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Authors

Gary A. Troia, Rebecca K. Shankland, Kimberly A. Wolbers

Abstract

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Motivation Research in Writing: Theoretical and Empirical Considerations

GARY A. TROIA REBECCA K. SHANKLAND

Michigan State University, East Lansing, Michigan, USA

KIMBERLY A. WOLBERS

University of Tennessee, Knoxville, Tennessee, USA

This article reviews research on motivation in the academic domain of writing situated within a social cognitive perspective. First we summarize major findings related to 4 theorized components of human motivation—self-efficacy beliefs or perceived competence, mastery and performance goal orientations, task interest and value, and attributions for success and failure. For each component we also offer general instructional recommendations gleaned from the literature. Next we discuss how these components play a role in writing motivation, with particular emphasis on self-efficacy for writing skills versus writing tasks. Then we present findings from studies that have examined the motivational characteristics of individuals who struggle with writing, including those with disabilities, and interventions designed to enhance motivation to write. Finally, we offer suggestions for future research in writing motivation.

Writing a book is a horrible, exhausting struggle, like a long bout of some painful illness. One would never undertake such a thing if one was not driven on by some demon whom one can neither resist nor understand.

—George Orwell (Brownell Orwell & Angus, 1968, p. 7)

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Rebecca K. Shankland is now at Appalachian State University, Boone, North Carolina. Address correspondence to Gary A. Troia, Department of Counseling, Educational Psychology, & Special Education, Michigan State University, 343 Erickson Hall, East Lansing, MI 48824, USA. E-mail: gtroia@msu.edu

The demonabout which George Orwell (the nom deplume of satirist Eric Arthur Blair) spoke was his source of motivation, albeit an ethereal one, while he wrote his masterpieces Nineteen Eighty-Four (1949) and Animal Farm (1945). All good writers, even those who are not so famous, motivate themselves to expend effort in the service of reaching their goals for writing, an often inherently difficult task that requires the coordination of numerous cognitive, linguistic, and physical abilities. How authors motivate themselves differs widely, but motivation is certainly one necessary ingredient for attaining success (McLeod, 1987; Pintrich & Schunk, 2002). In this article we first discuss the varied components of the construct of motivation (and associated instructional recommendations) and follow this with a summary of the body of empirical research rooted in social cognitive theory on these components as they relate to writing. Then we describe (a) how writing motivation differs for struggling writers and (b) quantitative research that has examined ways to enhance motivation, particularly in those children and youth who do not possess optimal motivation. Finally, we suggest new directions for research in writing motivation.

GENERAL MOTIVATION CONSTRUCTS

Motivation, or drive, is a domain-specific and contextually situated dynamic characteristic of learners (e.g., Bong, 2001). That is, one's motivation to write may be substantially greater or weaker than one's motivation to speak or read, for instance, and the magnitude and perhaps direction of this difference is likely to change across varied performance contexts. It is well documented that positive motivation is associated with strategic behavior (Kuhl, 1985; Kurtz & Borkowski, 1984), task persistence (Zimmerman & Ringle, 1981), and academic achievement (Kuhl, 1985; Kurtz & Borkowski, 1984; Paris & Winograd, 1990). Thus, students who are motivated deploy learning and strategies (e.g., distributed periodic review of summarization of key concepts and ideas, self-encouragement, seeking assistance) to maximize their educational potential, work through challenges and adversity without giving up, and perform better in school. Four broad components of achievement motivation have been identified by researchers: self-efficacy beliefs, goal orientations, personal and situational interest, and attributions for outcomes. We briefly discuss these four theorized components here. Figure 1 displays the relationships between these components.

Self-Efficacy Beliefs

Self-efficacy, an individual's assessment of his or her competence to perform a future task, is perhaps the most well established and well researched aspect of human motivation. Generally speaking, measures of self-efficacy are positively related to the amount of effort expended to perform a task, persistence

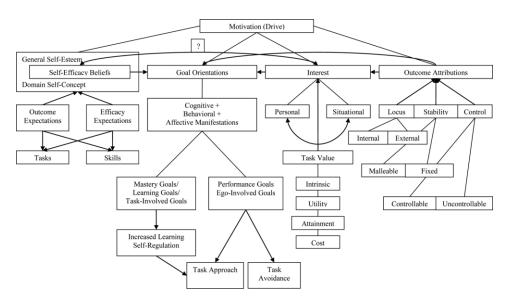


FIGURE 1 Interrelationships between motivational components and associated constructs.

