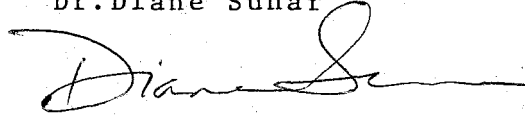
Committee Member

Dr.Ayhan Aksu

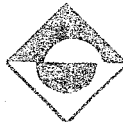


Committee Member

Dr.Diane Sunar



Date:



## ACKNOWLEDGEMENTS

In the preparation of this thesis I sought and received invaluable help from a number of people. I wish to express my gratitude to my professors in Boğaziçi University who have given me guidance, to the directors of the nursery schools who gave me the permission to carry out the study in these schools, to the participant children and to my family and friends.

I would like to single out three people who deserve my special thanks: My friend and colleague Mevlide Birsun for her numerous and constructive suggestions in preparing the instruments and the other parts of the Method section; my friend Elşan Yurdakul, for his beautiful illustrations and his translation of the whole text into English; and lastly my friend and colleague Sühendan Konakçı for her invaluable help in every step of the study.

I also appreciate the kindness of the people in "Sürat Daktilo" who typed the manuscript in a very short time.

## TABLE OF CONTENTS

	PAGE
ABSTRACT -----	1
INTRODUCTION -----	2
METHOD -----	30
RESULTS AND DISCUSSION -----	42
CONCLUSION -----	58
REFERENCES -----	62
APPENDIX 1 -----	66
APPENDIX 2 -----	67

## ABSTRACT

The present study attempts to find the determinants of preferences for justice norms. It is proposed that a) The preference for equity or equality norm varies with the sex of the child, such that girls prefer to use the norm of equality more often than boys do; b) Children are affected by the type of the relationship (unit-nonequivalence) between individuals in their choice of justice norms. More specifically, children who perceive the relationship as unit use the norm of equality more often than those who perceive it as nonequivalent; and lastly c) When children are told "not to be unjust" they use the norm of equity more often than those who are not told so.

The hypotheses were tested on 80 nursery school children (40 girls - 40 boys) aged 5, using a full factorial design. The result showed that sex of the subjects, the perceived relationship between the individuals and being told not to be unjust are important factors in the preference for justice norms.

## PREFERENCE FOR THE EQUITY OR EQUALITY NORM BY PRESCHOOL CHILDREN IN REWARD DISTRIBUTION

The distribution of resources among persons has been a fundamental problem since the first human society. During the historical progress, every society has allocated the resources according to its concept of justice. In some societies the resources were equally distributed among the members while in others the members who had esteemed human qualities such as wisdom, courage, wealth etc., received bigger shares from the resources than the members who lacked such qualities.

Beginning with Ancient Greece, various philosophical systems have been concerned with the matter of fair allocation of resources in societies and the related issue of justice. Since the 1960's, social psychology has also been concerned with distributive processes. Homans (1961) was the first to bring forth the justice problem as a distinct theoretical concern. His theory of "distributive justice" makes the assumption that people with similar investments are expected to be receive similar profits.

In fact, the distribution of resources is determined by the social system prevailing in a society. In some societies, it may be considered just to allocate rewards (i.e. resources) to the members of the society proportional to the amount of their contribution, while in some others equal distribution of rewards regardless of differences in the members' contributions may be considered fair. Norms in a society define the ways of resource distribution. Before stating the norms of justice, it is better to give a short definition of norms. According to Stainer: "Norms are behavioral rules that specify what one should do (or refrain from doing) when he encounters a given situation. Norms apply to everybody and they have the salutary effect of minimizing conflict and uncertainty (1976, p.410).

Like other norms, the norms related to justice also vary according to the structure of each society. These norms affect children as much as they do adults. It is the aim of the present study to find out which norms preschool children use in distributing rewards. Before presenting previous studies in the area, let us first review the types of distributions and the related issue of justice in various societies beginning from the so called primitive periods to the present

The history of societies, according to Senel (1970) can be divided into two main periods: the primitive and civilized. The primitive period is the one in which all members of the society do the same work without any cooperation. Such a

society consisting of members doing the same work is homogeneous and has a social structure based on equality. Namely, in such a society, there exists equal distribution and sharing of resources. The civilized period begins with cooperation. With the beginning of this period the members of the society began to have different pursuits, therefore it is not possible to talk about homogeneity any longer.

One of the fundamental conditions of civilization is the settled society. According to McNeil and Divetev (Şenel, 1970) Sumerians were the first to reach civilization by settling down in Mesopotamia in 5000 B.C.. Sumerians practiced agriculture on the fertile lands of Mesopotamia and, since floods in the spring harmed their crops, they had to construct banks near the rivers. Banks also provided the water they needed for irrigation in the summer drought. This process which seems to be very simple, started a great revolution in the history of mankind. In previous agricultural societies, families were self-sustaining economic units. There was no cooperation between them. But, among Sumerians, the construction of the banks and digging the canals necessitated cooperation between the members. There arose the distinction between the "rulers" and the "ruled". In other words, social classes began to appear. The needs of the people working on the construction of the banks and digging the canals had to be supplied by the others. Therefore the professions aimed at



supplying their needs were established. Cooperation increased productivity, productivity increased cooperation, and humanity began a technological development which accelerates day by day. Needless to say, this brings about social differences.

The practice of unequal distribution of resources among Sumerians later developed into a system of thought in Ancient Greece. According to Şenel (1970) in Ancient Greece the thought of inequality first appeared in Homer's Epics. "Ilyada and Odysseia" are works which defend the inequality that had affected the social and economic system of Greece for ages. Homer's Epics are all a praise for aristocratic values of the Heroic Period. The Heroic Period was the period in which the combatant aristocracy was the dominating class in Ancient Greece. People were divided into two classes, namely the nobles and the commoners. The nobles were considered to be superior to commoners in strength and courage. As can be seen, inequality was based on nobility which was based on strength and courage. On the other hand Hesiodos lived in a period, 700 B.C., when the Heroic Period had come to an end and the social system of police was beginning to appear. Hesiodos' "Works and Days" is considered to be the beginning of the idea of equality. But, Hesiodos did not oppose the unequal distribution of resources, he was only against the inequality between the commoners and the nobles. Later, Demokritos, who lived between 460-370 B.C., and his student Protogoras, who lived between 485-415 B.C., established the

philosophical basis of equality. Protagoras advocated that not only a group of people but everybody should own "The art of the State". Later Sophism, which was influenced by Protagoras' ideas appeared as a reaction to the Aristocratic movement, came into the philosophical scene. Socrates was one of the leaders of this new system of thought. He put forth the concept of wisdom, by which he supported the view that only the wise should govern the state. This view formed the basis of other philosophical thoughts which defended inequality. The founders of the philosophy of inequality are Aristotle and Plato. Plato, 427-347 B.C. proposed a society in which there existed definite differences between the classes and it was not possible for individuals to change their classes. According to Plato justice occurs in societies where everybody and every class do their duties without interfering with the duties of others. Plato's basic idea was that everybody should know his duties and limits. Aristotle's view was different from Plato's. Aristotle asserted that there should exist political equality among the citizens of Athens and inequality in all aspects between the citizens and non-citizens. Aristotle is against only extreme economic inequality.

According to Brinton (Şenel, 1970) ideas of equality appeared in the Hellenistic Period, which is the last days of the Polis. Şenel (1970) acknowledges that with the downfall of Polis ideas of inequality also began to disappear. For this reason, new ideas and value judgements had to be found.

To supply this demand, there appeared two new philosophic views. They are Epicurus's school of thought and Xenon's Stoic School. While the former defended equality among friends, the Stoic School accepted the idea of the universal equality of mankind.

The system of unequal distribution in Ancient Greece later continued to exist in the old society of Rome and in the feudal system and bourgeois societies where capitalistic relationships dominate (Zubritski, Mitropolski and Kerov, 1976).

In the Ottoman Empire where resources were distributed unequally, equal allocation was seen among Ahis, in Anatolia. Ahism was a trade union in the modern sense, and it provided standardization in production, unity in marketing and equality of earnings among the groups (Kabaagaçlı, 1980).

As can be seen, since the beginning of human society, fair sharing and distribution of resources has been an important problem. Social psychology has been interested in the concept of justice for more than twenty years and has been searching for the norms specifying the behavior related to the sharing of rewards and the distribution of sources. Among the social psychological views, Social Exchange Theory is one of the views which tries to explain how an individual judges how much he and others should get from the resources. Before presenting the theory, which forms the framework of

this study, the views which form the basis of this theory have to be examined.

At the base of the Social Exchange Theory there lies the reinforcement orientation. The roots of this reinforcement orientation go back to Aristotle and to British Empiricism. The name of this view in psychology is Behaviorism, and according to Behaviorism, all knowledge is a result of Stimulus (S)-Response (R) associations. A certain (S) elicits a certain (R). Since reinforcement is important in eliciting a certain behavior, it will be useful to review the principles of reinforcement. According to the first definitions of human behavior, human beings tend to seek pleasure and escape from pain. Bentham (Shaver, 1977) in order to analyze pain and pleasure, proposes the concept of "Hedonistic Calculus". According to Bentham (1789), pain can have different sources and these sources are characterized by dimensions such as density, sharpness and contents. Because of individual differences, objects that give pain or pleasure can vary from man to man, but the result is always the same. People always try to decrease pain to the lowest degree and increase pleasure to the highest.

