



ELSEVIER

Contents lists available at ScienceDirect

Learning and Individual Differences

journal homepage: www.elsevier.com/locate/lindif

The role of mothers' beliefs in students' self-concept of ability development

Laura Pesu^{a,*}, Kaisa Aunola^a, Jaana Viljaranta^b, Riikka Hirvonen^a, Noona Kiuru^a^a University of Jyväskylä, Finland^b University of Eastern Finland, Finland

ARTICLE INFO

Keywords:

Self-concept of ability
 mothers' beliefs
 Transition to lower secondary school
 Mathematics
 Literacy

ABSTRACT

The aim of this study was to investigate whether the child-related competence beliefs of mothers are associated with the development of Finnish adolescents' self-concept of mathematics and literacy ability during their transition from primary to lower secondary school and whether these associations depend on adolescents' level of performance. The results showed that, first, adolescents' self-concept of mathematics and literacy ability decreased over time. The impact of maternal beliefs on the linear trend of the self-concept of mathematics and literacy ability was dependent on the level of students' performance. Mothers' high beliefs buffered against the decrease in adolescents' self-concept of ability in mathematics, but only among high-performing adolescents. In turn, mothers' high beliefs in adolescents' literacy ability were detrimental to the development of low-performing adolescents' self-concept of ability in literacy, whereas mothers' beliefs had no effect on the change in the self-concept of students with average or high literacy performance.

1. Introduction

Previous studies have revealed that students' self-concept of ability is an important predictor of their behavior (Durik, Vida, & Eccles, 2006). The self-concept of students' ability has been defined as students' perception of their current competence in a particular subject area (Eccles, 2005), and it has been found to be associated with, for example, their academic performance (Valentine, Dubois, & Cooper, 2004) and choice of college major (Musu-Gillette, Wigfield, Harring, & Eccles, 2015). One of the most important factors affecting the development of self-concept of ability is parental beliefs about their children's abilities (Frome & Eccles, 1998; Gniewosz, Eccles, & Noack, 2012), and this effect has been found among primary (Frome & Eccles, 1998; Simpkins, Fredricks, & Eccles, 2012; Spinath & Spinath, 2005) and secondary school children (Fredricks & Eccles, 2002; Simpkins et al., 2012), as well as during the transition to lower secondary school (Gniewosz et al., 2012). Recent evidence, however, suggests that the impact of parental beliefs may vary depending on students' level of performance. There is some indication that high-performing students may be more prone to being affected by mothers' beliefs than low-performing students (Pesu, Viljaranta, & Aunola, 2016; Pesu, Aunola, Viljaranta, & Nurmi, 2016). However, more evidence is needed on the differential impact of parental support on low- and high-performing students.

As far as we know, only two prior studies have investigated the moderating role of students' performance level in the associations between mothers' beliefs and students' self-concepts of ability. The first of

these studies focused on first grade children (Pesu, Viljaranta, & Aunola, 2016), while the second focused on lower secondary school students (Pesu, Aunola, et al., 2016). Besides the obvious need to replicate these studies' findings with other samples, neither of them focused on critical educational transitions. It has been argued that during school transitions, students are particularly sensitive to external feedback, such as parental beliefs regarding their competencies (Ruble, 1994). Consequently, there is a need for a novel understanding of students' self-concept of ability development and the role of mothers' beliefs on this development during the different transition phases. The present study aims to examine the extent to which mothers' beliefs about their children's abilities predict their children's self-concept of ability development in mathematics and literature during the critical transition from primary to lower secondary school and the possible moderating role of students' level of performance in these associations.

1.1. Self-concept of ability among adolescents

The self-concept of one's ability refers to an individual's perception of his or her competence in a certain domain (Eccles, 2005; Wigfield & Eccles, 2000). Previous research has shown that it is highly domain-specific and that children have distinct mathematics and verbal domains in the academic self-concept of abilities (Arens, Yeung, Craven, & Hasselhorn, 2011). Self-concept of ability has been shown to impact school achievement and skill development in both the domains of mathematics and literacy: the higher the self-concept of ability in a

* Corresponding author at: Department of Psychology, P.O. Box 35, FIN-40014, University of Jyväskylä, Finland.
 E-mail address: laura.a.pesu@jyu.fi (L. Pesu).

certain domain (e.g., in mathematics), the higher the subsequent performance in this domain (Marsh & Martin, 2011; Marsh, Trautwein, Lüdtke, Köller, & Baumert, 2005; Valentine et al., 2004). Children tend to have overly positive perceptions of their abilities when they enter school and during the first school year (Aunola, Leskinen, Onatsu-Arville, & Nurmi, 2002; Wigfield & Eccles, 2000), but these perceptions tend to become more realistic and more negative during later school years (Dweck, 2002; Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002).

The stage–environment fit model (see Eccles et al., 1993) focuses on the impact of school transitions on adolescent development and states that a poor fit between changes in individual (e.g., an intensified need for autonomy) and contextual (e.g., stricter grading practices) levels may lead to a decrease in ability beliefs during a school transition. Accordingly, previous research has documented that students' self-concepts of abilities decrease, on average, during the transition to lower secondary school (Gniewosz et al., 2012). It has been suggested that this declining trend is due to the fact that the transition to lower secondary school comes with changes in adolescents' social relationships as well as in the ways in which adolescents are given feedback in school (see Wigfield, Eccles, Schiefele, Roeser, & Davis-Kean, 2006). During school transitions, adolescents are also faced with many other changes, including new academic challenges: courses become increasingly difficult, students move from a classroom teacher system to a subject teacher system, and there is a change in the reference group to which a student compares his/her skills. Moreover, it has been argued that during school transitions, students are especially susceptible to external feedback, such as parental beliefs concerning their competencies (Ruble, 1994). From this point of view, the transition from primary to lower secondary school can be assumed to be a particularly important period in the development of the self-concept of one's ability and the factors associated with this development.

