Peer Discrimination between Primary School Students: A Scale Development Study[1]

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Abstract

The purpose of this study is to develop a scale that can be used to measure peer discrimination among primary school students. The validity and reliability studies of the scale were conducted with 274 (124 female, 150 male) students. In the development study, exploratory and confirmatory factor analysis was applied and the Cronbach Alpha reliability coefficient calculated. At the end of the study, a scale consisting of 21 items was obtained. The results of the exploratory factor analysis showed that the scale consisted of three sub-dimensions; physical characteristics, individual psychological traits, and sociocultural features. Confirmatory factor analysis showed that the three-dimensional model was confirmed.

Keywords: discrimination, peer discrimination, primary school student, scale development

1. Introduction

Different people come together at school, at work, in associations, as groups of friends, etc. It is normal for people to have differences from each other; however, in some situations, people become intolerant regarding these differences. They may perform negative actions against people who are different from themselves. One of the most negative actions is discrimination. Discrimination; is the act of casting out of others or to not provide the same conditions which they have given to others based on characteristics of people, or according to their thoughts, beliefs; in short, according to any difference. We can exemplify discrimination through negative actions such as when we greet someone, we pretend not to see the person who is being discriminated against, and not giving certain rights to the discriminated person while everybody else is afforded those same rights.

Individuals who are the subject of discrimination feel negative emotions. They may feel left out, incomplete, or restricted. At the same time, communication problems may increase, self-confidence may decrease, and psychological problems may occur.

Discrimination comes from discriminate. To discriminate is to classify two things by identifying their differences. The intended purpose of discrimination is based on the assumption that the quality and/or quantity of one is superior or better than the other. This assumption can sometimes turn into a belief, leading communities or individuals to discriminate or be discriminated against in society. Ultimately, some people are faced with obstacles in life while using their political, social, economic, cultural rights based on discrimination. Psychologists as well as sociologists, political scientists and social philosophers are working on discrimination which is considered as a problem.

Discrimination often stems from ignorance, prejudice and stereotypical judgments. Most people are afraid of things that are perceived as or are foreign to them, so they may look with suspicion at the appearance, culture or behavior of others, or even use violence against them. Attitudes, actions and institutional practices which put any person in a subordinate or a marginal position can be considered as discrimination (Flowers, 2010, p. 215).

Discrimination comes from the Latin, "discriminare" as the root and means to divide and separate (Iştar, 2002). According to Ataöv (1996), while discrimination is the victimization of a person because of different characteristics; according to Çelenk (2010), discrimination is to behave towards an individual in an unequal manner compared to other persons in the same situation and without valid reason. In summary, discrimination is to behave differently towards an individual based on measures other than individual ability. It is based on the distinction between gender, age, physical ability, class, ethnicity, race, gender orientation, sexual orientation,

religion etc. – the list is endless. Prejudice lies at the fundamental root of discrimination. If we have prejudices, it is a matter of involuntary discrimination. Prejudices are negative attitudes, which often lead to discrimination, which affects our relationships and which directs our daily lives. Studies have been performed on prejudice in the field of psychology. There is a general consensus that prejudice has two main components: (i) a stereotypical belief or idea that can be defined as an unfounded belief or idea against a group of people, (ii) a strong emotion associated with it (Quillian, 2006).

Allport (1955), who made the first comprehensive exposition of prejudice psychology, defined prejudice as an antipathy based on an erroneous or inflexible generalization. Prejudice is often described as a negative attitude towards a group of people or single members of that group, formed as a result of an incomplete/incorrect judging process (Fiske, 1998; Jones, 1997; Nelson, 2002).

We must first understand the social structure of the cognitive background that leads to prejudice and discrimination in order to be able to remove the prejudice that brings discrimination to the fore or to take measures against prejudice. There can be many reasons for prejudice which causes discrimination. These can be classified as individual and social reasons. Individual aspects may accommodate prejudices that cause discrimination. Genetic and evolutionary features, personality attitudes, emotional states, readiness about the issue involved in discrimination, educational level, etc., need to be considered in the discrimination process. The social factors that cause discrimination are the social structure, differences of thought in group relations, norms, laws, government, and the effects of dominant groups on others.