In psychology, the doctrine of Hedonism was first offered by Thorndike (Shaver, 1977) as the "Law of Effect". According to Thorndike (1898) an action that gives pleasure will be "stamped in" and an action that gives pain is going to be "stamped out". The behaviors that give pleasure will

take place more often in the future. The effect of the past action becomes the reason for the behavior that will take place in the future.

The most important name in the analysis of observable behavior and its effects is Skinner (Shaver, 1977). Skinner regards the "Law of Effect" as a reinforcement principle. According to him, positive reinforcement increases the probability of occurrence of the behavior in future. Skinner calls the concept of pleasure in Bentham's Hedonism positive reinforcer and the concept of pain negative reinforcer.

The main assumption of Social Exchange Theory is that individuals try to increase pleasure and decrease pain in their relationships with other people. Social Exchange Theory depends on the analogy between economic relations and other social relations and is a reward-cost model. That is to say, in the relations between individuals, both reward and cost are important. Here, reward corresponds to pleasure and cost to pain. And the behaviors of the individual will be aimed at increasing the rewards and decreasing the costs.

Social Exchange Theory is a common outcome of both psychology and sociology and also economics. This theory was developed by the psychologists Thibaut and Kelly (1959) and the sociologist Homans (1961) separately. In Thibaut and Kelley's theory there are the concepts of Comparison Level (CL) and Comparison Level for Alternatives ( $CL_{alt}$ ). With

these concepts their theory differs from Homans' theory. Comparison Level according to Thibaut and Kelly, is a standard for the individual in estimating his outcomes. If the outcome is below CL the situation is not wanted, if over CL the situation is wanted. CL and CL<sub>alt</sub> are cognitions and this is where Thiabut and Kelley differ from orthodox S-R theory.

But according to Homans' theory which depends on orthodox S-R theory, the individual does not compare his profits with his similar profits, but with the profits of other individuals with whom he has relationships. From this point of view, Homans brings forth the concept of "Distributive Justice". At the base of Distributive Justice, there lies the comparison of the individual's profits and investments with another one in an exchange. It can be formulated as follows:

$$\frac{\text{A's profits}}{\text{A's investments}} = \frac{\text{B's profits}}{\text{B's investments}}$$

The investments of the individual include things like age, education. experience, skills etc., but the profits shows the earnings provided.

Everybody wants to receive a reward for a cost. The person who does not receive the reward he expects thinks that he is treated unjustly. The individual compares himself with another person whose investments are similar to his. If one of the two people who have the same or similar investments receives more profits than the other there occurs distributive

injustice. According to Homans (1961) there are two kinds of investments:

- Achieved investment: The contribution of the previous valuable activities in the group.
- Ascribed investment: The contribution of the fundamental personal characteristics, such as sex race ... which have no relation with the group.

Although achieved investments are directly rewarded, ascribed investments usually are not rewarded directly. However, sometimes, according to the structure of the group, ascribed investments such as being male, or being a member of the white race, can be considered valuable and provide high profits. Because of this, it is important to specify the norms which determine the valuable investments.

Homans' formula which shows the ratio of profits to investments is a mathematical expression. But to express social relations within the frame of mathematics and to interpret them accordingly in that frame can pose difficulties. In situations where there are no definite boundaries, one can estimate his investments more than the others' and his profits less than the others'. What's more, Homans' formula can not explain why someone although he has the right to change the group he dislikes, does not change.

After Homans had proposed the concept of Distributive Justice, Adams (1963, 1965) offered the "Equity Model". Adams' concept concentrates on the cognitive activities of an individual who encounters a problem related to injustice in the distribution. According to Adams, the individual compares himself and the others according to their inputs and the outcomes they get. Adams says that outcomes should be proportional to inputs. So he offers his formula:

$$\frac{O_A}{I_A} = \frac{O_B}{I_B}$$

According to Adams, if one of two people who have the same inputs receives more outcome than the other, it will cause them to perceive injustice and this will create tension in both of them. This tension motivates people to reduce the injustice.

Although the formulas offered by Adams (1963, 1965) and Homans (1961) seem to be similar, their standpoints are different. Homans' view is based on Exchange Theory but Adams' view is based on Cognitive Dissonance Theory. When the distribution is unjust. Homans calls this situation "Distributive Injustice" whereas Adams calls it "Cognitive Dissonance".

The equity model was reformulated by Walster, Berscheid and Walster (1976). The main principle in these views is that the rewards should be distributed according to



the individual's investments. The distribution is accepted as just as long as the rewards are distributed proportionally to the individuals' investments.

According to Walster, Berscheid and Walster (1976) the Equity Model includes four propositions:

Proposition I: Individuals will try to maximize their outcomes  
(Outcomes = reward-cost)

This proposition was expanded by Walster, Berscheid and Walster (1973) as follows.

Corollary I : So long individuals perceive that they can maximize their outcomes by behaving equitably, they will do so. Should they perceived that they can maximize their outcomes by behaving inequitably they will do so.

Proposition IIA: Groups can maximize collective reward by evolving accepted systems for "equitably" apportioning reward and cost among members. Thus members will evolve such systems of equity and will attempt to induce members to accept and adhere to these systems.

According to this proposition, every culture has to establish a system for the allocation of resources. Each cul-

ture has different norms. An Equitable relationship is a relationship in which an outside observer perceives that the outcomes are distributed equitably among members (here outcomes means either a negative or a positive result received from a relation).

Proposition IIB: Groups will generally reward members who treat others equitably and generally punish (increase the cost for) members who treat others inequitably.

According to proposition IIA and IIB, the society rewards equitable treatment.

Proposition III: When individuals find themselves participating in inequitable relationships, they become distressed.

According to proposition III, individuals, whether they are victims or beneficiaries, are disturbed by unfair relationships. In an experiment Walster, Berscheid and Walster showed that a person who inequitably receives more reward than the others tends to share his outcome with the others. Adams devoted a number of studies to demonstrating this point, also.

Proposition IV : Individuals who discover they are in an inequitable relationship attempt to eliminate their distress by restoring equity.

To eliminate the distress predicted in proposition IV, there are two ways to restore equity:

- Actual Equity: An individual alters his or his partner's inputs or outcomes.
- Psychological Equity: An individual distorts his perception of his or his partner's inputs and outcomes.

In short, according to Walster, Berscheid and Walster (1976), the individual wants to increase his outcomes and make his outcomes and inputs proportional and also to live in an "equitable" world.

According to Leventhal (1976), in every social system there are rewards and resources for the group to reach its aims and for the members of the group to satisfy their needs. In the social system the person who allocates rewards and resources is called the "allocator" and the person who receives them is called the "recipient". The distribution of resources is done according to four different norms (Leventhal, 1976):

- Equity Norm
- Equality Norm
- Need Norm
- Reciprocity Norm

If the relationship between the allocator and recipient is direct the reciprocity norm is used, in situations in which the relationship between the allocator and recipients is mediated, the equity, equality and need norms are used.

According to the equity norm, the allocator allocates the rewards or resources according to the recipient's work, namely, whether the recipient's work is useful or not (Leventhal and Lane, 1970; Lane and Messé, 1971). That means if the individual's inputs are taken into consideration, the equity norm is used. Namely, if the person who works more than the others gets more reward than the others, this means that in the distribution of rewards equity norms is used. It is said that the equity norm increases productivity in industrialized countries.

According to the equality norm, which is also used in mediated relationships, whatever their inputs are the individuals receive the same amounts of reward. It is held that equal distribution of resources especially in friendly groups encourages harmony and solidarity.

Another norm used in the same system of relationships is the need norm (Marxian Justice Norm) which was suggested by Lerner (Leventhal, 1976). If this norm is preferred, the allocator allocates the rewards according to the recipients' needs.

When the relationship is direct between the allocator and the recipient the reciprocity norm is used. Such a relation is a two-sided one. The allocator in such a relationship gives reward to the recipient by considering the recipient's previous favors. Such relations are common between couples.

### Studies in Turkey

In Turkey the first study on the subject was made by Aral and Sunar (1977). Aral and Sunar in an attempt to specify the range and limits of application of the justice as equality norms (justice as reciprocity, justice as equity and justice as equality) found the following results: a) Reciprocity is the dominant norm in direct interaction situations; and b) in mediated interactions the dominant norm is equity. They further tested whether the same results hold true for people from two different cultures (American and Turkish). Both American and Turkish subjects preferred the reciprocity norm in direct interactions, but American Ss perceived direct interaction situations in which participants had equal investments as more just, while Turkish Ss perceived interactions in which participants had differentiated investments as more just. In mediated interaction situations all subjects mostly used equity norm but Turkish Ss evaluated the justice of a mediated interaction situation mainly on the basis of the proportionality of rewards to investments, whereas American Ss evaluated justice in mediated interaction situations mainly on the basis of the equality of reward distribution.

Another study was made by Boysan in 1981. Boysan proposed that norm preferences are influenced by the need level (level of perception of inadequacy of employee's income) and the occupational status of the employees. Her results indicated that employees whose perception of inadequacy of their salaries was high preferred the need norm (i.e. distribution to each according to his needs), that blue collar status employees preferred the need norm and white collar status employees preferred the equity norm.