1.2. Associations between parental beliefs and students' self-concept of abilities

Parental beliefs have been suggested to play an important role in the formation of students' ability beliefs (Eccles, 1993). Eccles et al.'s expectancy-value model proposes some mechanisms through which parental beliefs are associated with students' self-concepts of abilities (Eccles, 1993; Eccles et al., 1983; Simpkins et al., 2012). Parents may directly communicate their beliefs to their offspring by encouraging their children to do better in school or by giving them positive feedback (Eccles, 1993). Parents may also indirectly convey their beliefs to their children through the ways in which they behave with their children (Eccles, 1993). There is also empirical evidence showing that parents' beliefs about their children's abilities have an impact on these children's ability perceptions (Eccles, 1993). For example, in studies by Gniewosz et al. (2012); Gniewosz, Eccles, and Noack (2014), parents' perceptions of their children's abilities were found to have a positive impact on the domain-specific self-concept of ability among sixth and seventh grade students (Gniewosz et al., 2012) and among fifth to seventh graders (Gniewosz et al., 2014). Although not yet widely examined, it has recently been suggested that the impact of adults' beliefs on students' self-concept of ability development may be dependent on students' level of performance. Pesu, Viljaranta, and Aunola (2016) found that the role of teachers' beliefs in the development of first grade students' self-concept of ability was particularly evident among high-performing students in both the domains of mathematics and literacy. Similarly, mothers' beliefs were positively related to the development of their children's self-concept of mathematics ability among high-performing students in grades seven to nine, but less so among low-performing students (Pesu, Aunola, et al., 2016).

One theoretical proposal that lends support to the assumption that low- and high-performing students may be differently impacted by adults' beliefs is self-verification theory (Kwang & Swann, 2010). This

theory proposes that people prefer others to see them in the same way in which they see themselves, even when a person's self-perception is negative. People seek self-verification because it makes the world seem more coherent and predictable (Kwang & Swann, 2010). Thus, according to self-verification theory, people who see their abilities as low, for example, in mathematics, have a preference for others to see their abilities in mathematics as low. By contrast, people who consider their abilities in mathematics as high prefer others to perceive these abilities as high. It is thus possible that high-performing students are more likely to benefit from positive teacher and parental beliefs than low-performing students because positive beliefs fit better with their perceptions of themselves. Low-performing students might have strong negative self-perceptions, which would contradict positive beliefs expressed by teachers and parents; this lack of fit between self-perceptions and external evaluations may explain why teachers' and parents' positive beliefs have a less positive impact on low-performing students' self-concept of ability (see Pesu, Aunola, et al., 2016). Moreover, it is possible that for low-performing students whose self-concepts of abilities are low, the negative beliefs of adults would be in line with these students' self-concepts and, thus, may have less detrimental impacts on their self-concepts than they might have on those of high-performing students.

Another relevant theory is self-enhancement theory, which proposes that people have a need to see themselves positively (for a review, see Leary, 2007). It has been argued that the self-enhancement motive is a “cornerstone” of psychological activity (Sedikides & Gregg, 2008). According to self-enhancement theory, people tend to engage in self-serving biases that presumably enable them to maintain positive conceptions of themselves. An example of this kind of bias is the tendency to attribute positive outcomes to the self and negative outcomes to external factors (e.g., Blaine & Crocker, 1993). In light of self-enhancement theory, students might have a need to obtain a positive view of themselves and, in this case, would use the positive feedback from adults to serve this need. Based on this theory, mothers' beliefs should be positively connected to students' self-concept of ability, regardless of students' performance level.

Previous research has shown that, at the mean level, parental beliefs have a positive effect on students' self-concept of ability (e.g., Eccles, 1993; Gniewosz et al., 2012). Thus, an important next step in the research on self-concept of ability would be to study whether the predictive effects of parental beliefs are actually similar for students at all ability levels. The present study focuses on mothers' beliefs as a predictor. It has previously been argued that the role of teachers' and parents' beliefs in students' self-concept of ability may be particularly evident among high-performing students (Pesu, Aunola, et al., 2016; Pesu, Viljaranta, & Aunola, 2016). However, this issue represents an under-studied area, and there is a need for further investigation.

1.3. The Finnish school system

The present study was conducted in Finland. In the Finnish educational system, children start school by attending pre-school in the year they turn six. In the year children turn seven, they go to compulsory comprehensive school, which is divided into primary school (grades 1–6) and lower secondary school (grades 7–9). Thus, the transition from primary school to lower secondary school takes place between grades six and seven. In the Finnish school system, the transition from primary to lower secondary school is the first remarkable transition for students. It includes some important changes in the school environment, such as changing school and moving from a classroom teacher system to a subject teacher system. In lower secondary school, students also start to study new school subjects. Moreover, a change of school also means changes in peer relations. In Finnish primary and lower secondary school, students do not need to decide whether to take higher- or lower-level courses. Instead, they all follow the same curriculum and are taught at the same academic level. This characteristic of the Finnish

Download English Version:

<https://daneshyari.com/en/article/6844333>

Download Persian Version:

<https://daneshyari.com/article/6844333>

[Daneshyari.com](https://daneshyari.com)