with a difficult task, the recruitment of strategies to accomplish a task, and actual task performance, regardless of one's age, gender, or ethnicity (Bandura, 1986, 1997; Dweck & Leggett, 1988; Harter, 1996; Kuhl, 1985, 1987; Kurtz & Borkowski, 1984; Pajares, 1996, 1997; Pintrich, 1999; Pintrich & DeGroot, 1990; Pintrich & Schunk, 2002; Schunk, 1991; Schunk & Zimmerman, 1994; Zimmerman & Ringle, 1981). In a meta-analysis of 36 studies in which the association of self-efficacy beliefs with academic outcomes was explored, Multon, Brown, and Lent (1991) found a mean effect size of .38 for self-efficacy, ranging from .52 for basic skills assessments, .36 for grades, and .13 for standardized achievement tests. This study demonstrates the importance of self- efficacy for school success, especially when success is measured by classroom assessment tasks and teacher judgments of performance.

Self-efficacy beliefs comprise both *outcome expectations*, which are beliefs that particular actions will lead to desired outcomes, and *efficacy expectations*, which are beliefs that one is capable of performing those actions to achieve goals (Bandura, 1997; Eccles & Wigfield, 2002; Schunk, 1989a, 1989b). For instance, one might believe that an action will yield a particular result—revising a report several times for clarity and detail will produce a more polished and informative paper—but not necessarily that one can successfully perform the requisite action. According to Schunk (1989b, 2001), an individual appraises multiple sources of information to derive self-efficacy beliefs, including (a) perceived task difficulty, value, and performance expectations; (b) prior successes and failures with tasks similar or identical to the task about to be performed; (c) estimates of required effort and opportunities for assistance; (d) persuasion from other credible individuals; (e) vicarious

experiences (e.g., observing a model who is perceived to be similar to the individual successfully perform the task); and (f) associated physiological states (e.g., elevated heart rate accompanying anxiety).

It is important not to confuse self-efficacy with the motivational constructs of self-esteem and self-concept. Unlike self-efficacy, which is based on one's predictions of task performance, *self-esteem* refers to the complex of emotional reactions tied to previous accomplishments across varied tasks. Likewise, self-concept is based on general beliefs about competence within a

domain rather than task-specific beliefs—one may have a positive selfconcept in the domain of writing (e.g., "I'm a good writer") but varied self-efficacy beliefs related to specific writing tasks (e.g., "I'm not sure I could write a good poem" vs. "I'm confident I can write an enjoyable autobiography") or writing skills (e.g., "I'm certain I could spell all the words I'd use in my paper"vs. ""I'm not at all confident I will successfully punctuate my paper"). Research findings demonstrate that when both self-efficacy and self-concept are measured, only self-efficacy accounts for significant unique variance in task performance (e.g., Pajares & Miller, 1994); thus, self-efficacy is more closely related to outcomes (see also Pajares, Miller, & Johnson, 1999). Gender differences in self-efficacy beliefs favoring females have been found in several studies (Eccles et al., 1989; Hidi, Berndorff, & Ainley, 2002; Pajares et al., 1999; Pajares & Valiante, 1997, 2001; Wigfield, Eccles, MacIver, Reuman, & Midgley, 1991), but these differences may diminish and even reverse direction by the time students reach high school (Pajares & Johnson, 1996). This change may be due to relative differences rather than absolute differences—adolescent females may be more modest in their estimations of task competence and-or adolescent males may overestimate their competence (Noddings, 1996; Wigfield, Eccles, & Pintrich, 1996). Generally speaking, when prior achievement is controlled, gender differences in selfefficacy are not significant (e.g., Pajares et al., 1999; Pajares & Valiante, 1999).

Regardless of the relative differences between males' and females' measured self-efficacy and how these differences change over time, they seem to be related more to gender stereotyping than gender itself. In the domain of writing, for instance, writing is viewed by both male and female students as a "feminine" activity (Pajares, 2003; Pajares & Valiante, 2001; Valiante, 2001). When gender stereotyping has been controlled, the effects of gender differences on writing self-efficacy among middle school students have been voided (Pajares & Valiante, 2006).