A similar study was carried at on children by Şahin (1981). Şahin formed three groups of children according to their ages (the first group consisted of children between the ages of 5-6, the second between 8-9 and the third between 11-12). He asked the children to rate social situations told as stories as just or unjust. The stories were related to the distribution of duties and rewards. The results showed that the children in all groups rated equal Sharing as more just than differentiated sharing. Şahin also asked the subjects to guess the degree of delight or sorrow the strong and weak heroes had in the stories. Other than the males in the third group, all subjects answered that being successful at work makes a person delighted.

The studies on norm preference in our society are few and there is only one which aims at specifying the norm

preference among children. Şahin (1981) tried to find how the norm preference of the child is affected when the heroes of the stories are perceived to be different in sex and strength. But it is clear that there can be other factors which can influence norm preference. The present study tries to fill this gap. One of the questions is whether the relationship between the heroes (close friends and strangers) affect the use of equity and equality norms. In addition, the present study investigates which norms the child would prefer, when the stimulus "Be careful not to be unjust" is given. The rationale for asking questions is going to be explained in detail in the section dealing with the aim of the study. As mentioned above there are factors which affect the norm preference of individuals. Therefore, it will be useful to study these factors.

#### The Factors That Affect the Norm Preferences of Individuals:

##### The importance of age in norm preference:

Various studies have been carried out the development by age of justice norms. Leventhal and Anderson (1970) questioned whether preschool children distribute the rewards according to the quantity of work the individual performed.

In this study they asked 5 year old children of both sexes to share a reward that consisted of 20 pictures with a so-called partner who did work equal to his, one-third of his and three times more than his. It was observed that male children who had done three times more work than his partner took more than half of the rewards for themselves, though the others distributed the rewards equally. Lerner (1974), who repeated the same research, found that pre-school children of both sexes distribute rewards equally, disregarding the differences in the quantity of the work each performed. On the other hand, Lane and Coon (1972), who repeated the same experiment, found that 5 years old children distributed the rewards according to the principles of equality while 4 years old children took most of the reward for themselves. Leventhal, Popp, and Sawyer (1973) and Lerner (1974) indicated that when the children are both the distributor and the receiver at the same time, this might influence the behavior of reward distribution of the child because of his desire to take most of the reward for himself. In order to cancel this effect, Leventhal, Popp and Sawyer (1973) and Lerner (1974) chose a supervisor in their studies and asked him to distribute the rewards between two people who did the same task. According to Leventhal, Popp and Sawyer's data, the subject who acted as the supervisor gave most of the rewards to the child who did 75% of the work. Lerner also found that supervisors gave more rewards to the children who performed more work and less to



the ones who performed less work.

Another point which Lerner makes about Leventhal and Anderson's experiment is that the distribution of twenty pieces of reward is too complex for pre-school children. Lerner says that children at this age have not got the ability to divide such big numbers. Moreover, Lane and Coon (1972) also stated that pre-school children have not got the capacity to compare the quantity of the work performed and the quantity of rewards. According to them this process is so complex that pre-school children can not manage it. Wohlwill (Peterson, Peterson, and McDonald, 1975) asserts that only 29% of the group of 4-7 years-old children could distinguish 6-7-8 items from each other. From this point Peterson, Peterson, and McDonald tested the pre-school children's ability of counting and distributing the items into two equal portions by decreasing the number of rewards. According to their data, the children perceived the differences in the quantities of the work performed, though they used the rule of equality. According to Leventhal (1976) the reason for preferring the rule of equality is its simplicity, because the distributor considers only the portions that will be given. If he uses the rule of equity, he was to consider both the work performed and portions that will be given, which is a rather complex process for pre-school children.

As a summary, the following results are observed in these studies:

- Pre-school children can distinguish at most 6-8 items from each other and do the counting and dividing processes with this amount of rewards correctly.

- Pre-school children can perceive differences in the quantities of the contributions of different people. However, there is a general tendency to distribute the rewards equally.

- In mediated relationships children have a tendency to distribute the rewards equally.

The importance of the system of relationships between the individuals in norm preference:

Some authors agree that the use of a specific norm in reward distribution is related to the system of relationships in which the individuals live (Lerner, 1974; Lerner, Miller, and Holmes, 1976). People establish different relations with different individuals in their society. The relationships with families and friends are different from relationships on

the job. In relationships which last long and have an emotional component, even if the quantities of the work performed by each side are different the resources are shared either equally or the one who needs more receives more, whereas in relationships which include competition or relationships which do not last long the one who performs more work wants to receive a bigger share of the resources. That is, the norm which will be used is specified by the type of the relationship between individuals.

According to Lerner (1974), people have the following three types of relationship with each other:

- Identity : The relationships among family members are usually of this type. The need form is used. To explain the situation this example can be given: Even in families in which only the father works and earns income for all the family members, the father does not buy shoes for himself. Instead, shoes are bought for the child whose shoes have been outgrown. Although the father earns the money, he considers the child's need should be met first.

- Unit : Usually the relationships among the members of a team are of this type. Justice of parity is valid and the equality norm is used. For example, the members of a scouting team perceive the team as a whole. When they are at camp, the member who has cooked the meal that day does not receive a bigger share of the meal. This situation is the same as it was in primitive societies, in which the member who has provided the meat for that day would not receive a bigger share than the other members of the society.
  
- Nonequivalence : This kind of relationship is seen in situations like the market place where there is a clear struggle between individuals. Justice of equity prevails and the equity norm is used.

Lerner (1974) found that when first grade students of primary school perceive themselves as members of the same team, they use the rule of equality, but when they perceive themselves as members of different teams they use the rule of

equity. Shapiro (1975) observed that when subjects who performed more work than others were warned that in the future they all would be in the same group, they distributed the rewards equally, whereas, in situations where future relations were not expected the rule of equity was used. Shapiro (1975) interprets this situation as follows: when future relationships are expected the distributor apportions the rewards equally to affect the other members positively and to establish harmonious relationships with them.

Therefore, in summary it can be said that the system of relationships in which a person lives influences his norm preference. When the type of relationship is perceived as "unit" the preferred norm is the equality norm. In unit relations, the individuals are together for a long time, and so they give importance to the harmony of the group. Therefore in unit relations equality norm is mostly used, whereas when the relations are perceived as "nonequivalent", the equity norm is used.

The importance of sex in norm preference:

There are studies which show that, other than age and the kind of relationship between individuals, the sex of the individuals also influences the distribution of reward. According to the results of some studies, women usually prefer the rule of equality whereas men prefer the rule equity

(Leventhal and Anderson, 1970; Leventhal, Popp and Sawyer, 1973; Benton, 1971). They concluded that women usually give importance to harmonious relationships and distribute the rewards according to the rule of equality, and that men give more importance to the quantity of the work and distribute the reward according to the rule of equity. In Leventhal's opinion, while women want to establish harmonious and friendly relationships, men aim at success. The tendency of women to establish friendly relationships is so strong that although they make an equal distribution when they perform more work than their partners, they take less than their partners when they perform less than their partners (Leventhal and Lane, 1970). This shows that, the rule of equality is not a habitually preferred but is preferred in order to provide harmony within the group.

Kahn (1972) emphasizes the importance of the situation which can create sex differences in the preference of norm. He observed that sex differences come out when the research situation included competition (in this situation men received more reward than women), but it does not come out when the situation includes no competition (in such a situation both men and women use the equality norm).

As reviewed in this section it is observed that compared to men, women use the rule of equality more. According to Leventhal and Lane (1970), women behave this way not

because they cannot appreciate differences in the quantity of effort, but because they want to maintain harmony within the group.

The aim of the research:

It is seen in the studies discussed above that norm preference in the distribution or sharing of rewards is influenced by many different factors. As was mentioned before, the studies on norm preference in our country are very few. The present study is an attempt to investigate the norm preferences among pre-school children in Turkey.

The basic question of the study presented is whether the results obtained in the studies made in other countries are relevant to our society. For this reason, first of all it was asked whether there is a difference between males and females in norm preferences.

Hypothesis 1: Female children in the pre-school period (at the age of 5) use the norm of equality more than male children.

According to the studies previously done, compared to men, women usually prefer to use the norm of equality more (Leventhal and Anderson, 1970; Leventhal and Lane, 1970; Benton, 1971; Leventhal, Popp and Sawyer, 1973). Hypothesis 1 aims at testing whether this result is relevant to our society.

Another factor which influences the norm preference of an individual is the system of relations in which he lives. The choice of a norm is affected by the perceived system of relationships between individuals (Lerner, 1974; Lerner, Miller and Holmes, 1976). When friendship or membership of the same team is in question the preferred norm is the norm of equality, whereas when the relation of two people who do not know each other and who do not think that the relation will last long is in question, usually the norm of equity is used. Hypothesis 2 was constructed to test which norm the individuals prefer to use where the relation is perceived either as a unit relation or as a nonequivalence relation.

Hypothesis 2: The children in the pre-school period (at five years of age) who perceive a relation as a "unit" relation will use the norm of equality more than the children who perceive it as "nonequivalent".

