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## On Certain Aspects of Dembo-Rubinstein Method of Self-Esteem Measurement

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### Abstract

A variety of techniques for studying self-esteem and a wide range of studies reflect the high importance of this phenomenon at all stages of ontogeny, especially in the period of growth and development. One of the most common approaches to self-esteem measurement is the scale of Dembo-Rubinstein. Currently Dembo-Rubinstein scale has several different modifications. According to one of them subjects are asked about both their actual self-esteem and its desired level. It is assumed that in this way the level of individual claims can be estimated. The aim of the following research is to assess the correlation between the actual and desired levels of self-esteem and on this basis to draw the conclusion concerning the usefulness of this modification of the method.

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*Keywords:* self-esteem, actual level, desired level, age and gender differences

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### Introduction

The so called «Dembo– Rubinstein scale» has become popular in in Russian psychology and anthropology. The first author of this technique was Tamara Dembo, a student and colleague of Kurt Lewin. As early as in the 1940s she used an original method: her patients were offered to mark the level of their happiness on a 100 millimeter vertical line, then the height of the appropriate segment was measured. In Soviet and Russian science this method became known through the works of Susanna Rubinstein as the method was applied in her studies of self-esteem in the 1950s - 1970s (Rubinstein, 1970). The method of T. Dembo– S.Rubinstein is widely used today; its popularity is largely explained by the fact that the scale can be modified depending on the specifics of some particular research.

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**2. Research problem**

The study of self-esteem using the Dembo-Rubinstein scale is possible in several methodological variants. According to the first of them, originally developed by the authors of the method, subjects are asked to make a single mark on each vertical line of the scale indicating their own idea about the level of some particular individual trait. In another version of the same method tested subjects are asked to make two marks on each vertical line of the scale. One of them represents an actual individual self-esteem of the particular own trait, while the second refers to the desired level of those same trait. In this case the difference between the actual and desired levels shows a possible discrepancy between the level of aspirations and self-esteem. The study becomes more complicated, but the obtained results give a broader perspective in the study of self-esteem and provide a more complete and complex pattern of personality characteristics of the subjects (Prikhojan, 2007). The question arises: to what extent is it justified to use sophisticated techniques in the study of self-esteem? Does additional information justify a significant complication in the process of working with tested subjects making it problematic for some contingents (such as young children and the elderly)?

**3. Participants**

507 students aged 11 to 17 years from several Moscow schools. Table 1 shows the division of a total sample into groups by age and sex.

Table 1. Size of the groups constituting the total sample

	11 – 12 years	13 – 15 years	16 – 17 years
Boys, N=257	112	98	47
Girls, N=250	107	91	50

**4. Method**

As a methodical approach to the indicated problem, we compared the actual and desired levels of self-esteem for both sexes in three age groups of teenagers. Furthermore, the correlation coefficients between both levels of self-esteem have been calculated. In our study the Dembo-Rubinstein scale included five separate traits that the participants rated for themselves by making marks on the vertical line: the level of his/her self-confidence, his/her perception of others' attitude, estimation of his/her appearance, intelligence, and happiness (Stupina, Bakholdina, 2010).

**5. Results**

Table 2 provides a comparison of boys and girls in three age groups according to their esteem of actual level of several qualities and of the desired level of the same qualities. The comparison results show clear differences between the genders and the dynamics of these differences from the younger to the older age group (Table2).

Table 2. The actual and the desired levels of personal characteristics on the scale of self-esteem, comparative data for boys and girls for three age groups