Self-efficacy mediates the relationship between prior accomplishments and future task performance best when it is optimistic yet accurately calibrated to previous achievements (Bandura, 1997). Generally speaking, young children tend to hold inaccurate self-efficacy beliefs that become more aligned with actual achievement over time (Paris & Oka, 1986; Stipek, 1993). Poorly calibrated self-efficacy (e.g., gross overconfidence) might lead to weaker strategy use and task engagement (Bandura, 1989; Linnenbrink & Pintrich,

2003; Salomon, 1984), though empirical work remains to be done to explore this assumption.

Nevertheless, low self-efficacy tends to result in a number of maladaptive behaviors, including avoidance of instrumental help seeking (because the individual believes that requesting help will reveal his or her incompetence) and learned helplessness (Ryan & Pintrich, 1997, 1998), as well as negative emotional states such as anxiety and depression (Harter, 1992; Meece, Wigfield, & Eccles, 1990; Pintrich & DeGroot, 1990). Though low self-efficacy is difficult to alter (Bandura, 1986), there are several general instructional recommendations for enhancing this form of self-belief (Deci & Ryan, 1985; Ellis, 1986; Schunk, 1989a, 1989b; Zimmerman & Kitsantas, 2002; Zimmerman & Rocha, 1984, 1987):

- Ensure that students have opportunities to perform challenging tasks on which they can be successful through sufficient scaffolding.
- Model coping tactics while faced with difficulty in completing a task as well as successful task completion.
- Give truthful, realistic, and specific feedback regarding task performance.
- Foster the belief that competence is alterable through the expenditure of effort.
- Reinforce effort attributions when students are first mastering a task, but recognize that the continued need for significant effort may signal low levels of ability and may negatively affect self-efficacy.

Goal Orientation

Self-efficacy beliefs affect one's goals for engaging (or not engaging) in a task. Pervin (1983) noted that goals have manifestations in the realms of cognition (goals are mental representations of desired outcomes, often embedded in a serially and hierarchically organized framework of proximal and distal subgoals), behavior (meeting one's goals and subgoals requires the development and execution of plans to achieve the desired outcomes), and affect (one may associate goals with positive or negative feelings, leading to approach or avoidance, respectively). In the area of academic achievement, goal theory specifies two general kinds of goals, mastery and performance goals (Ames, 1984, 1992; Elliott & Church, 1997; Middleton & Midgley, 1997), which are also called, respectively, learning and performance goals (Dweck & Leggett, 1988) and task-involved and ego-involved goals (Nicholls, 1984). Mastery goals are associated with a focus on attaining knowledge and skill, improving competence, and achieving a sense of competence, whereas performance goals are associated with a focus on demonstrating relative ability, receiving public recognition, and surpassing others (Ames, 1984, 1992). More recently, performance goals have been separated into approach performance and avoidance performance goals, reflecting the fact that one

may desire to display competence (approach) or to avoid displaying incompetence (avoidance).

Mastery goals are associated with many positive learning attributes, such as higher self-efficacy, greater self-regulation, and better achievement (Ames, 1992; Dweck & Leggett, 1988; Elliott & Dweck, 1988; Midgley & Urdan, 1995; Pintrich & DeGroot, 1990; Pintrich & Schunk, 2002; Schunk & Zimmerman, 1994). However, performance goals, specifically approach performance goals, are not necessarily maladaptive (Pajares, Britner, & Valiante, 2000; Pintrich, 2000a, 2000b), though it is unclear under what circumstances and for which students this may be the case (Midgley, Kaplan, & Middleton, 2001). In other words, a certain degree of competitiveness may operate as a powerful motivator. In order for students to adopt mastery goals, teachers can do the following (see Ames, 1984, 1992; Anderman & Anderman, 1999; Bandura, 1986, 1997; Dweck & Leggett, 1988; Ellis, 1986; Garner, 1990; Meece, 1991; Nicholls, 1979, 1984; Pervin, 1983; Schunk, 1989a, 1989b, 1990; Skinner & Belmont, 1993; Wentzel & Wigfield, 1998):

- Foster a sense of belonging, cooperation, and social responsibility.
- Provide for student autonomy.
- Give private rather than public evaluations of student performance.
- Help students focus on personal improvement and mastery.
- Help students devise specific, proximal, and challenging goals for themselves.
- Show students how to prioritize and modify their goals so that they can remain encouraged and juggle competing goals (i.e., take volitional control to fulfill intentions).

