CrossMark

Self-concept in adolescence: A longitudinal study on reciprocal effects of self-perceptions in academic and social domains

Franzis Preckel [a,*], Christoph Niepel [a], Marian Schneider [a], Martin Brunner [b]

[a] University of Trier, Department of Psychology, Universitätsring 15, 54286 Trier, Germany
[b] University of Berlin and Berlin-Brandenburg Institute for School Quality, Germany

ABSTRACT

Fostering social and academic self-concepts are central educational goals. During mid-adolescence academic engagement and success seem to be devalued by peers and to be negatively associated with students' social standing. For this age group, is the development of a positive academic self-concept compatible with the development of a positive social self-concept? We investigated relations among academic self-concept, social self-concept, and academic achievement. 1282 students (47.60% female) participated in three-waves of measurement in Grade 5, 6, and 8. Earlier social self-concept of acceptance negatively predicted changes in academic self-concept over time while earlier social self-concept of assertion positively predicted changes in academic self-concept. There were no significant relations between social self-concepts and achievement but positive reciprocal relations between academic self-concept and achievement. Results indicate that fostering adolescents self-concept in social and academic domains are compatible goals. However, some students need support in managing the challenge to coordinate social and academic goals.
© 2013 The Foundation for Professionals in Services for Adolescents. Published by Elsevier Ltd. All rights reserved.

Important developmental tasks of adolescents are to build up positive relationships with peers and a commitment toward academic goals (Fend, 2005). Corresponding educational goals of schools are that students feel accepted and confident about their social and academic competencies. Therefore, supporting the development of a positive social and academic self-concept is one central educational task (Shavelson, Hubner, & Stanton, 1976). The relevance of self-concept for psychological adjustment and academic achievement has been documented in a plethora of studies (Flook, Repetti, & Ullmann, 2005; Harter, 1999; Valentine, DuBois, & Cooper, 2004). During adolescence peer relations gain increasing importance and at the same time students frequently develop an anti-intellectual attitude (e.g., Vannatta, Gartsein, Zeller, & Noll, 2009). This raises the following question: To what extend is the development of a positive academic self-concept compatible with the development of a positive social self-concept?

In this paper, we describe a three year longitudinal study of the reciprocal relations between students' academic and social self-concepts during early and mid-adolescence. Most research on self-concept has focused on either the academic or the social dimension. Our study addresses a less frequently observed angle by including both self-concept dimensions. Moreover, most studies on social self-concept only considered self-concept of feeling accepted by others. Our study takes a multidimensional view by investigating social self-concept of acceptance and social self-concept of assertion. Furthermore, we

---

wanted to contribute to a better understanding of the interplay of the academic and social dimensions of self-concept over time. Last but not least, we investigated the role of academic achievement in these complex relations.

Academic and social self-concepts and their relations to academic achievement

Academic self-concept refers to a person's self-evaluation regarding a specific academic domain or ability. Besides being domain specific, academic self-concept can be conceived to be hierarchically organized, with a general academic self-concept at the apex of the hierarchy (Brunner et al., 2010). Among the most important influences on students' academic self-concepts are reference group effects or social comparisons, in which students compare their self-perceived performance with the perceived performance of others within a particular achievement domain (Seaton, Marsh, & Craven, 2010). Academic self-concept has been found to have beneficial effects on a broad range of academic outcomes, like academic interests (Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2005), academic emotions (Götz, Preckel, Zeidner, & Schleyer, 2008), or occupational aspirations (Ireson & Hallam, 2009). The relations between academic self-concept and academic achievement have often been found to be reciprocal and mutually reinforcing (Marsh & Martin, 2011).

