Learning and Individual Differences 65 (2018) 135–147

Contents lists available at ScienceDirect

Learning and Individual Differences

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

Does perceived competence serve as a protective mechanism against performance goals for struggling readers? Path analysis of contextual antecedents and reading outcomes☆

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ARTICLE INFO

Keywords:
Motivation
Reading
Classroom goal structures
Achievement goals
Perceived competence
Reading difficulties

ABSTRACT

This study examined the extent to which struggling readers' perceived classroom goal structures explain their adoption of personal achievement goals and ratings of perceived competence. We also investigated how these motivational characteristics relate to outcomes in word reading and reading comprehension in a sample of fourth and fifth grade struggling readers ($N = 112$). In a series of path analyses, different motivational patterns emerged in predicting word reading and reading comprehension. Mastery goals negatively predicted while perceived competence positively predicted word reading. For reading comprehension, only perceived competence was a significant motivational predictor. However, for both reading outcomes, perceived competence had a positive moderating role against the potential negative effect of performance-avoidance goals on reading. Our findings also highlight the importance of focusing on mastery goals within the classroom in order to promote students' perceptions of competence in reading comprehension.

1. Introduction

A decline in students' intrinsic academic motivation across the later elementary and middle school years is a well-documented trend (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Lepper, Corpus, & Iyengar, 2005; McKenna, Conradi, Lawrence, Jang, & Meyer, 2012; Unrau & Schlackman, 2006). Motivation for reading is not an exception, with previous studies demonstrating a similar developmental decline in students' enjoyment of and perceived competence in reading (Guthrie & Wigfield, 2000). This phenomenon is particularly concerning for struggling readers in the upper elementary grades as, after third grade, students are asked to engage with increasingly complex text. Therefore, students who have not mastered fluent word-level reading skills are likely to be left behind, a phenomenon often referred to as the 'fourth grade slump' (Chall & Jacobs, 2003). Exacerbating the problem is that it becomes less likely that struggling readers will read for pleasure and spend time engaged with text, leading to reduced print exposure and continuing to fall further behind their peers (Guthrie & Davis, 2003; Guthrie, Wigfield, Metsala, & Cox, 1999; Mol & Bus, 2011; Stanovich, 1986; Wigfield & Guthrie, 1997).

In fact, reading researchers have recognized the importance of examining psychosocial factors, including motivation, related to reading development (Fletcher et al., 2002; International Reading Association, 2000; RAND, 2002) with a suggested bidirectional relationship between motivation and reading (Morgan & Fuchs, 2007). However, little is known about the complex relations among different aspects of motivation in explaining reading achievement (Guthrie et al., 1999) or the contextual sources of variabilities in student motivation (e.g., Neugebauer, 2013). Thus, the primary goal of the present study is to address this gap. In particular, we focus on relations of reading to perceived competence and achievement goals for struggling readers in upper elementary grades. Furthermore, we seek to understand whether and to what extent students' perceived learning environment (i.e., classroom goal structure) predicts their self-reported motivation.

1.1. Perceived competence

1.1.1. Perceived competence and reading

Competence beliefs encompass different terms—self-efficacy, perceived competence, self-concept—all of which can be broadly defined

☆ This research was supported in part by the Institute of Education Sciences, U.S. Department of Education, through Grant R305F100013 to The University of Texas at Austin as part of the Reading for Understanding Research Initiative. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.
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https://doi.org/10.1016/j.lindif.2018.05.017
Received 14 July 2017; Received in revised form 14 May 2018; Accepted 18 May 2018
1041-6080/ Published by Elsevier Inc.

as one's evaluative perception about how well he/she will do on a given task (Bandura, 1977; Schunk, 1991; Wigfield & Eccles, 2002). Such personal belief systems serve as a key mechanism in the learning process by affecting achievement-related behaviors and engagement, which in turn promote students' performance (see Honicke & Broadbent, 2016; Schunk & Pajares, 2009; Zimmerman, 2000 for reviews). Students who are more confident about their ability to do well on a task are more likely to engage in challenging activities (Bandura & Schunk, 1981) and deeper strategy use (Prat-Sala & Redford, 2010), show higher levels of academic achievement (Fast et al., 2010), display intrinsic motivation (Guay, Roy, & Valois, 2017), and put forth more effort and persistence in the face of difficulties (Hoffman, 2010; Komarraju & Nadler, 2013; Multon, Brown, & Lent, 1991). Through these achievement-related behaviors, students with positive competence beliefs achieve higher than those who doubt their abilities (Shell, Murphy, & Bruning, 1989). In fact, one of the strongest and most consistent motivational predictors of student achievement, even after controlling for prior achievement level, is one's competence beliefs (Pajares, 1996).

Although some theoretical distinctions exist among the different terms describing competence beliefs (Hughes, Galbraith, & White, 2011), reading researchers have generally used these terms interchangeably (Conradi, Jang, & McKenna, 2014; Schiefele, Schaffner, Möller, & Wigfield, 2012; Wigfield & Eccles, 2002). In the present study, we use the term *perceived competence* when discussing students' perceptions and beliefs about their reading competence. Prior research has found that perceived competence contributes between 6% to 14% of the variance in reading comprehension, beyond that which is explained by cognitive and linguistic variables in typically-developing students in the upper elementary grades (Conlon, Zimmer-Gembeck, Creed, & Tucker, 2006; Katzir, Lesaux, & Kim, 2009; Retelsdorf, Köller, & Möller, 2011; Solheim, 2011). Unlike the well-established relations between perceived competence and reading comprehension, we know little about the associations between perceived competence and word reading. According to the study that examined reading comprehension and word reading separately, it is believed that perceived competence makes a unique contribution to each (Conlon et al., 2006).