Interest and Value

In conjunction with self-efficacy beliefs, task interest and value (which are related) influence the selection of goals and represent another core component of human motivation (Eccles, 1987; Hidi et al., 2002; Pervin, 1983; Wigfield & Eccles, 2001). Personal interest in a task or domain tends to be stable because it arises from individual preferences, whereas situational interest arises from specific task characteristics (Hidi, 1990; Hidi & Baird, 1986; Hidi & Harackiewitcz, 2000); thus, an individual may have little interest in writing stories, but an assignment that specifies writing a first-person narrative of a personal hero may spark his or her interest. Interest reflects, in part, the personal significance or value attached to a task (Schiefele, 1999; Wigfield & Eccles, 1992).

According to Eccles (1987), value can be broken down into attainment value (i.e., the relevance of the task), intrinsic value (i.e., the extent to which the task presents a challenge, invites curiosity, and permits a sense of control and mastery), utility value (i.e., the importance of the task), and cost (i.e., how

much anxiety, effort, and loss are associated with the task). One must keep in mind that interest and value, though related, can operate independently (Eccles, Wigfield, & Schiefele, 1998; Wigfield et al., 1996). That is to say, an individual might be interested in a task but assign relatively little value to it or, conversely, view a task as highly valuable but have little interest in it. Likewise, research suggests that values and self-efficacy beliefs initially may operate rather independently of each other and then gradually become related through operant conditioning and efforts to maintain positive selfbeliefs (Eccles et al., 1998; Wigfield, 1994; Wigfield et al., 1997). As an example, task value may be diminished if an individual's self-efficacy beliefs for the task are low in order to preserve one's self-concept and self-esteem (Eccles et al., 1993; Harter, Whitesell, & Junkin, 1998; Pervin, 1983). The particular causal pathways between self-efficacy, interest, and value are presently unclear: Perceived competence may lead to increased value and interest (Eccles et al., 1998; Linnenbrink & Pintrich, 2003; Wigfield, 1994; Wigfield & Eccles, 1992; Wigfield et al., 1997) or vice versa.

Interest and value may lead to greater student engagement and better learning outcomes (Pintrich & Schunk, 2002). To achieve these results, teachers must attend to the relevance, importance, and difficulty of instructional activities and carefully match these to their students' actual and perceived levels of competence. There are several instructional recommendations related to increasing students' personal and situational interests (see Bandura

& Schunk, 1981; Deci & Ryan, 1985; Ellis, 1986; Lepper & Hodell, 1989; Malone, 1980):

- Permitting choice whenever possible.
- Using innovative and engaging instructional practices and tasks.
- Connecting what is learned to students' personal lives and explaining the value of what is learned.
- Using naturally occurring external rewards only when necessary.

Attributions for Outcomes

The final core motivation construct is *attributions*, or the perceived causes of success and failure (Weiner, 1979, 1985, 1986). Causal attributions are influenced by the perceived amount of personal control over the cause, its locus, and its stability (Schunk, 1994; Weiner, 1985). When individuals attribute success to factors under their personal control, such as effort, and failure to either insufficient effort or unreasonable task demands (Borkowski, Weyhing, & Carr, 1988; Weiner, 1985, 1986), they are more likely to exhibit an adaptive motivational pattern. That is, these persons will be motivated to perform well because they anticipate that their effort expenditure will facilitate their performance. Conversely, when success is attributed to luck, task ease, or teacher assistance and failure is attributed to limited ability, all of which are factors

not under personal control, a helpless motivational pattern is likely to emerge (Leggett & Dweck, 1987; Schunk, 1984). Persons exhibiting a helpless motivational pattern are less likely to be motivated to perform well because they

believe their efforts have little impact on performance outcomes—they are helpless to effect change.

Adaptive attributions are related to, though conceptually distinct from, self-efficacy beliefs and have an impact on persistence, choice, goals, strategic behavior, and achievement (Kalechstein & Nowicki, 1997; Weiner, 1986). Of course, effort may or may not lead to success with a task; misapplied but substantial effort can result in failure, and a simple task or innate talent may necessitate little or no effort (Carr, Borkowski, & Maxwell, 1991; Licht, 1983). It is important to note that when an individual perceives himself or herself as possessing adequate ability, feedback attributing success to ability is preferred over feedback attributing success to effort. Apparently, if effort alone is emphasized when ability attributions exist, it implies that ability is poor (Covington, 1992; Schunk, 1994). This may explain why both effort and ability attributions are associated with high achievement (Schunk, 1984; Schunk & Cox, 1986; Schunk & Gunn, 1986). In addition, attributions become more rooted in ability than effort over time (Shell, Colvin, & Bruning, 1995; Stipek, 1993), as children's perspectives regarding the nature of ability and intelligence shift from incremental or malleable to more fixed and trait oriented (Nicholls & Miller, 1984). Many of the previously noted instructional recommendations hold true for promoting adaptive causal ascriptions.