	11 – 12 years		13 – 15 years		16 – 17 years	
	Boys	Girls	Boys	Girls	Boys	Girls
Self-confidence, actual	73.53	<b>75.18</b>	67.95	<b>73.29</b>	<b>77.4</b>	69.84
Self-confidence, desired	95.12	<b>96.36</b>	91.39	<b>94.61</b>	<b>96.14</b>	91.56
Attitude of others, actual	67.78	<b>78.02</b>	66.59	<b>79.87</b>	75.8	<b>76.16</b>
Attitude of others, desired	93.88	<b>95.79</b>	92.58	<b>95.01</b>	<b>95.24</b>	87.64
Appearance, actual	66.15	<b>74.27</b>	63.27	<b>74.21</b>	<b>77.84</b>	77.12
Appearance, desired	91.47	<b>93.21</b>	84.6	<b>93.23</b>	<b>94.72</b>	90.34
Intelligence, actual	70.86	<b>74.64</b>	69.6	<b>74.74</b>	<b>78.38</b>	76.28
Intelligence, desired	95.33	<b>95.74</b>	93.1	<b>94.42</b>	<b>97.36</b>	91.38
Happiness, actual	78.15	<b>83.64</b>	73.45	<b>77.44</b>	<b>78.78</b>	78.22
Happiness, desired	94.07	<b>97.17</b>	90.96	<b>95.79</b>	<b>96.74</b>	95.92

Higher values for pair-wise comparisons are indicated in bold

In the younger and middle age groups, the assessment of all the above qualities is higher in girls, and this applies both to the actual and desired levels of evaluation (Figures 1, 2).

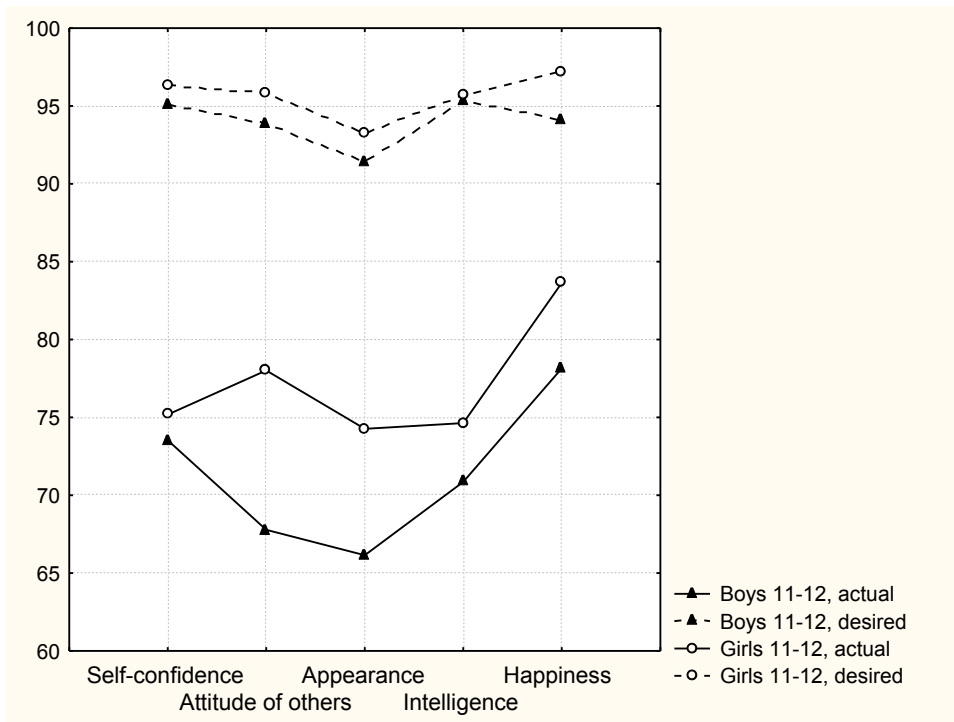


Figure 1. Boys and girls, 11 – 12 years.  
The actual and desired levels of personal characteristics on the scale of self-esteem