Another point of importance is the preference for a norm when the stimulus "Be careful not to be unjust" is given. The reason for this point which has never been tested before is as follows: A child, as a member of the society he lives in, has values related to justice. The child can perceive his environment and judge it. Although it is usually expected that the child will share goods with his friends of the same age group, the child observes that adults do not share



their belongings. Briefly, a concept of justice develops in a child parallel to the structure and the value judgements of his society. Although when he is left by himself and a stimulus is not given, he uses the rule of equality as it is taught and expected, when the stimulus "Be careful not to be unjust" is given the usage of the rule of equity will increase. This is due to the fact that, the society is a nonequivalent one and a five year old child can perceive this fact. From this standpoint Hypothesis 3 was constructed.

Hypothesis 3: The children in the pre-school period (at five years of age) who are given the stimulus "Be careful not to be unjust" will use the norm of equity more than the children who are not given this stimulus.

In the present study, age was taken as the control variable and the experiment included only children of five years of age. Preference for the equity or equality norm is the dependent variable and sex, the type of the perceived relationship (unit-nonequivalence) and the existence or non-existence of a stimulus promoting "justice" are the independent variables.

## METHOD

In this research it was assumed that the norm preference of Turkish children at the age of five differs with the sex of the child, whether the relation concerned is taken as "Unit" or "Nonequivalence" and whether he is warned to "Be careful not to be unjust". For this reason, among experimental designs, the Full Factorial Design was preferred to see the interaction between the factors. During the research, for each male-female, unit-nonequivalence and warned-not warned categories, separate experiments were held. Each category and the number of subjects in each category are presented in Table I.

### SUBJECTS:

80 children (40 girls-40 boys) were subjects in this research. They all were five-year-old nursery school children.

The subjects were taken from SSYB Bakırköy Kreş ve Gündüz Bakımevi, SSYB Okmeydanı Kreş ve Gündüz Bakımevi, İstanbul Üniversitesi Mediko-Sosyal Merkezi Kreş ve Gündüz Bakımevi, Boğaziçi Üniversitesi Okulöncesi Eğitim Merkezi, Mensucat Santral Kreş ve Çocuk Bakımevi and Eczacıbaşı Kreş ve Çocuk Yuvası.

In these nursery school the children who were born in 1977 were chosen from the files and grouped according to

their sexes. The children who were not present at the nursery school at the time of the application were not taken into the study. Also, three children who did not want to take part in the experiment were not forced. At the end of the application a boy and three girls were needed to complete the groups and they were chosen randomly from the list.

39 subjects were taken from SSYB Bakırköy Kreş ve Gündüz Bakımevi, 7 from SSYB Okmeydanı Kreş ve Gündüz Bakımevi, 7 from İ.Ü. Mediko-Sosyal Merkezi Kreş ve Gündüz Bakımevi, 6 from B.Ü. Okulöncesi Eğitim Merkezi, 7 from Türkiye Çocuk Esirgeme Kurumu Zeytinburnu Anaokulu ve Eğitim Merkezi, 3 from Mensucat Santral Kreş ve Çocuk Bakımevi and 19 from Eczacıbaşı Kreş ve Çocuk Yuvası.

Two factors were taken into consideration in the choice of these nursery schools: first pre-school education is given in these nursery schools and it was easy to get permission for the application from them.

Only the children who were born in 1977 were taken as subjects. The mean age of the group was 5 years and 6 months. The mean age of the girls was 5 years and 6 months and the mean age of the boys was 5 years and 5 months. (See Graph I for the ages of the subjects).

The reason for taking the five-year-old children attending kindergartens is that the children at this age

attend classes in which they are prepared for primary school, but they are not in a situation of getting grades which is a definite way of rewarding. Neither their successes nor failures were given grades. That is, these children do not receive bad marks if they do not, participate enough in some work. They are not expected to work hard; instead they are expected to be able to work in teams with cooperation and not to prevent their friends from working. No doubt their successes are rewarded in nursery school, too. But this reward is nothing more than hanging the child's picture on the wall or only an encouraging word. There is no promise of promotion to the next class or fear of failure. What's more, a successful child in the kindergarten has no right to play with the toys more than the others and he can not take more paint than the others. On the contrary, in nursery schools, in order to provide harmony within the groups, children are taught the habit of sharing resources equally. Children in nursery schools have to share everything such as toys, books, paint etc. In other words in nursery schools the method of apportioning resources is equal distribution.

Nursery school children were preferred as subjects because of the resources are mostly shared equally and the children's contribution is not judged definitely in kindergartens.

In nursery schools in which the resources are used

equally, the most mature group consisted of the five-year-old children. These children can do subtraction and addition better and give their attention to a subject longer than the younger ones. That's why five-year-old kindergarten children were taken as subjects of this research.

#### INSTRUMENTS:

Data sheets were used to record the characteristics and responses of each subject (See APPENDIX I). For each group 3 stories were made up. For each story pictures were presented to the subjects to make the story clear in the children's minds. There were 3 pictures for the first two stories and 4 pictures for the last one. The stories were constructed separately for the male-female and unit-nonequivalence categories (See APPENDIX II for the stories and pictures). Chocolates were used as the rewards to be distributed to the two children in the studies by the subjects.

While the stories were being constructed a great deal of care was taken to ensure that the work the heroes did in each story should vary in quantity but not in quality. The stories prepared were tested in a pilot study and only stories that were found to be clearly understood by the children were used for the research. This can be explained better with an example: In one of the original stories two children are making a snow-man. One of the children makes the body and the

head of the snow-man and the other makes only the eyes and the nose. Since the eyes and the nose of the snow-man appear to be important the subject can not distinguish whether the work done by the first child is more or less than that done by the second child. Because he perceives the incident as making a snow-man, the work of the child who only made the eyes and the nose comes out to be as important as the work of the child who made the whole body and the head. Stories of this sort, which contained variations in the quality of work, were not included in the experiment.

Another matter which was given consideration was that the heroes of the stories should be of the same sex as the subject, because the child should concentrate only on the quantity of the work done in the stories. Therefore differences in sex which might affect the child's decision were not introduced and the child was left only the quantity of the work to decide about.

While the stories were being made up the use of words which might imply strength and ability was avoided. The aim of this was to avoid creating any variation in the abilities of the two heroes.

In drawing the pictures to illustrate the stories, heroes were drawn to appear similar. The only differences between the heroes were the color of the clothes and the hair style. These are necessary variations to show the subject

that the heroes of the stories are different persons. Both in the pilot and the main study it was observed that the children did not distribute rewards according to the color of the clothes or hair style.

In a second pilot study the pictures' relevance to the stories was checked. The results of this pilot study showed that the pictures were relevant to the stories and they contributed to a better understanding of the stories.

Another point regarded as important while the stories were being constructed was to avoid talking about the quantity of the work the heroes did by using words like "little-much" or numerical values. That's because it was thought that the subject would get stuck to these messages and he might do the distribution automatically according to those them, whereas the requirement is that the subject himself should comprehend the situation presented and make his decision according to that.

#### PROCEDURE :

This research was carried out in the nursery schools mentioned above, during periods other than the sleeping and dining hours of the children, between 17th January and 11th February 1983.

In each nursery school the experiment was carried out

in a separate room where the experimenter and the subject could be alone. Usually play rooms, bedrooms, waiting or sitting rooms served the purpose. These rooms were preferred since the children were not used to playing in them. Places such as the infirmary were not used to carry out the experiment because the children might have felt uneasy in them.

From the files of the nursery schools the children who were born in 1977 were chosen and grouped according to their sexes. Then the experimenter was introduced to the children by the teacher of the group and the director of the nursery school. The children were told that they would play a game with the experimenter. Because there were some children who were born in 1978 in the pre-school group, it was emphasized that the game would be played only with those born in 1977. It was also stated that any children, among the ones born in 1978, who wanted to play the same game could do so after the older ones. So, when the experimenter finished the experiment with the subjects she told the same stories and showed the same pictures to the children born in 1978 just to please them. But the answers of the children were neither recorded nor taken into consideration.

When each subject entered the room where the experiment was carried out, the experimenter asked him whether he wanted to play with the experimenter or not. The children who stated that they did not want to were not forced. Only three



children did not want to take part in the research. Among these three, two of them never came to the room where the experiment was held, and the other came in but when asked whether he wanted to play a game with the experimenter said he did not.

In order to motivate the subjects, "playing a game with the experimenter" began with the child who seemed to be the most enthusiastic in each group. The experimenter tried not to change the environment the children were used to. Therefore in some nursery schools the experiment was carried out on the carpet (in B.Ü. Okulöncesi Eğitim Merkezi, SSYB Okmeydanı Kreş ve Gündüz Bakımevi where the experiment was held in the children's playing rooms), on a sofa (Türkiye Çocuk Esirgeme Kurumu Zeytinburnu Anaokulu ve Eğitim Merkezi) and in others sitting opposite at a square table.

Each subject was taken to the room where the experiment was going to be carried out and the experimenter and the subject sat face to face. First the child was questioned about his name, age and favorite games in order to ease the subject and to establish contact although his name and age had already been printed on the data sheet. These questions were answered by all the subjects.