EMPIRICAL FINDINGS RELATED TO WRITING MOTIVATION

In the late 1970s and early 1980s, much of the research that examined motivation to write was conducted with college students enrolled in composition courses and focused on apprehension of writing (Daly & Miller, 1975). In these early studies, researchers found that measures of writing apprehension were related to choice of academic tasks and majors. self-esteem, and writing performance (Daly, 1978; Daly & Wilson, 1983; Faigley, Daly, & Witte, 1981). As the social cognitive theory of learning emerged, empirical work shifted to reflect newly theorized components of academic motivation. Research at that point helped establish the primacy of self-efficacy in the domain of writing. Though writing anxiety, locus of control, and grade goals in college composition courses were correlated with self-efficacy beliefs, they did not contribute significant additional independent variance to outcomes beyond that contributed by students' self-efficacy beliefs (McCarthy, Meier, & Rinderer, 1985; Meier, McCarthy, & Schmeck, 1984; Shell, Murphy, & Bruning, 1989). More recent studies have replicated and extended these findings with school-age children and youth; although writing apprehension does indeed correlate with writing performance, when self-efficacy is controlled, this

relationship is diminished or eliminated—self-efficacy beliefs mediate the relationship between apprehension and writing performance (Pajares et al., 1999; Pajares & Valiante, 1997, 1999, 2001). In addition, when initial writing competence (which also accounts for prior influences of motivation), grade, and gender are controlled, self-efficacy still makes a significant independent contribution to variance in writing outcomes (Graham & Harris, 1989a; Pajares et al., 1999; Pajares & Valiante, 1997; Zimmerman & Bandura, 1994).

Measures of self-efficacy for writing can focus on writing skills (e.g., grammar, spelling, planning, editing, incorporating an interesting setting into a story, including convincing arguments in a persuasive paper), writing tasks (e.g., writing a term paper, composing a friendly letter, creating an advertisement), or graded writing performance (Shell et al., 1989). This separation of foci for self-efficacy is defensible given that writing skills, especially lower level transcription skills such as spelling and handwriting, exert a powerful influence on how well students accomplish composing tasks when these skills are underdeveloped (e.g., Berninger, 1999; Graham & Harris, 2000). In other words, self-efficacy beliefs may be differentiated according to the particular

aspect of writing in which an individual is judging his or her competence—skill, task, or successful performance.

One line of research has obtained empirical support for the distinction between skill and task efficacy. Karaglani (2003) found that self-efficacy for writing skills made significant independent contributions to variance in third graders' holistic story quality, whereas teacher ratings of writing performance, general academic achievement, and writing self-concept and attitudes did not. Using path analysis, Pajares and Johnson (1996) reported that self-efficacy for writing skills and writing achievement measured by a statewide test had a direct effect on ninth graders' holistic essay quality in response to a timed prompt. Finally, in a study with undergraduate preservice teachers, Pajares and Johnson (1994) found that self-efficacy for writing skills and initial writing performance measured at the beginning of the semester predicted significant unique variance in holistic essay quality in response to a timed prompt given at the end of the semester, but self-efficacy for writing tasks did not. These findings highlight the importance of matching items on self-efficacy measures with outcome measures. Specifically, measures of self-efficacy for writing skills encompass features associated with virtually any composing task (e.g., spelling, punctuation, details), whereas measures of self-efficacy for writing tasks address a variety of tasks beyond the criterion writing task used to assess writing performance. Thus, skill efficacy has been found to have a stronger relationship with writing performance than task efficacy because skills apply to any given task, and typically only one writing task is used as a criterion measure in studies of self-efficacy for writing. Given the use of a single criterion writing task, the likelihood that diverse task selfefficacy items on an instrument will be related to performance on the task is reduced.