Children form and shape much of their personality during their primary and secondary level education. With the help of the environment, they consider discrimination in society as the norm. A child can consider the group he/she belongs to as inferior or superior to others. If a child sees his or her group as inferior, there is a possibility of them growing up as an individual with disunity, insecurity, and psychological problems. Conversely, if a child sees his or her own group as superior, there is a possibility of them growing up as an individual with negative features such as superiority, spoiledness, lack of empathy, and intolerance. In this case, our aim should be to raise children in an environment free from these prejudices as much as possible and not to discriminate. More explicitly, we must first reduce or even eliminate our own discriminatory tendencies (Çayır & Ceyhan, 2012).

It is necessary to teach children that humans are valuable simply because they are human. Features such as ethnic group, language, age, physical characteristics, personal characteristics, social economic status, or emotional characteristics do not increase or decrease the value of a person.

When children are taught respect for differences and tolerance, their own discriminatory tendencies also fall to a minimal level. According to the research conducted, it is observed that children of middle school age are mostly discriminated against due to hygiene from their family's habits, level of success, gender, and points of interest. At the base of such discrimination lies prejudices, which are stereotypical thoughts. If such prejudices are broken, discrimination may also diminish (Çayır & Ceyhan, 2012).

People, wherever they are born in the world, whatever their skin color, gender or sexual orientation, and whatever their ethnic roots, religion or sect, they all belong and are all equal in terms of being human. As Göregenli (2012) points out, although the principle of equality seems to be theoretically solvable in relation to exclusion and discrimination, when we look the history, obviously this assumption was not accepted in general. It would be wrong only if we consider that equality would solve the problems of discrimination. One of the items that removes discrimination is emphatic thinking and justice.

Actions such as rejection or exclusion of a particular group or person due to their specific characteristics are defined as discrimination. Today, discrimination is a situation often encountered in society. Discrimination is a phenomenon without regard to age, religion, language, or gender. Similarly, discriminative behavior is also common in children (Çayır & Ceyhan, 2012).

Children discriminate against certain other children depending on their particular differences. They may not let them join in a certain game, or may not speak to them and ignore them. Such situations cause psychological problems in children. Children who apply physical violence may also inflict actions such as hitting, bumping, or touching against the child who is being subjected to discrimination. With verbal violence, children can develop shielding methods such as the use of nicknames or teasing. These behaviors interfere with the fundamental human rights and freedoms of children.

Brander et al. (2002) stated that discrimination can be of two kinds; indirect and direct discrimination. Indirect discrimination is often as a result of behaving the same, rather than by behaving differently. In some situations it is due to not behaving tolerantly or intolerantly, but from equality without discrimination. For example, instead

of using specific narrative methods and techniques for students who have learning difficulties, it would be discriminatory to teach the same lesson along with all the other students. The individual who has difficulty in understanding here is disadvantaged by being forced into a way of thinking that is afforded by the mental capacities of the other individuals. Direct discrimination occurs with the intention of identifying a person or group who is then subjected to negative actions. This means that someone is treated in a more inadequate manner in a similar situation, than the treatment shown or to be shown to others (Brander et al., 2002).

The consequences of indirect or direct discrimination have led to the concept of positive discrimination. This practice requires that women and those with disabilities be given deliberate priority as an attempt to overcome the discriminatory practices that these groups may otherwise face (Brander et al., 2002).

Children's education may be directed to reduce the discriminatory behavior seen in children. Trainee teachers aim to make children able to accept diversity and differences as wealth, while concentrating on creating an environment free of discrimination, violence, and conflict.

Trainee teachers as well as appointed school staff must accept the differences and be aware of this wealth. Differences are accepted in order to create a healthy school environment, with discrimination in both the internal and external environment recognized and efforts made to address it. The best way to foster positive attitudes towards discrimination in students is role-playing and dramatization as a means to develop and encourage empathic skills. Through these activities, students' awareness and empathy will develop, and the resistance and determination of children exposed to discrimination can also be increased.

It has been observed from the literature that discrimination is multidimensional. Allport (1955) examined the issue of discrimination in five dimensions; expressing opposition, avoidance, segregation, physical attack, and extermination.

Factors causing discrimination behavior have been examined by many researchers and its many reasons determined, such as Oliphant and Alexander (1982) stated marital status; Erdal (2007) stated racial or ethnic origin, language, gender, political thought, religion and sect, philosophical beliefs and thoughts; Arslan (2010) stated age, gender, level of education, work experience, references and disability status; Ural (2012) stated gender, race, color, religion, mother tongue, economic power, political opinion, social origin; Demir (2011) stated religion and ethnicity, age, gender and disability; and Özturk (2015) stated age, school, regional / urban identity, ideological view / life view and gender results in discrimination.