After this short conversation, four chocolates were put in front of the subject and he was asked how many pieces of chocolate were on the table. When the subject stated that

the number was four, he was then asked "Now if you and I were to share these chocolates equally, how many would there be in front of each of us? Please show me by placing them in front of you and me". If the child did not do this (43 subjects did not) the experimenter put two pieces of chocolate in front of the child and said "Look, it will be like this, now, come on you do it yourself this time." Then she waited for the child to do it by himself. When the subject distributed the chocolates equally between himself and the experimenter, the subject was then asked to give less chocolates to the experimenter and take more himself. It was observed that except for one child from SSYB Bakırköy Kreş ve Gündüz Bakımevi all the children understood this message and put one chocolate in front of the experimenter while taking three for themselves. The child mentioned above did not respond to this message at all. But after the experimenter had showed the process once more, it was repeated by the child. Later, the child was given the following message "This time let me have more and you get less chocolates". It was observed that all the subjects understood the message correctly and put one in front of themselves and three in front of the experimenter. The children were rewarded with the praise "well-done" after each distribution.

By this process it was checked that the children could do sharing in three different ways. The subject was then given a chocolate. While the child was eating the chocolate

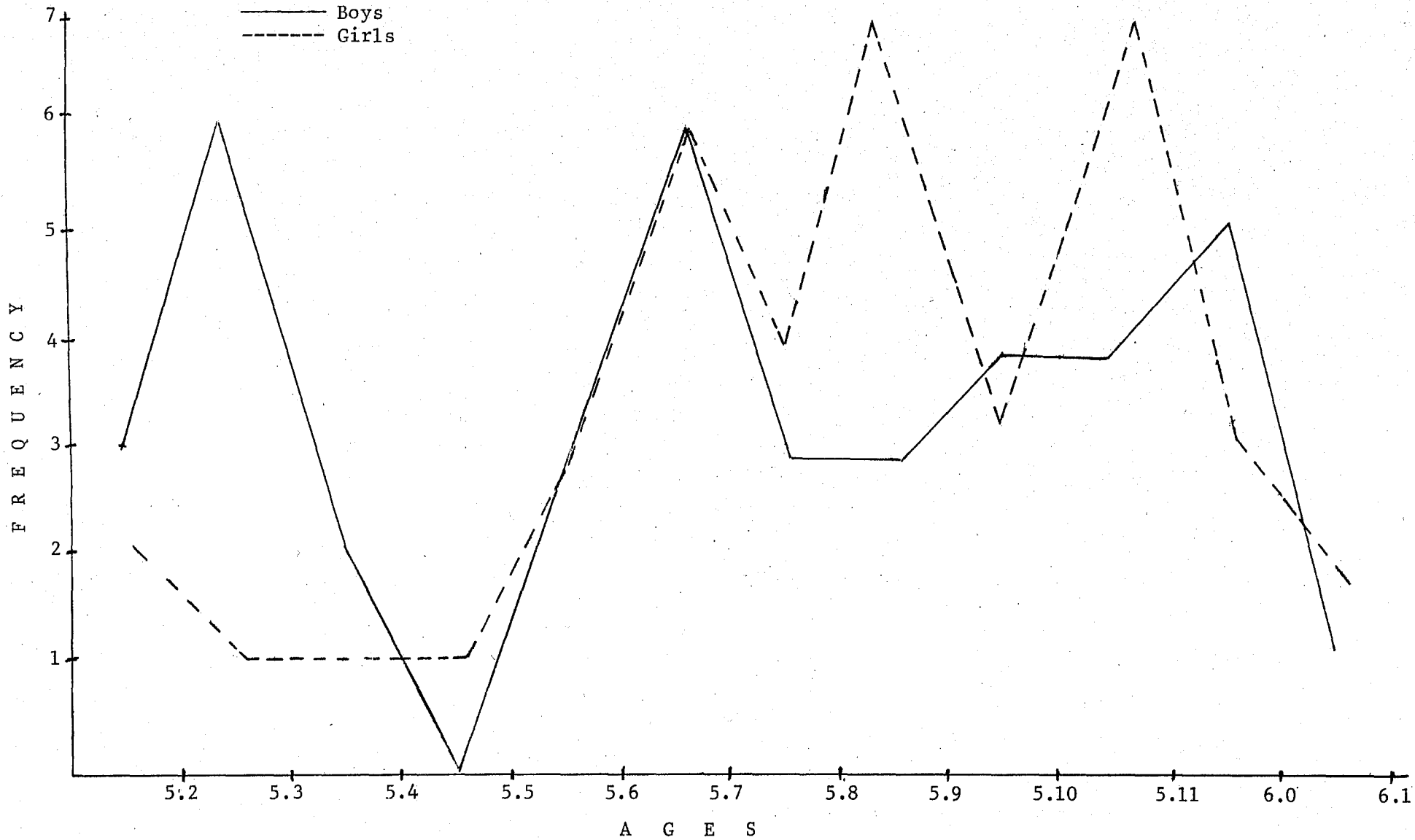
the experimenter asked, "Shall I tell you the stories related to these pictures?". After receiving a positive answer the pictures of the stories which would be told, were put in front of the subject. The experimenter presented the stories in the same order for each child. After each story was told, the child was asked to repeat it and questioned about the story. Such as, "How many apples did the child pick, what did the child in the red clothes pick?" After the child answered these questions correctly he was asked the following questions for each story: "The teacher has four chocolates and is going to distribute these chocolates between these two people in the story. If you were the teacher how would you distribute the chocolates between them? Please show me by placing the chocolates on the children in the picture". The subjects' choice of distribution of rewards (3-1; 2-2; 4-0) was recorded by the experimenter and the subject was asked why he had distributed the chocolates in that way, and the answers received were recorded on the data sheet.

When the experiment, which lasted for about 15-20 minutes for each child, was finished, the child was thanked and asked to bring or send the next subject whose name was on the list. The reason for sending the message to the next subject by the child who completed the experiment is to enable the child to tell the next one that the experimenter was showing colored pictures and giving chocolates. It was observed in the pilot study that these messages transmitted between the children had a positive effect on the subject and was put into practice in the main study.

TABLE I

GIRLS (40)	UNIT (20)	NO WARNING	(10)
		FAIRNESS WARNING	(10)
	NONEQUIVALENT (20)	NO WARNING	(10)
		FAIRNESS WARNING	(10)
BOYS (40)	UNIT (20)	NO WARNING	(10)
		FAIRNESS WARNING	(10)
	NONEQUIVALENT (20)	NO WARNING	(10)
		FAIRNESS WARNING	(10)

FIGURE I



## RESULTS AND DISCUSSION

In this section, the three hypotheses of the present study will be dealt with one by one; and the results will be discussed. Chi Square, a nonparametric test, was used to analyze the data. Only the responses of the subjects who used the same norm in all three stories were taken into consideration. The number of the subjects who used different norms for the three stories was very few and it was felt that their inclusion would unnecessarily complicate the analysis. Therefore their responses were not included in the statistical analysis.

Hypohotesis 1: Female children in the pre-school period (at the age of the 5) use the norm of equality more than male children

The data revealed that in the reward distribution 52.5 % of the boys made use of the norm of equality whereas this proportion was 47.5 % for the girls, while 56.7 % of girls and 47.5 % of boys used the norm of equity in reward distribution. The data are shown in Table II.

Table II- Norm preference of girls and boys in the distribution of rewards

	<u>Norm of equity</u>	<u>Norm of equality</u>
Girls	21 (56.7)	16 (43.3)
Boys	19 (47.5)	21 (52.5)

The results of the Chi Square test did not support the first hypothesis ( $\chi^2 = 0.8$ ). In fact, the data show that the effect is in the opposite direction. It was expected that the girls would prefer to use equality norm more frequently compared to the boys. But the data revealed that the norm of equality was used more often by the boys than by the girls. This result contradicts the results of previous studies (Leventhal and Anderson, 1970; Benton, 1971; Leventhal, Popp and Sawyer, 1973; Leventhal and Lane, 1970; and Kahn 1973). According to these studies, in general, females prefer the rule of equality and males prefer the rule of equity in the distribution of rewards. In order to explain this contradiction, the interaction effects should be taken into consideration. For this reason, first of all the norm preference of both sexes when the relationship was perceived as unit was examined. It was observed that 57.9 % of the girls and 50.0 % of the boys used the norm of equality when the relationship between two people was perceived as unit, whereas the use of equity norm in girls was 42.1 % and 50.0 % in boys when the relationship was perceived as unit (The data is presented in Table III).

Table III- The norm preferences of the girls and the boys when the relationship is perceived as unit

	<u>Norm of equity</u>	<u>Norm of equality</u>
Girls	8 (42.1)	11 (57.9)
Boys	10 (50.0)	10 (50.0)

According to the Chi Square test results, ( $\chi^2 = 0.4$ ) there is no meaningful relationship. But it was observed that there is a tendency for the girls to prefer the equality norm when the relationship between two people is perceived as unit. Leventhal and Anderson (1970), Leventhal and Lane (1970), and Leventhal, Popp and Sawyer (1973), explain this situation by the fact that females give more importance to harmony in relations. The data showed that, the boys used norm of equality and equity in the same proportions when the relationship was perceived as unit (50.0 % for both norms).

When the relationship between two people were perceived as "nonequivalent", 27.8 % of the girls and 55.0 % of the boys used the norm of equality, whereas in nonequivalent relationships 72.2 % of the girls and 45.0 % of the boys preferred to use the norm of equity (Table IV shows the relevant data).