What is interesting is that self-efficacy for writing tasks improves over time, but self-efficacy for writing skills remains relatively stable and perhaps even drops (Pajares & Johnson, 1994; Pajares & Valiante, 1999; Shell et al., 1995). This difference may be an artifact of a protracted course of development for the vast array of writing skills necessary to perform a more limited set of academic writing tasks, or it may be associated with how writing is frequently taught—students spend more time writing for varied purposes (tasks) than practicing specific writing skills within a process writing instructional framework (Applebee & Langer, 2006; Pritchard & Honneycutt, 2006). As students' progress in their education, they may feel less efficacious with respect to writing skills because middle and high school teachers (a) expect them to have mastered basic writing skills, (b) feel that instruction in basic writing skills is not consistent with content area learning goals, and (c) may not tolerate classroom writing performance marred by poorly developed skills and consequently may provide feedback to that effect (Troia & Maddox, 2004).

Some researchers have explored another form of writing self-efficacy—self-efficacy for self-regulation in writing, or students' confidence in their ability to use writing strategies. This form of self-efficacy is significantly correlated with writing performance (Harris & Graham, 1992; Schunk & Zimmerman, 1994; Zimmerman & Risemberg, 1997), strategy use, and adaptive attributions (Schunk & Zimmerman, 1994; Zimmerman & Schunk, 1989). However, when writing self-efficacy and self-efficacy for self-regulation are regressed onto writing performance, only writing self-efficacy yields a significant predictive relationship (Pajares & Johnson, 1996; Pajares et al., 1999; Pajares & Valiante, 1997, 1999, 2001).

Interest appears to have a facilitative effect on writing performance (Albin, Benton, & Khramtsova, 1996; Benton, Corkill, Sharp, Downey, & Khramtsova, 1995). Hidi and her colleagues (Hidi & Anderson, 1992; Hidi & McLaren, 1991) suggested that interest is a necessary though insufficient ingredient for writing success: Even if students write about topics they find fascinating, they are less likely to produce high-quality papers if they lack sufficient topic knowledge to generate meaningful content. The role of interest in writing performance should not be overlooked, but it is unclear just how relevant it is given the broad array of other motivational components.

Knudson (1991, 1992, 1993, 1995) has found that attitudes account for unique variance in writing performance, that more positive attitudes toward writing are exhibited by better writers, and that attitudes toward writing tend to decline across grades. Though not a core theoretical component of motivation—they represent an affective stance toward an activity rather than the will to engage in it—attitudes are clearly related to motivation. However, the measures developed by Knudson did not exhibit strong construct validity (cf. Graham, Berninger, & Fan, 2007; Knudson, 1991, 1992, 1993). Using structural equation modeling, Graham et al. (2007) found that a model that specified a direct path from writing attitudes (a measure devised by the researchers

with good construct validity) to writing achievement (a composite of holistic essay quality, sophistication of essay vocabulary, length of correct word sequence for the essay, and score on a standardized test of written expression) fit the observed data better than models that specified a direct path from writing achievement to writing attitudes or a reciprocal pathway. Although they did not find a decline in writing attitudes as did Knudson (1991, 1992), they only included first and third graders in their study. It is possible that writing attitudes change over a longer period of time as students gain more writing experience; a decline in writing attitudes might be an anticipated corollary of a decline in self-efficacy for writing skills.

DIFFERENCES IN WRITING MOTIVATION AND INTERVENTIONS FOR POOR WRITERS

Many poor writers, including those with learning disabilities (LD), exhibit pervasive motivational problems (Zimmerman, 1989), a lack of will and effort to tackle the demands of written composition. First, though students with LD perform poorly on writing tasks in comparison with their peers, they hold rather positive self-efficacy beliefs related to writing (Graham, Schwartz, & MacArthur, 1993; Klassen, 2002a, 2000b). Their tendency to overestimate their competence (i.e., display mis-calibrated self-efficacy beliefs) may be due to poor task analysis and limited self-awareness (Bandura, 1997; Butler, 1999; Pajares, 1996). That is, students with writing problems may lack metacognitive knowledge about their own learning capabilities and personal strategic resources and the exact demands imposed by specific writing tasks (e.g., Lin, Monroe, & Troia, 2007; Saddler & Graham, 2007). Such a lack of knowledge likely results in reduced metacognitive action, such as self-regulation of one's thoughts, feelings, and behaviors during the writing process. Second, students who have written language difficulties tend to attribute their successes and failures to factors that are not under their volitional control rather than to effort or the lack thereof (Borkowski, Estrada, Milstead, & Hale, 1989; Ellis, Lenz, & Sabornie, 1987; Licht, 1983; Pearl, 1982). This maladaptive attribution pattern ultimately leads these children and youth to devalue writing and to avoid activities that demand a lot of writing because they believe they are powerless to influence their dismal writing performance.