On the basis of the literature, it is possible to divide discrimination into three dimensions; discrimination based on physical characteristics, individual psychological traits, and sociocultural features.

Physical characteristics dimension: Students apply discrimination according to physical characteristics such as gender, weight, height, disability.

Individual psychological dimension: Corresponding to the characteristics of an individual's personality such as shyness, being energetic, being chatty, and not communicating with friends can be shown as examples of their discrimination. In addition to personality traits, interests and academic achievement also belong to this dimension.

Sociocultural features dimension: Includes differences such as religion, language, accent, clothing style, and socioeconomic situation.

In order to investigate the reasons for the discriminatory acts of children at the primary school level, interviews have been conducted by researchers with teachers resulting in the causes of discrimination behavior identified among children. As a result of the interviews, it was found that children show discrimination behaviors in terms of clothing style, height difference, weight difference, different languages spoken, gender, and disability status.

2. Method

2.1 Study Group

In the current study, data were collected from 274 primary school fourth-grade students attending two different schools in the Gölcük district of Kocaeli province, Turkey, during the fall semester of the 2016-2017 academic year. Of the 274 students in the study group, 124 are female and 150 are male, with 139 attending Şirinköy Primary School and 135 from Barbaros Primary School.

2.2 Data Analysis

In order to determine the structural validity of the Peer Discrimination Scale designed to determine peer

discrimination among primary school students, exploratory factor analysis and then confirmatory factor analysis were applied. The Cronbach Alpha Reliability coefficient was calculated to determine the reliability. The exploratory factor analysis and reliability coefficient calculation were performed using the SPSS 13 program and confirmatory factor analysis using the Lisrel 8.30 program.

3. Findings

The Exploratory Factor Analysis (EFA) technique was used in order to test the structural validity of the scale and to determine its sub-dimensions. In the course of the scale's development process, factor analysis was utilized to discover which dimensions were measured by the scale regarding the desired characteristics.

Questionnaire items were selected by screening the existing literature for peer discrimination issues researched among children aged 9-10 years. As a result of interviews held with field specialists and primary school teachers, an item pool consisting of 36 items was created. After the validity and reliability tests, 15 of the items were removed. As a result of the analyses, the discrimination scale consisted of a total of 21 items in three dimensions.

The scale items are four-point, Likert-type (1: Never, 2: Sometimes, 3: Frequently, 4: Always). Of the 21 items in three dimensions., nine measure discrimination against physical characteristics, six of them discrimination against individual psychological traits, and six of them measure discrimination based on sociocultural features.

A normality test was applied to the data obtained within the scope of the research. The Kolmogorov Smirnov test was applied to measure the normality of the Peer Discrimination Scale. Whether the variance scores are normally distributed can be examined in three ways. The first is to look at the Skewness coefficient. If the skewness coefficient is within the limits of -1 to 1, it can be interpreted that the scores do not show a significant deviation from the normal distribution. Another way to look at the normality distribution is graphical analysis. For this, the histogram and the normal Q Q Plot graphs in which the normal distribution curve is plotted can be used. In Normal Q Q graphic, if the dots on the plot show 45 degrees or close to normal, the normal distribution suitability can be stated. Thirdly, Kolmogorov Smirnov test may be used in the tests where the number of people in the study group is more than 50 and the scores are examined regarding normality (Büyüköztürk, 2012). Data regarding normality testing are presented in Table 1.

Table 1. Normality scores for the scale according to Kolmogorov Smirnov tests

	Kolmogorov Smirnov			
	Skewness	Kurtosis	sd	p
Peer Discrimination Questionnaire	.01	-.90	275	.07

When Table 1 is examined, it can be stated that the value of p is larger than $\alpha = .05$, the score of the variable does not show normal distribution. The skewing coefficients were found to be between -1 and 1 interval (Skewness = .01). The kurtosis level is -90. Normality Q Q Plot and histogram values show that they do not deviate much from the normal distribution.

To assess the suitability of the data for factor analysis; KMO and Bartlett test results were examined. Significant increases in BMD were higher than .60 (.87), indicating that the Bartlett test is appropriate for factor analysis of the data (Kline, 2005 Tabachnick & Fidell, 2001).

After the exploratory factor analysis, it is seen that the scale consists of three dimensions. The item factor loads of the scale are given in Table 2.