Table IV- The norm preference of the boys and the girls when the relation between 2 people is perceived as nonequivalent

	<u>Norm of equity</u>	<u>Norm of equality</u>
Girls	13 (72.2)	5 (27.8)
Boys	9 (45.0)	11 (55.0)

The result of Chi Square test ( $\chi^2$  0 2.9) showed that this result is not significant at the .05 level but it is quite close to significance. The percentage of girls who used the equality norm was 27.8, when the relationship was perceived as nonequivalent. However this percentage increases to 57.9, when the relationship is perceived as unit. This finding makes it clear that the girls place importance on the type of the relationship.

Contrary to the hypothesis it was found that the general tendency of the girls in the distribution of rewards is to use the norm of equity. It was also found that boys tended to prefer the norm of equality. The type of the relationship was found to be important for girls. When the relationship between 2 people was unit, girls preferred to distribute the sources equally possibly not to disturb harmony. Contribution was of secondary importance for girls in these situations. During the experiment when the subjects had finished the process of distribution, they were asked why they had allocated the chocolates in that way. The subjects

replied that "They are friends, if I don't give both them the same amount, they would quarrel, be sad and be cross with each other". It was clear that they tried to save the friendship and not to disturb the harmony between them. When the relationship is perceived as nonequivalent girls tend to use the norm of equity more.

When the stimulus "Be careful not to be unjust" was given and the norm preferences of both sexes were examined, it was found that the boys used the norm of equity more, compared to the girls. (The data obtained are presented in Table V).

Table V- The norm preferences of boys and girls when the instruction "Be careful not to be unjust", was given

	<u>Norm of equity</u>	<u>Norm of equality</u>
Girls	11 (57.9)	8 (42.1)
Boys	13 (65.0)	7 (35.0)

The result of the Chi Square test, however, did not show a significant difference between the two sexes ( $\chi^2 = 0.4$ ).

As can be seen in Table VI, when the instruction, "Be careful not to be unjust", was not given, the boys preferred to use norm of equality.

Table VI- The norm preference of girls and boys when the instruction "Be careful not to be unjust" was not given

	<u>Norm of equity</u>	<u>Norm of equality</u>
Girls	10 (55.6)	8 (44.4)
Boys	6 (30.0)	14 (70.0)

The result of the Chi Square test showed that there is no significant difference, but the difference is close to significance ( $\chi^2 = 2.7$ ). When the stimulus was not given the boys compared to the girls used the norm of equality more frequently.

When Tables V and VI are examined, a very important point is observed. The norm of equity was used by 57.9 % of the girls, when the instruction was given and by 55.6 % when

wasn't given. On the other hand, 65.0 % of the boys prefer to use the norm of equity when they receive the instruction, though when the instruction is not given the percentage of the boys who prefer the equity norm is 30.0 %. The general tendency of the boys to use the norm of equality changes to preference for the norm of equity when the stimulus is given, while no significant change was observed in the preference of the girls in response to the instruction.

In general the first hypothesis is not supported by the results (Table II). It is fairly clear that, giving a stimulus or making the child perceive the situation as unit or nonequivalence affects the norm preferences of both males and females. It can be said that in the preference of norms the determining factor is not only the sex of the child, but other factors affect the decisions of both sexes.

In the present study, the effects of the following factors on the preference of norms are investigated: The sex of the subjects, the relationships between the individuals in social situations, and warning the child not to be unjust. Further studies can be carried out examining the effects of the structure of society, socio-economic-level of the subjects, practices of child rearing, on norm preference. It seems to be highly probable that when these factors are controlled norm preference will not be greatly affected by sex.

Hypothesis 2: The children in the pre-school period (at five years of age) who perceive a relation as a "unit" relation will use the norm of equality more than the children who perceive it as "nonequivalent".

The data shows that, 46.2 % of the subjects who perceived the relationship as "unit" and 57.9 % of those who perceived the relationship as "nonequivalent" used the norm of equity (Table VII).

Table VII- The norm preferences of the subjects who perceived the relationship between two people as "unit" or "nonequivalent"

	<u>Norm of equity</u>	<u>Norm of equality</u>
Unit	18 (46.2)	21 (53.8)
Nonequivalence	22 (57.9)	16 (42.1)

According to the Chi Square test, the difference is not significant at the .05 level ( $\chi^2 = 1.2$ ) but is in the expected direction. As can be seen in Table VII, when the relation is perceived as unit, use of the equality norm increases and when the relation is perceived as nonequivalence, use of the equity norm increases.

The results obtained seem to support the results of similar studies (Lerner, 1974; Lerner, Miller, Holmes 1976; Shapiro 1975). In order to understand the results better, interactions should be considered again. Therefore, the

effect of perceiving the relationship as unit or nonequivalent norm preference is considered. Separately for the two sexes. The interaction between sex and the kind of perceived relationship between the heroes were examined above and the results were shown in Tables III and VI. Here the independent variable is the kind of relationships whereas it was sex in the above mentioned tables.

Table VIII- The norm preference of boys who perceived the relationships as unit or nonequivalence.

	<u>Norm of equity</u>	<u>Norm of equality</u>
Unit	10 (50.0)	10 (50.0)
Nonequivalence	9 (45.0)	11 (55.0)

As can be seen in Table VIII, the relationship's being unit or nonequivalent, does not affect the norm preferences of boys ( $\chi^2 = 0.4$ ). But, as can be seen in table IX, the type of relationship affects the norm preferences of girls.

Table IX- The norm preferences of girls who perceive the relationship as unit or nonequivalence

	<u>Norm of equity</u>	<u>Norm of equality</u>
Unit	8 (42.1)	11 (57.9)
Nonequivalence	13 (72.2)	5 (27.8)

The results of the Chi Square test shows that the relationship is very close to significance at the .05 level, ( $\chi^2 = 3.5$ ). As can be seen in the table 72.2 % of the female subjects used the norm of equity when they perceived the relationship as nonequivalence, but when the relationship was perceived as unit the percentage decreased to 42.

The results obtained are in the expected direction, however, differences were observed between the sexes. It was discovered that for boys the kind of relationship (unit-nonequivalence) was not important. But 57.9 % of the girls used the norm of equality when they perceived the relation as unit; compared to 27.8 % who preferred to use the norm of equity when they perceived the relationship as nonequivalence. These results indicate that the type of relation which isn't important for boys, is quite important for girls. This result is not surprising, since previous studies have shown that female subjects have a tendency to maintain harmony in their relationships.

In the situations where the instruction "Be careful not to be unjust" was given, the effect of perceiving the relationship as unit or nonequivalence on norm preference was also studied separately. It was found that there are differences between the situations where the relationship is perceived as unit and as nonequivalence.

Table X- The effects of the type of the relation (unit-non-equivalence) on norm preference when the instruction "Be careful not to be unjust", is not given.

	<u>Norm of equity</u>	<u>Norm of equality</u>
Unit	5 (26.3)	14 (73.7)
Nonequivalence	11 (57.9)	8 (42.1)

According to the result of the Chi Square test, the relationship between the two variables is significant at the .05 level ( $\chi^2 = 4.2$ ). Therefore, in cases when the stimulus was not given, if the relationship was perceived as "unit", the norm of equality was used more; frequently if it was perceived as "nonequivalence", the norm of equity was used more often. In situations where the relationship was perceived as "unit" and no stimulus was given, the preferred norm was the norm of equality. This result supports Hypothesis 2.

When the stimulus was given, the norm of equity was used more frequently whatever the type of the relationship. In fact, when the relationship was perceived as unit, the norm of equity was used more frequently compared to the nonequivalent relationship situation (See Table XI).

Table XI- The effect of the relationship (unit-nonequivalence) on norm preference in cases when the instruction is given

	<u>Norm of equity</u>	<u>Norm of equality</u>
Unit	13 (65.0)	7 (35.0)
Nonequivalence	11 (57.9)	8 (42.1)



Thus the examination of the data indicates that the second hypothesis is valid only when the stimulus is not given. This is not the expected result. According to the second hypothesis subjects were expected to use the norm of equality when the relationship was perceived as unit, however, it was found that the stimulus proved to be more important than the relation system and the use of the norm of equity increased when this stimulus was given. As this issue is related directly to the next hypothesis, at this point it is necessary to take up the third hypothesis.

Hypothesis 3: The children in the pre-school period (at five years of age) who are given the stimulus "Be careful not to be unjust" will use the norm of equity more than the children who are not given this stimulus.

According to the results, when this instruction was given, 61.5 % used the norm of equity but when the instruction was not given, 42.1 % used the norm of equity. Clearly the relationship is in the expected direction (See Table XII).

Table XII- The norm preferences for the warning/no warning conditions

	<u>Norm of equity</u>	<u>Norm of equality</u>
Warning	24 (61.5)	15 (38.5)
No warning	16 (42.1)	22 (57.9)

The Chi Square test results indicate that the relationship between the variables is close to significance at the .05 level ( $\chi^2 = 3.1$ ). In order to evaluate the results better interactions were considered. First, the effect of sex was examined and the results are presented in Tables XIII and XIV.