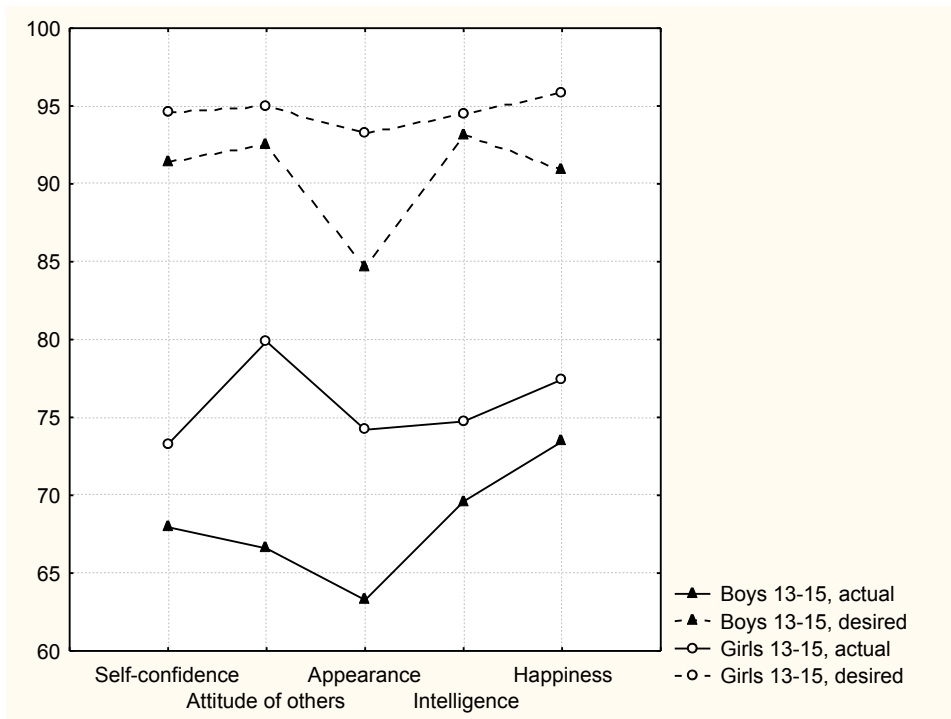


Figure 2. Boys and girls, 13 – 15 years.  
The actual and the desired levels of personal characteristics on the scale of self-esteem

In the older age group, the ratio of rating levels between boys and girls changes drastically. By all indications except for «actual attitude of others» the level of assessment is higher in boys than in girls (Table 2, Figure 3).

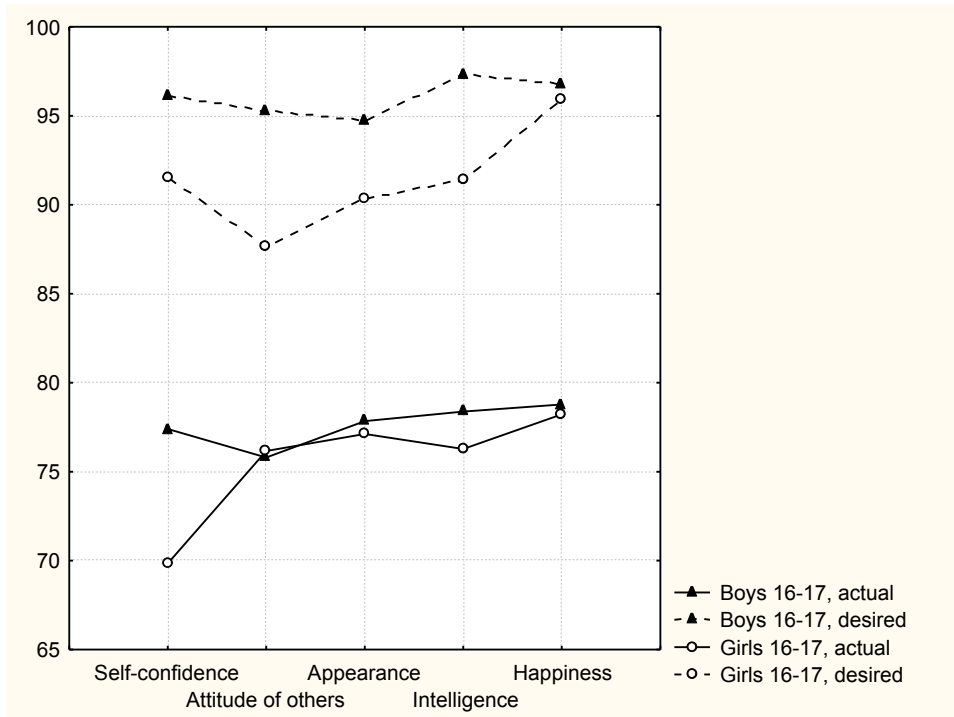


Figure 3. Boys and girls, 16 – 17 years.  
The actual and the desired levels of personal characteristics on the scale of self-esteem

It also seems interesting to compare the differences between the actual and desired level of personal characteristics for boys and girls in the three age groups studied (Table3).