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Table 2. Factor Loads of Discrimination Scale

Discrimination Scale	Factor 1	Factor 2	Factor 3
My classmates can play games with friends who are different from themselves.	.665		
My classmates can sit in the same order with friends who are of different gender than themselves.	.750		
My classmates can play games with friends very much taller or shorter than themselves.	.73		
My classmates can sit with friends very much taller or shorter in the same order.	.66		
My classmates can play games with friends fatter or thinner than themselves.	.80		
My classmates can take part in the same working group with friends fatter or thinner than themselves.	.66		
My classmates can play games with friends who have visual, hearing, bodily, speaking, or mental disability.	.52		
My classmates can sit with their friends who have visual, hearing, bodily, speech, or mental disability.	.43		
My classmates can play games with friends who are of a different gender from themselves.	.54		
My classmates can play with friends who have higher or lower grades.		-.71	
My classmates can be in the same study group with friends who have higher or lower grades.		-.72	
My classmates can play games with friends who have different hobbies, interests.		-.58	
My classmates can sit at the same desk with friends who have different hobbies, interests.		-.64	
My classmates can sit at the same desk with friends who have different personal traits (shy, chatty, attentive, energetic).		-.66	
My classmates can take part in the same study group with friends who have different personal traits (shy, chatty, attentive, energetic).		-.72	
My classmates do not want to take part in the same working group with friends with have a better or worse financial status than themselves.			.72
My classmates do not want to sit in the same desk with friends who have different understanding of cleanliness.			.63
My classmates do not want to play games with friends who have different clothing style from theirs.			.73
My classmates do not want to play with friends with families who have higher or lower religious sensitivities than their own families.			.72
My classmates do not want to take part in the same working group with friends with families who have higher or lower religious sensitivities than their own families.			.75
My classmates do not want to play games with friends who have different language or accents.			.61
Eigen values	6.39	3.01	1.30
Described variance	30.43	14.36	6.22
Described total variance	30.43	44.80	51.02
Cronbach Alpha values of sub-dimensions	.84	.83	.77
Cronbach Alpha Value of the whole scale	.84		
KMO value of scale	.87		

As a result of exploratory factor analysis on the discrimination scale, it is seen that items 1-9 are loaded in the physical characteristics dimension as Factor 1. The item factor loadings related to the individual psychological dimension of discrimination scale are seen in Factor 2, and includes items 13-14 and 17-20. The dimension of sociocultural features is Factor 3, with items 10-12, 15-16 and 21.

When Table 2 is examined, the Cronbach alpha reliability coefficient of the whole scale is .84, with reliability coefficients of sub-dimensions as .84 for physical characteristics, .83 for individual psychological traits, and .77 for sociocultural features. These results show that the reliability of the whole scale and the sub-dimensions is sufficient (Büyüköztürk, 2012).

Three factorial structure confirmatory factor analysis (CFA) was used to evaluate the model and x2/sd, RMSEA, GFI, NNFI, CFI, and SRMR values were used. When the results of the confirmatory factor analysis were examined, no items were removed from the scale because the t values of the items did not show any noncompliance with the factors to which they belong; with t values all shown as significant.

