

Relationships between self-esteem, self-concept and academic achievement in adolescents¹

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Abstract

In this study we compare the self-representations (both global and specific), the importance given to academic achievement and attitudes towards school in three groups of students (one comprising high achievers and two low achievers). Participants comprised 618 students from the 7th, 9th and 11th grades. Results show that good achievers present higher self-esteem than low achievers, but there is no differentiation from underachievers. MANOVA analysis also shows that school achievement differentiates students in relation to self-concept dimensions, the importance given to academic self-concept and the attitudes towards school.

Introduction

Self-representation plays an important role in the explanation of student's behaviour in educational settings. We must, however, distinguish between global self-evaluations and specific ones (Harter, 1999). Thus, research that relates global self-representations to academic achievement shows up weak or non-existent relationships between them. Nevertheless, when we consider more specific measures of self-representation, such as academic self-concept, the relationships are stronger. Besides this, academic self-concept relates moderately to strongly to self-esteem. Thus, a lowering of

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the academic self-concept may represent a threat to self-esteem if the academic field is valued by the person (Peixoto & Almeida, 2010). Under these circumstances, what strategies could possibly be mobilised by the person in order to protect self-esteem that is threatened by a negative self-perception with respect to academic competence?

A possible way of maintaining self-esteem at acceptable levels involves a reorganisation of the student's domain-specific evaluation, whereby he/she reduces his/her investment in those areas that represent a threat to his/her self-esteem and invests in others that are potentially more rewarding (Harter, 1999). In this way, students with poor results at school are able to protect their self-esteem by reducing their investment in the academic field and investing in other domains in which they perform well, such as interpersonal relations or sports. In previous studies we have found that low achievers show perceived competence in areas not related to school highly, and denigrate those that are related to school (Alves Martins et al., 2002).

In this work we will analyse the relationship between self-esteem and school achievement. We also intend to analyse differences in self-concept, importance being given to academic self-concept and attitude towards school in function of academic achievement.

Method

Participants

Participants were 618 students in 7th, 9th or 11th grade, from four schools in Lisbon, with ages ranging from 12 to 20 years. Of these students 324 were girls and 292 were boys. In relation to achievement we have focused on 3 groups: students that had repeated at least one year and had low grades (Underachievers, $n=209$); students that had never failed in previous years but had low grades (Low Achievers, $n=110$); and students that had never failed in previous years and had good grades (High Achievers, $n=299$)

Instruments

To collect the data we used a self-concept and self-esteem scale (Peixoto & Almeida, 1999) and a scale to assess attitudes towards school (Alves Martins et al. 2002). The self-concept and self-esteem scale consists of 53 items distributed among 10 sub-scales, referring to School Competence, Social Acceptance, Athletic Competence, Physical Appearance, Romantic Appeal, Behavioural Conduct, Close Relationships, Competence in Portuguese Language, Competence in Mathematics and to Self-Esteem. The reliability of each scale

was acceptable with Cronbach's alpha ranging from .74 to .88. This scale assumes that self-concept is organised hierarchically where the 9 specific facets of self-concept are organised in three high order dimensions (Academic Self-concept, Social Self-Concept and Presentation Self-concept). For the higher order dimensions of self-concept, Cronbach's alpha ranges from .81 to .85. We also used a scale to assess the importance given to academic self-concept, which consisted of 6 items. Cronbach's alpha was .77.

To evaluate the attitude towards school, we used a scale consisting of 21 items (Cronbach's alpha = .89).

Results

To analyse the differences in self-esteem, self-concept and attitude towards school we carried out several uni and multivariate analyses of variance, where those variables were considered as dependent variables and academic achievement was considered as an independent variable.

Our first aim was to analyse the relationship between self-esteem and school achievement. ANOVA results show a main effect of academic achievement $F(2, 598)=4.16, p=.016$. A post-hoc analysis with the Tukey test shows that effect is due to the differences in self-esteem between high and low achievers ($p=.016$). A MANOVA analysis of self-concept dimensions in function of school achievement, show major effects on school achievement (Pillai's Trace = .365, $F(6,1194)=44.37, p<.001$). These effects appear in academic self-concept $F(2, 598)=143.4, p<.001$ and in presentation self-concept $F(2, 598)=3.02, p=.012$. High achievers show higher academic self-concepts than low and underachievers. Regarding presentation, self-concept underachievers present higher presentation self-concepts than high achievers. Regarding the importance given to academic self-concept, ANOVA analysis shows differences introduced by school achievement $F(2, 598)=7.45, p=.001$. Post-hoc analysis shows that underachievers attach less importance to these competences than high achievers ($p<.001$). In attitudes towards school, underachievers and low achievers show less positive attitudes than high achievers ($F(2, 598)=12.8, p<.001$).

Table 1 – Means and standard deviations for each variable in function of school achievement

Conclusion

Does school achievement introduce differences in self-esteem? In previous studies, where we considered those who had never failed as good achievers and those who had failed at least once as underachievers, we didn't find any differences in function of school achievement (Alves Martins et al., 2002; Peixoto & Almeida, 2010).

This result has been corroborated by current research, because we did not find differences between those who had failed at least once and students who had never failed and have good grades. However, when we take into account low achievers where it can be thought that the “failure route” begins, the picture is somewhat different. Thus, we have been led to think that in an initial stage of school failure, academic achievement affects self-esteem. For those who are “failure veterans” (only in terms of school achievement) academic achievement seems not to have any effect on self-esteem. Corroborating results from many others studies academic achievement differentiates high achievers from those who are less successful at school (under and low achievers) in both academic self-concept and attitude towards school. The results in the presentation self-concept and in the importance given to academic dimensions of self-concept are more interesting. Here the differences appear only between high achievers and underachievers.

From these results, what seems to be crucial in the maintenance of self-esteem is the existence of positive self-representations in non-academic dimensions of self-concept, namely in presentation of self-concept. This could be an important cue for interventions because one way to restore self-esteem could be through an increase in presentation self-concept (e.g. extracurricular activities linked to sport, Peixoto, 2004). Despite the differences found in the importance attached to academic self-concept it is less clear what the role of devaluating school is to the maintenance of self-esteem. Here, we can hypothesize that the devaluation of the academic dimension could be a strategy that some use and others don't. In a previous work (Peixoto & Almeida, 2010), we showed that this strategy is important for some students but not for the student body as a whole.

References

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