A number of investigations have been carried out in which writing interventions have been developed for students with and without writing problems and the effects of these interventions on writing outcomes and students' motivational beliefs have been evaluated. In one line of research, the types of writing goals students pursue have been manipulated to determine which kinds are most effective for improving writing performance and increasing self-efficacy. Schunk and Swartz (1993a, 1993b) gave typically developing fourth- and fifth-grade students one of three goals for writing

paragraphs using different genres: (a) a general goal to work productively, (b) a product goal to write paragraphs, and (c) a writing process goal of learning to use the paragraph writing strategy taught. Half of the students in the process goal condition also received progress feedback for their goal. Those students who were in the process goal condition wrote better paragraphs and displayed increased self-efficacy following strategy instruction than those in the other two goal conditions. Moreover, when progress feedback accompanied the process goal, the greatest advantages were realized in most cases (also see Graham & MacArthur, 1988; Graham, MacArthur, Schwartz, & Page-Voth, 1992). Graham, MacArthur, and Schwartz (1995) gave fifth- and sixth-grade poor writers either a general revising goal for their papers (make it better) or a specific revising goal (add more information). Students who were asked to include more information wrote papers of higher quality. However, these researchers did not evaluate motivation in this study.

In a later study, Page-Voth and Graham (1999) did evaluate the selfefficacy beliefs of seventh- and eighth-grade students with LD who were randomly assigned to one of three treatment conditions: goals, goals plus strategy instruction, and control. Students in the goals condition were asked to write three persuasive papers, each with a specific goal (include more supporting reasons, include more rebutted counterarguments, or both). Students in the goals plus strategy instruction condition performed the same tasks but were also provided with a writing strategy to help them attain their goals. Participants who worked toward specific goals wrote better papers than those who were simply asked to write persuasive essays. However, there were no differences between the groups in their self-efficacy beliefs either before or after the intervention. Taken together, these studies suggest that (a) specific goals related to the writing process positively affect the writing performance of students with and without writing difficulties more than general goals or the absence of goals; and (b) goal setting does not necessarily have a salutary effect on the perceived competence of poor writers, though it does seem to benefit the self-efficacy of typical and accomplished writers.

Another line of research has examined the influence on writing motivation of strategy instruction that explicitly or implicitly incorporates self-control procedures such as goal setting, self-talk, self-monitoring, and self-assessment. Most, though not all, studies have found that such instruction benefits the writing performance and self-efficacy beliefs of students with LD and other struggling writers (cf. García & de Caso, 2004; García-Sanchez & Fidalgo-Redondo, 2006; Graham & Harris, 1989a, 1989b; Graham, Harris, & Mason, 2005; Sawyer, Graham, & Harris, 1992).

Gersten and Baker (2001) conducted a meta-analysis of 13 intervention studies with students with LD to determine the impact cognitive strategy instruction for composing had on these students. They reported an aggregate effect size of .81, which represents a large effect favoring the selected interventions, for varied measures of writing performance. However, weaker

effects were evident for students' writing knowledge, self-efficacy beliefs, and attitudes about writing (effect sizes ranged from .40 to .64, or small to moderate, for associated measures). Thus, strategy instruction does appear to have a notable effect on writing motivation, though not as powerful as its effect on actual writing performance. Because these interventions usually consist of multiple "active ingredients" that might affect motivation (e.g., positive and specific feedback, carefully scaffolded instruction with extensive modeling and multiple guided practice opportunities, high expectations, reinforcement for strategy use, visual displays of progress, self-monitoring and reflection), it is not possible to determine which ones are causally related to changes in poor writers' beliefs or attitudes. Considering that goal setting alone does not appear to have a substantial influence on struggling writers' perceived competency (Page-Voth & Graham, 1999), other aspects of self-regulation and strategy instruction either apart from or in combination with goal setting are likely necessary.