Table XIII- The norm preferences of girls for the warning/no warning conditions

	<u>Norm of equity</u>	<u>Norm of equality</u>
Warning	11 (57.9)	8 (42.1)
No warning	10 (55.6)	8 (44.8)

The relationship was nonsignificant ( $\chi^2 = 0.2$ ). As can be seen in the table, the stimulus did not affect the norm preferences of the girls. In both cases the girls used the norm of equity more. However as can be seen in Table XIV, for boys the warning "Be careful not to be unjust", led to important changes in norm preferences.

Table XIV- The norm preferences of boys by warning/no warning conditions

	<u>Norm of equity</u>	<u>Norm of equality</u>
Warning	13 (65.0)	7 (35.0)
No warning	6 (30.0)	14 (70.0)

It was found that this relationship is significant at the .05 level, ( $\chi^2 = 5.0$ ). Thus, it is clear that the third hypothesis is valid only for boys. When the stimulus was given there was no change in the preference of the girls, but a significant change in the preference of the boys who received this stimulus was observed. This reveals that the stimulus is quite effective on male children, because 30.0 percent of the boys used the norm of equity when the stimulus was not given, while 60.0 percent of them used the norm of equity when the stimulus was given.

Finally, situations where the relationship between two people was perceived as "unit" or "nonequivalence" were considered. The data related to these situations are presented in Table XV.

Table XV- The norm preferences for the unit-relationship condition in the warning/no warning conditions

	<u>Norm of equity</u>	<u>Norm of equality</u>
Warning	13 (65.0)	7 (35.0)
No warning	5 (26.3)	14 (73.7)

The result is significant at the .05 level, ( $\chi^2 = 5.9$ ). The hypothesis is supported for the cases where the relationship was perceived as "unit". When the relationship was perceived as "unit" and the stimulus was given, 65.0 percent of the subjects used the norm of equity. When the stimulus

was not given, only 26.3 of the subjects used the norm of equity.

When unit relationships are in question the warning, "Be careful not to be unjust", appears as an important factor that determining the subjects' norm preference. This may indicate that for children, the concept of 'justice' is more important than friendship and that they also consider the social situation, in making then decisions.

No difference was found between the existence or non-existence of the stimulus when the relation between the two people was perceived as "nonequivalent", (See Table XVI).

Table XVI- The norm preferences for the nonequivalent condition in the warning/no warning conditions

	<u>Norm of equity</u>	<u>Norm of equality</u>
Warning	11 (57.9)	8 (42.1)
No warning	11 (57.9)	8 (42.1)

The Chi Square test results indicated that the instruction had no effect in the "nonequivalent" conditions, ( $\chi^2 = 0.0$ ). In fact, in the "nonequivalent" conditions the use of the equity norm was a general tendency among the subjects. The discovery that the stimulus did not have any effect in this situation does not seriously restrict the validity of the third hypothesis. According to the hypothesis, it was expected that the percentage of subjects who used the

the norm of equity would be higher when the stimulus was given. The use of the norm of equity was high both in the situations where stimulus was given and not given. These data show that the stimulus was more effective on the boys and when the "unit" relationships are in question. The reason for using the equity norm in the "unit" relationships when the stimulus was given, might be that the children could have thought that a fair reward distribution could be done only when contribution is considered.

While the data were being examined it was observed that there were strong interaction effects among the variables. Furthermore, there are many uncontrolled variables (Socio-economic status, different practices of child rearing, the expectation of the society from the child and vice versa, etc.) which are probably as important as sex, the type of the perceived relationships between the individuals and being told not to be unjust. The uncontrolled variables mentioned above might affect preferences for justice norms, as they are important factors that affect the norms and value judgements of individuals in general. When these factors are neglected the individual is isolated from the environment in which he was brought up. And it is an important shortcoming of this study not to have controlled for these factors. However, the practical circumstances under which this study was carried out, did not allow for elaborate controls.

## C O N C L U S I O N

The results of the study can be summarized in three different sections: the differences between boys and girls in their preferences for justice norms; the effect of perceived social relationship on preferences for justice norms; and the effect on preference for justice norms of being warned not to be unjust.

1- The differences found in the justice norm preferences of male and female children:

According to the results of the present study, 43.3 % of the girls and 52.5 % of the boys preferred the norm of equality in distributing rewards. These results contradict the results of the previous studies (Leventhal and Anderson, 1970; Leventhal and Lane, 1970; Benton, 1971; Kahn, 1972; Leventhal, Popp and Sawyer, 1973). In order to explain the results better, interaction effects were also considered. When the relationship between two people was perceived as "unit", 57.9 percent of the girls and 50.0 percent of the boys used the norm of equality. This shows that the use of the norm of equality when the relationship was perceived as

"unit" is more frequent among girls than boys. That is to say, the type of the relationship is important for the girls. On the other hand the number of male children who used the norm of equity is roughly equal to the number of boys who used the norm of equality, regardless of the social situation.

In summary the general tendency among the girls is to use the norm of equity. However, when the subjects were informed about the type of the relationship (i.e. unit), the use of the norm of equality increased. This shows that female children place importance on the type of the relationship in distributing rewards.

The effect on preferences for justice norms in both sexes when the subjects were asked not to be unjust was also examined. In these situations it was observed that the percentage of boys who used the norm of equity was higher than the percentage of girls who used this norm, (57.9 % in girls; 65.0 % in boys). It is clear that telling the subjects not to be unjust, results in a change in norm preference in boys, although it does not seem to affect the girls.

2- The differences in the preferences for justice norms in different social situations.

According to the results, 53.8 percent of the subjects who perceived the relationship as unit and 42.1 percent of the subjects who perceived the relationship as nonequivalent used the norm of equality. This was the expected result and

is in accord with the results of previous studies (Lerner, 1974; Lerner, Miller and Holmes, 1976; and Shapiro, 1975).

The interaction between the type of relationship and existence of a warning, ("Be careful not to be unjust") was examined, as well. It was found that whatever the type of relationship, the use of the norm of equity is high given the warning. Thus, the hypothesis was supported only in the situation when the stimulus was not given. We can say that the warning is more effective than the type of relationship, in determining the norm preference.

3- Differences in the preferences for justice norms when the subjects were asked not to be unjust:

The results show that this warning is quite important. While the percentage of the subjects who used the norm of equity was 61.5 when the stimulus was given, this percentage was 42.1, when it was not given. That means, the hypothesis was supported by the results.

It was found that although the warning did not lead to an important change in the norm preferences of the girls, it affected the boys a lot.

Similarly, the stimulus led to important changes in norm preferences when the relationship was perceived as "unit". More specifically, when the stimulus was not given and the relationship was perceived as "unit", 26.3 percent of the



subjects used the norm of equity. But this percentage increased to 65.0 when the stimulus was given.

In summary, it can be said that there are significant interaction effects between the variables of the present study. Sex, social context and the warning to be just, as well as other probable factors not controlled for in this study, determine individual children's norm preferences in a complex and intricate manner.

## REFERENCES

- Adams, J.S. "Inequity in Social Exchange", L. Berkovitz (Ed.) Advances in Experimental Social Psychology, Vol. 2, New York: Academic Press, 1965.
- Adams, J.S. "Toward an Understanding of Inequity", Journal of Abnormal and Social Psychology, 1963, 67(5), 422-436.
- Aral, S.O., and Sunar, D.G. "Interaction and Justice Norms: A Cross-National Comparison", The Journal of Social Psychology, 1977, 101, 175-186.
- Berscheid, E.V., and Walster, E. "When Does a Harmdoer Compensate a victim?", Journal of Personality and Social Psychology, 1967, 6, 435-440.
- Boysan, Z. "Preferences for Justice Norms", Master Thesis, B.Ü., 1981.
- Deutsch, M. "Equity, Equality and Need: What Determines Which Value will be Used as the Basis of Distributive Justice" Journal of Social Issues, 1975, 31, 137-149.

- Homans, G.C. Social Behavior: Its Elementary Forms, New York: Hartcourt Brace and World, 1961.
- Kabağaçlı, C.Ş. Düşün Yazıları, Bilgi Yayınevi, 1980.
- Kahn, A. "Reaction to Generosity or Stinginess from an Intelligent or Stupid Work Partner: A Test of Equity Theory in a Direct Exchange Relationship". Journal of Personality and Social Psychology, 1972, 21, 116-122.
- Lane, I.M., and Coon, R.C. "Reward Allocation in Preschool Children" Child Development, 1972, 43, 1382-1388.
- Lane, I.M., and Messé, L.A. "Equity and the Distribution of Rewards", Journal of Personality and Social Psychology, 1971, 20, 1-16.
- Lerner, M.J. "The Justice Motive: Equity and Parity Among Children", Journal of Personality and Social Psychology, 1974, 29(4), 539-550.
- Lerner, M.J., Miller, D.T., and Holmes, J.G. "Deserving and Emergence of forms of Justice", L. Berkowitz and E. Walster (Eds.) Advances in Experimental Social Psychology, Vol. 9, 1976, New York: Academic Press, 134-162.
- Leventhal, G.S. "The Distribution of Rewards and Resources in Groups and Organizations", L. Berkowitz and E. Walster (Eds.) Advances in Experimental Social Psychology, Vol. 9, 1976, New York: Academic Press, 92-133.

Leventhal, G.S., and Anderson, D. "Self Interest and the Maintenance of Equity", Journal of Personality and Social Psychology, 1970, 15, 57-61.