Social self-concept represents a person's self-perceptions of his or her social acceptance by others as well as his or her skills with respect to social interactions with others (Berndt & Burgy, 1996). Social self-concept tends to be derived from the assessment of one's social behavior within a given social context (Markus & Wurf, 1987). For the differentiation of these social contexts, Byrne and Shavelson (1996) found that a global social self-concept can be decomposed hierarchically into two major facets: Social self-concept as it relates to the family (sub-dimensions "siblings" and "parents") and social self-concept as it relates to the school environment (sub-dimensions "classmates" and "teachers"). These facets were supplemented by two further dimensions: "same sex peers" and "opposite sex peers".

With respect to content (not context) of social self-concept, most studies focused on people's perceptions of social acceptance. Trautwein (2003) distinguished content facets of social self-concept by assessing social acceptance and social assertion. The self-concept of social assertion can be defined as one aspect of the self-perceived capacity to execute social control (Fend & Prester, 1986). For an adolescent sample, Trautwein (2003) found better empirical fit for models that differentiated between social acceptance and social assertion than for models with one social self-concept factor. Both factors were positively correlated. That is, people who perceive themselves as more accepted by others are also more likely to perceive themselves as more socially skilled (Berndt & Burgy, 1996).

The vast majority of studies looking at the association between social self-concept and academic achievement report these two constructs to be unrelated (Marsh, 1990a; Song & Hattie, 1985), or weakly and positively related (Jonkmann, Trautwein, & Lüdtke, 2009; Preckel, Zeidner, Götz, & Schleyer, 2008). This finding also holds for the relation between achievement and the social self-concepts of acceptance and assertion (Trautwein, Köller, & Baumert, 2004). If a relation between academic achievement and social self-concept is found, it may plausibly be accounted for by the mediating effect of third variables like academic self-concept (Flook et al., 2005), global self-esteem (Lopez & DuBois, 2005), or psychological distress (e.g., depressive symptoms; Schwartz, Hopmeyer Gorman, Nakamoto, & Toblin, 2005).

Relations of academic and social self-concepts in adolescence

In cross-sectional studies, academic and social self-concepts have been found to be positively related with correlations of small to moderate size (Byrne, 1996a; Harter, 1982; Preckel & Brüll, 2008; Preckel et al., 2008). There are only few studies on their longitudinal relations. A positive social self-concept of acceptance is consistent with higher actual acceptance by peers (Berndt & Burgy, 1996; Jonkmann et al., 2009) which again is an important predictor of academic adjustment and achievement (Lopez & DuBois, 2005; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). Both, a positive social self-concept of acceptance and assertion are likely to enhance appraisals of control about behavioral outcomes in achievement settings. Perceived acceptance by peers supports the expectation that others are available to provide encouragement and help if necessary (Goodenow, 1993). People with a high self-concept of assertion experience more control in social interactions that require to stand up for one's own rights or some other sort of assertive behavior. In addition, higher social assertiveness is consistent with an internal locus of control (e.g., Waksman, 1984; Iskender & Akin, 2010) which in turn is positively related to academic self-perceptions and achievement (Anderson, Hattie, & Hamilton, 2005; Gadzella, Willamson, & Ginther, 1985; Kalechstein & Nowicki, 1997). Therefore, it is plausible to assume significant longitudinal relations between academic self-concept and the social self-concepts of acceptance and assertion.

Guay, Boivin, and Hodges (1999) who investigated elementary school children in a longitudinal study found that perceived loneliness (which is closely related to perceived social acceptance) was not only negatively related to academic self-concept when assessed at the same time but also predicted negative changes in academic self-concept over time. The effect of perceived loneliness on academic self-concept was larger than the other way round. Also, Trautwein (2003) found reciprocal effects between academic and social self-concepts in a sample of 7th graders: Perceived social acceptance positively influenced changes in later verbal self-concept, while math self-concept was positively related to changes in later social self-concepts of acceptance and assertion.

However, relations between academic and social self-concepts might become more complex in adolescence. When individuals enter early adolescence peer relationships and achieving status among peers gain in importance (Byrne & Shavelson, 1996; Parker, Rubin, Price, & DeRosier, 1995). There is evidence that in mid-adolescence academic engagement