1.1.2. Perceived competence in struggling readers

Perceived competence may play an even greater role for struggling readers. The aforementioned studies focus on typically-developing students or modeled the effects of perceived competence in a representative sample of students (Conlon et al., 2006; Katzir et al., 2009; Retelsdorf et al., 2011; Solheim, 2011). However, converging evidence suggests that the effects of motivation are more salient for struggling readers than their typically-developing peers (Lau & Chan, 2003; Logan, Medford, & Hughes, 2011). For instance, a recent study focusing on linguistically diverse middle school students with disabilities found that students' perceived competence explained about 20% of the variance in reading comprehension outcomes beyond what was explained by English Learner status and performance on formative measures, which is a greater contribution to reading comprehension than other studies have found (Proctor, Daley, Louick, Leider, & Gardner, 2014).

Moreover, as students get older, perceived competence tends to correlate even more strongly with reading skills (Chapman & Tunmer, 1997). As such, it is not surprising that struggling readers in upper elementary grades, who have experienced failure in mastery of word-level reading skills in primary grades, are less likely to have positive perceptions of their own competence (Chapman, Tunmer, & Prochnow, 2000; Cho et al., 2015; Tabassam & Grainger, 2002). Thus, promoting positive perception of competence becomes even more critical for struggling readers.

1.1.3. Domain specificity of perceived competence

Although the reviewed studies consistently demonstrate the importance of perceived competence in explaining reading outcomes, particularly reading comprehension, one notable limitation across these studies is measurement specificity. Reading is a multidimensional skill—with word reading and comprehension relying on different, though overlapping, sets of cognitive skills. Skillful word reading requires acquisition of letter-sound correspondences and decoding/spelling patterns. Successful reading comprehension requires not only basic word-level reading skills, but also draws upon higher-level linguistic and cognitive processes (Gough & Tumner, 1986). Accordingly a substantial amount of heterogeneity exists in the sources of reading difficulties in older students, such that reading failure is accompanied by either word reading, comprehension, or both (Catts, Adlof, & Weismer, 2006).

Because perceived competence is based on domain- and task-specific evaluative appraisal (Hughes et al., 2011), students' perceptions of their competence in reading might vary depending on the specific skills being measured. That is, perceived competence may differ based on the specific area of reading in which a student struggles. Nevertheless, most of the extant studies do not match the domain of perceived competence assessed to the reading achievement outcomes (Conlon et al., 2006; Katzir et al., 2009) because the commonly used measures, such as the Motivation for Reading Questionnaire (Wigfield & Guthrie, 1997) and the Reading Self-Concept Scale (Chapman & Tunmer, 1995), do not clearly distinguish between these two reading outcomes. It therefore stands to reason that the predictive value of perceived competence in explaining reading would be clearer when it is measured separately for word reading and reading comprehension, particularly among struggling readers beyond primary grades.

1.2. Achievement goals

1.2.1. Achievement goals and reading

Achievement goals refer to students' reasons for achievement-related behaviors, such as choosing, engaging, and persisting in specific learning contexts (Ames, 1992; Dweck, 1986; Dweck & Leggett, 1988). The first generation of achievement goal researchers proposed a dichotomy model of mastery and performance goals (Dweck & Leggett, 1988; Nicholls, 1984). Students who are mastery goal-oriented focus on developing competence through task mastery, which has been positively associated with adaptive learning outcomes and academic performance (see Hulleman, Schrager, Bodmann, & Harackiewicz, 2010 for a review). Performance goal-oriented students, in contrast, focus on demonstrating their competence relative to others. Overreliance on performance goals has been suggested to lead to maladaptive achievement-related behaviors such as the use of shallow cognitive strategies, avoidance of help-seeking, and reduced effort in face of challenges. As the field grew, researchers proposed two subtypes of performance goals: approach and avoidance. These goals distinguish students whose goals are to demonstrate superiority to others (approach) from students who are more concerned with concealing their relative incompetence (avoidance) (Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997; Skaalvik, 1997). Performance-approach goals are generally viewed as positive because of its positive association with achievement, whereas performance-avoidance goals have been consistently viewed as detrimental to both psychological adjustment and academic achievement (Hulleman et al., 2010).

Despite its wide application in the field of educational psychology, empirical investigations of achievement goals in relation to reading are scarce. Two recent studies using constructs aligned with achievement goals have reported detrimental effects of competition, measured similarly to performance-approach goals (e.g., “do you read because you want to outperform others in your class?”), on reading comprehension with a large sample of second and third graders (Schiefele, Stutz, & Schaffner, 2016; Stutz, Schaffner, & Schiefele, 2016). Lepola, Poskiparta, Laakkonen, and Niemi (2005) examined the predictive role of mastery goals on word reading and found that task orientation, defined similarly to mastery goals, made a unique contribution to word