Finally, Miller and Meece (1997, 1999a, 1999b) have explored how elementary students' writing motivation is affected by teachers' use of challenging writing tasks, defined by the authors as tasks that require the composition of texts with multiple paragraphs over several days in collaboration with peers. Miller and Meece (1997, 1999a, 1999b) trained third-grade teachers to use challenging writing tasks in their classrooms over the course of a year and examined changes in the writing goals and interests of low-, average-, and high-achieving students. Regardless of achievement level, students (a) expressed a preference for challenging writing assignments and (b) reported a decrease in their pursuit of performance goals during the year (true of students in classrooms in which teachers frequently used challenging writing tasks; i.e., high implementation classes). However, when students were followed into Grades 4 and 5 (Miller & Meece, 1999a), the positive change in performance goal orientation attained in third grade was reversed and students' selfreported pursuit of mastery goals declined. The researchers suggested that these changes were associated with an increased focus on writing skills beyond third grade to help students prepare for high-stakes assessments.

SOME FUTURE DIRECTIONS FOR RESEARCH IN WRITING MOTIVATION

Though writing motivation has been the topic of research studies for nearly three decades, much remains to be explored in this area (for a more comprehensive review that extends beyond social cognitive theory, see Hidi & Boscolo, 2006). We would argue that perhaps one of the most productive avenues of research involves supplementing correlational research methods with qualitative methods aimed at identifying the forces at work in classroom writing instruction that mitigate or augment various aspects of student

motivation. Classroom observations can complement and situate self-report data, as can student interviews and focus groups. Moreover, this combination of research methods can help investigators untangle some of the causal connections among related theoretical components of motivation and between these and writing outcomes. Indeed, the findings reported by a number of authors highlight the importance of doing motivation research in the field and looking closely at the teaching and learning context and its impact on motivation (e.g., Abbott, 2000; Cleary, 1990; Dyson, 1993; Kim & Lorsbach, 2005; Miller & Meece, 1997, 1999a, 1999b).

Likewise, more experimental studies, especially ones in which discrete tactics that are hypothesized to impact motivation are manipulated, are sorely needed and should include multiple measures of motivation that represent discrete constructs (e.g., self-efficacy for writing skills vs. self-efficacy for writing tasks, outcome expectations vs. efficacy expectations). One factor that seems to exert an influence on students' self-efficacy beliefs—gender stereotyping—would lend itself well to experimental study. Are there means by which writing tasks can be rendered gender neutral, or are there ways in which male youths can be led to engage more readily in writing tasks despite viewing them as "feminine" activities?

We also think that the field would do well to examine the writing behaviors of students outside of school and to determine how participation in non- academic forms of writing, many of which are digital and multimedia in nature (e.g., e-mail and text messaging, online chat room discussions, blog entries), relates to writing motivation. It is quite possible that students view these forms of writing as more authentic, interesting, and valuable and consequently possess differentiated self-efficacy beliefs. attributions, and attitudes related to them. If so, finding ways to connect writing outside of school with written expression in school would be beneficial, insomuch as aligning motivation between the two spheres may help to ameliorate the problems experienced by struggling writers. Research along these lines in the domain of reading has shown that many adolescents, including those considered poor readers, report finding reading texts online to be more engaging than reading traditional printed texts (e.g., O'Brien, Beach, & Scharber, 2007) and that students do not necessarily perceive their leisure literacy practices and selves in the same ways as their school literacy practices and selves (Pitcher et al., 2007), perhaps because the latter privilege traditional text formats, activities, and transactions over the media-rich formats, activities, and transactions in which many students immerse themselves out of school (Alvermann & Moore, 1991). However, it is not at all clear how these differences in engagement and perceptions may or may not be related to enhancement of reading motivation components in or out of school.

Finally, the concepts of task interest and value deserve greater elaboration in future work, because presently experts do not fully understand how these relate to other aspects of motivation (e.g., self-efficacy beliefs).

Writing is a form of communication, and thus it serves a purpose (e.g., to finish the teacher's persuasive essay assignment, to remind oneself to purchase items at the grocery store, to get a piece published in an online zine, to practice responding to high-stakes writing prompts, to write a long overdue e-mail to a friend). If the purpose for writing is valued, then it is more likely to spark situational interest, but the value of many scholastic writing tasks—their relevance, importance, and benefits—may not be obvious to students and consequently may require explanation. However, valued writing tasks will not always be associated with strong interest (Eccles et al., 1998; Wigfield et al., 1996), and even if value and interest are aligned, other factors may mitigate motivation and performance (e.g., Hidi & Anderson, 1992; Hidi & McLaren, 1991). This means that researchers should pay attention to how their study participants perceive writing purposes, values, and interests and determine how these variables impact and are impacted by other components of writing motivation across time.

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