Looking at the other indicators and compliance indices of the items, it is seen that the square values of CFA result (610.86, p = .00) are significant. It is recommended to look at the x2/sd value when the value of x2 is significant (Şimşek, 2007). x2/sd ratio (610.86 = 3.28) is larger than 3 and slightly above the acceptable level of compatibility (Kline, 2005; Sumer, 2000). Other fit indices (RMSEA = .065, GFI = .90, NNFI = .96, CFI = .97) are acceptable and have good fit (SRMR = .044). As a result of the analysis, it is seen that the item factor load of sub-dimensions ranges between .56 and .84.
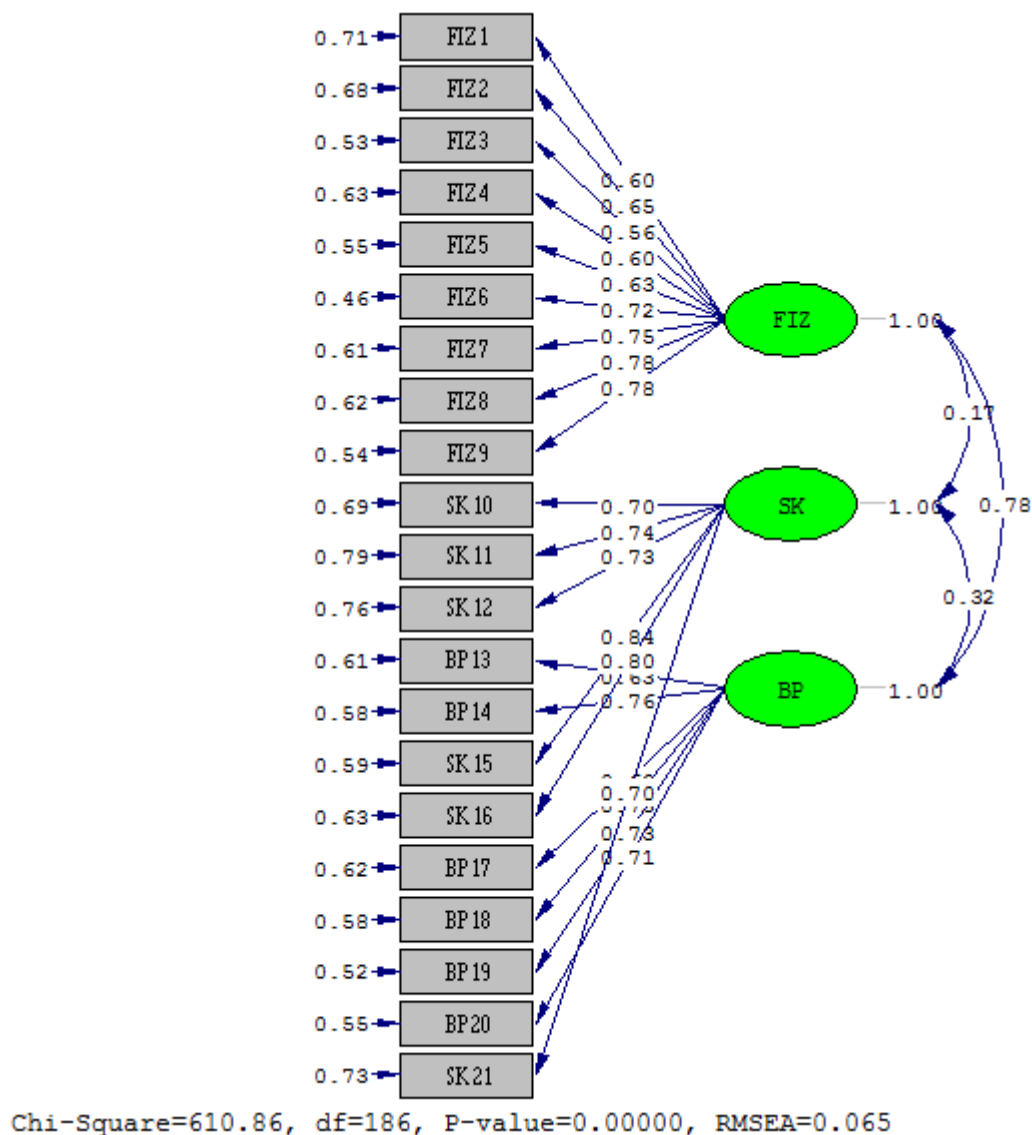

Figure 1. Path Diagram

When all the indices are evaluated together, the obtained goodness of fit indexes indicates acceptable fit. The findings indicate that the three-factor structure of the scale is confirmed.

4. Conclusion

The purpose of this study is to establish the psychometric properties of the Peer Discrimination Scale developed by the researchers with a dataset of primary school students. For this purpose, the validity of the scale was examined for structural validity and internal consistency.

In the validity study of the scale, exploratory factor analysis was applied to the dataset and a three-factor structure consisting of 21 items was obtained. According to the confirmatory factor analysis results applied to the three-factor structure obtained, the three-factor structure is confirmed. Findings about the reliability of the scale also indicate that the calculated internal coefficient of consistence are adequate.

It is possible to say that when the results of the analysis on the validity and reliability of the Peer Discrimination Scale are evaluated together, the scale has sufficient psychometric properties and that the scale is a valid and reliable data collection tool that can be used to determine the discrimination behaviors of primary school students. In this respect, it can be stated that the Peer Discrimination Scale can be used in the early childhood research on discrimination behavior of students.

This research has some limitations with data only collected from primary school students in the Gölcük district of Kocaeli province, Turkey. In subsequent research studies, data collected from students in different regions may be subjected to scale validity and reliability analysis.

Processes performed are a valid and reliable means of measuring students' attitudes towards peer discrimination.

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