Table 3. The differences between the actual and the desired level of personal characteristics on the scale of self-esteem for boys and girls.

\* The differences are significant at  $p < 0.05$   
\*\* The differences are significant at  $p < 0.01$

	11 – 12 years		13 – 15 years		16 – 17 years	
	Boys	Girls	Boys	Girls	Boys	Girls
Self-confidence	<b>21.59</b>	21.19	<b>23.68</b>	21.32	18.74	<b>21.72</b>
Attitudeofothers	<b>26.10**</b>	17.78**	<b>25.53**</b>	15.14**	<b>19.44*</b>	11.48*
Appearance	<b>25.32</b>	18.94	<b>21.54</b>	19.02	<b>16.88</b>	13.22
Intelligence	<b>24.47*</b>	21.09*	<b>23.28</b>	19.68	<b>18.98</b>	15.1
Happiness	<b>15.92</b>	13.52	17.68	<b>18.35</b>	<b>17.96</b>	17.70

Higher values for pair-wise comparisons are indicated in bold

It turns out that the differences between actual and desired levels for all characteristics are higher for boys in all three age groups. It is also interesting to note that the differentiation in this indicator between boys and girls is especially high in the parameter of «attitude of others» reaching in all three age samples the high level of statistical significance. Inverse relationship is observed only in the parameter of «happiness» in the middle age group and in case of «self-confidence» in the older group, but in

both cases the differences are not statistically significant.

Correlation coefficients between actual and desired levels of personal characteristics on the scale of self-esteem were also calculated (Table4).

Table 4. The correlation between the actual and desired levels of personal characteristics on the scale of self-esteem.  
p< .01000

	11 – 12 years		13 – 15 years		16 – 17 years	
	Boys	Girls	Boys	Boys	Girls	Boys
Self-confidence	0.58	0.50	0.41	0.38	0.46	0.49
Attitude of others	0.50	0.54	0.37	0.51	0.23	0.76
Appearance	0.53	0.65	0.65	0.43	0.39	0.50
Intelligence	0.47	0.53	0.44	0.49	0.13	0.62
Happiness	0.67	0.55	0.69	0.45	0.30	0.65
Mean	0.55	0.55	0.51	0.45	0.30	0.60

In the younger age the correlation between actual and desired levels of personal qualities in boys and girls do not differ too much which is demonstrated by the similarity of their means. In the middle age group the situation does not change significantly. As for the older age group, the correlation coefficients between actual and desired levels of assessment of their own qualities in boys are less than two to four times than those in girls. Perhaps these results can be regarded as clear evidence of gender differences in self-criticism which rises sharply for girls of this age, leading to their lower self-esteem. Conversely the self-criticism is markedly reduced in boys leading obviously to the inflation of their self-esteem in late adolescence.

## 6. Conclusion

The modified method of Dembo - Rubinstein which analyzes two levels of personal qualities, the actual and desired, allows to get additional information on the gender and age characteristics of adolescent self-esteem. The results obtained in the study on the dynamics of the age levels of self-esteem for boys and girls, the differences between the size of gap between the two levels of self-esteem, as well as the differences in the correlation coefficients between the levels in older age require further study and analysis. Thus despite the complexity of techniques the use of the discussed modification of the scale is justified in the case where there is a need for more in-depth study of the causes of gender and age differences in the process of self-evaluation. It is important to take into account a more complex level of the technique and the need for some restrictions when selecting subjects for research.

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