Leventhal, G.S. and Lane, D.W. "Sex, Age and Equity Behavior" Journal of Personality and Social Psychology, 1970, 15, 312-316.

Leventhal, G.S., Popp, A.B., and Sawyer, L. "Equity or Equality in Children's allocation Reward to Other Persons", Child Development, 1973, 44, 753-762.

Master, J.C. "Effects of Social Comparison Upon Subsequent Self Reinforcement Behavior in Children", Journal of Personality and Social Psychology, 1968, 10, 391-401.

Peterson, C.O., Peterson, J., and McDonald, N. "Factors Affecting Reward Allocation by Preschool Children", Child Development, 1975, 46, 942-947.

Sampson, E.E. "On Justice as Equality", Journal of Social Issues, 1975, 31, 45-61.

Shapiro, E.G. "Effect of Expectations of Future Interaction on Reward Allocations in Dyads: Equity or Equality", Journal of Personality and Social Psychology, 1975, 31, 873-880.

Shaver, K.G. Principles of Social Psychology, Winthrop Publishers Inc., 1977.

- Simpson, R.L. "Theories of Social Exchange", Thibaut, J.W.; Spence, J.T., and Carson, R.C. (Eds.), Contemporary Topics in Social Psychology, General Learning Press, 1976, 79-96.
- Steiner, I.D. "Task-Performing Groups", Thibaut, J.W., Spence, J.T. and Carson, R.C. (Eds.), Contemporary Topics in Social Psychology, General Learning Press, 1976, 410.
- Şahin, D. "Çocuklarda Haklılık Anlayışının Gelişmesi: Ödül Bölüşümüne İlişkin Haklılık Yargılarında Görev ve Pay Dağılımlarının Etkisi", Doktora Tezi, Ankara, 1981.
- Şenel, A. Eski Yunanda Eşitlik ve Eşitsizlik Üstüne, A.Ü. Siyasal Bilgiler Fakültesi Yayınları, 1970.
- Walster, E., Berscheid, E., and Walster, G.W. "Equity Theory: Toward a General Theory of Social Interaction" L. Berkowitz and E. Walster (Eds.), Advances in Experimental Social Psychology, Vol 9, 1976, Academic Press, 1-38.
- Zubritski, Y., Mitropolsky, and Kerov, V. "İlkel Topluluk, Köleci Toplum, Feodal Toplum, Çev.: S.Belli, 1979.

## APPENDIX I

### DATA SHEET:

Anaokulunun Adı: .....  
Deneğin Adı-Soyadı: .....  
Deneğin Doğum Tarihi: .....  
Deneğin Cinsiyeti: Kız ..... Erkek .....  
Kullanılan Hikaye Grubu .....

Denek çikolatalarla yapılan I. bölüştürme işlemini: Yaptı .....  
Yapmadı .....

Denek çikolatalarla yapılan II. bölüştürme işlemini: Yaptı .....  
Yapmadı .....

Denek çikolatalarla yapılan III. bölüştürme işlemini: Yaptı .....  
Yapmadı .....

I. hikyedeki çocuklara ödülleri nasıl dağıttığı ve nedeni:

II. hikyedeki çocuklara ödülleri nasıl dağıttığı ve nedeni:

III. hikyedeki çocuklara ödülleri nasıl dağıttığı ve nedeni:

## APPENDIX 2

### İLİŞKİNİN "UNIT" OLDUĞUNU VURGULAMAK İÇİN KULLANILAN HİKAYELER

#### HİKAYE 1

Birbirlerini çok seven ve her zaman beraber oynayan iki arkadaş varmış. Bak, burada ikisi de elele elma ağacının altında duruyorlar. (Kız denekler için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğunun resmi olan 1. kart gösterilir). Öğretmen bu iki arkadaştan yerdeki elmaları toplamalarını istemiş. İki arkadaş ayrı ayrı sepetlere elmaları toplamaya başlamışlar. (2. kart gösterilir). Bak, elmaları toplayıp gene elele tutuşmuşlar (3. kart gösterilir). Portakal rengi elbiseli çocuk bir sepet dolusu elma toplamış. Mavi elbiseli çocuk ise sadece yarım sepet elma toplamış.

Öğretmenin 4 çikolatası varmış. Elmaları topladıkları için 4 çikolatayı bu iki arkadaşına verecekmış. Sen öğretmen olsaydın, bu iki arkadaş arasında 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane çikolata vermek istiyorsan resimdeki çocukların üstüne koy.

## HİKAYE 2

Birbirini çok seven ve her zaman beraber oynayan iki iyi arkadaş varmış. Bak, burada ikisi de elele masanın önünde duruyorlar (kız denekler için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğunun resmi olan 1. kart gösterilir). Öğretmen bu iki arkadaştan sofrayı toplamalarını istemiş. İki arkadaş sofrayı toplamaya başlamışlar (2. kart gösterilir). Sarı elbiseli çocuk tabakları, kaşıkları ve bıçakları toplamış. Kırmızı elbiseli çocuk ise sadece çatal-ları toplamış (3. kart gösterilir).

Öğretmenin 4 çikolatası varmış. Sofrayı topladıkları için 4 çikolatayı bu iki arkadaşına verecekmış. Sen öğretmen olsaydın, bu iki arkadaş arasında 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane vermek istiyorsan resimdeki çocukların üstüne koy.



### HİKAYE 3

Birbirini çok seven ve her zaman beraber oynayan iki arkadaş varmış. Bak, burada ikisi de elele tutuşmuşlar (kız çocuklar için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğunun resmi olan 1. kart gösterilir). Öğretmen bu iki arkadaştan sepetteki paketlenmiş çamaşırları dolaba yerleştirmelerini istemiş. Yeşil elbiseli çocuk dolaba sadece bir paket çamaşır koymuş (2. kart gösterilir). Sarı elbiseli çocuk ise, sepette geri kalan bütün çamaşırları dolaba yerleştirmeye başlamış (3. kart gösterilir). Bak, sarı elbiseli çocuk geri kalan çamaşırların hepsini dolaba yerleştirmiş (4. kart gösterilir).

Öğretmenin 4 çikolatası varmış. Çamaşırları dolaba yerleştirdikleri için 4 çikolatayı bu iki arkadaşına verecekmış. Sen öğretmen olsaydın, bu iki arkadaşına 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane çikolata vermek istiyorsan resimdeki çocukların üstüne koy.

## İLİŞKİNİN NONEQUIVALENCE OLDUĞUNU VURGULAMAK İÇİN KULLANILAN HİKAYELER

### HİKAYE 1

Birbirleriyle arkadaş olmayan, ayrı ayrı sınıflardan olan iki çocuktan öğretmen elma toplamalarını istemiş (kız denekler için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğunun resmi olan I. kart gösterilir). İki çocuk ayrı ayrı sepetlere elmaları toplamaya başlamışlar (II. kart gösterilir). Portakal rengi elbiseli çocuk bir sepet dolusu elma toplamış. Mavi elbiseli çocuk ise sadece yarım sepet elma toplamış (III. kart gösterilir).

Öğretmenin 4 çikolatası varmış. Elmaları topladıkları için 4 çikolatayı bu iki çocuğa verecekmış. Sen öğretmen olsaydın, bu iki çocuk arasında 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane çikolata vermek istiyorsan resimdeki çocukların üstüne koy.

## HİKAYE 2

Birbirleriyle arkadaş olmayan, ayrı ayrı sınıflardan olan iki çocuktan öğretmen sofrayı toplamalarını istemiş (kız denekler için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğun resmi olan I. kart gösterilir). İki çocuk sofrayı toplamaya başlamışlar (II. kart gösterilir). Sarı elbiseli çocuk tabakları, kaşıkları ve bıçakları toplamış. Kırmızı elbiseli çocuk ise sadece çatalları toplamış (III. kart gösterilir).

Öğretmenin 4 çikolatası varmış. Sofrayı topladıkları için 4 çikolatayı bu iki çocuğa verecekmış. Sen öğretmen olsaydın, bu iki çocuk arasında 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane çikolata vermek istiyorsan resimdeki çocukların üstüne koy.

### HİKAYE 3

Birbirleriyle arkadaş olmayan, ayrı ayrı sınıflardan olan iki çocuktan öğretmen sepetteki paketlenmiş çamaşırları dolaba yerleştirmelerini istemiş (kız denekler için üzerinde iki kız çocuğunun, erkek denekler için üzerinde iki erkek çocuğunun resimleri olan I. kart gösterilir). Yeşil elbiseli çocuk dolaba sadece bir paket çamaşır koymuş (II. kart gösterilir). Sarı elbiseli çocuk ise, sepette geri kalan bütün çamaşırları dolaba yerleştirmeye başlamış (III. kart gösterilir). Bak, sarı elbiseli çocuk geri kalan çamaşırların hepsini dolaba yerleştirmiş (IV. kart gösterilir).

Öğretmenin 4 çikolatası varmış. Çamaşırları dolaba yerleştirdikleri için 4 çikolatayı bu iki çocuğa verecekmış. Sen öğretmen olsaydın, bu iki çocuk arasında 4 çikolatayı nasıl bölüştürürdün? Herbirine kaç tane verirdin? Herbirine kaç tane çikolata vermek istiyorsan resimdeki çocukların üstüne koy.

