Effects of Students' Writing Self-Efficacy on Interpreting Instructor Feedback

An Honors Thesis (HONR 499)

by

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Abstract

Self-efficacy of students in higher education is a concept well-documented throughout cross-disciplinary research. The content of feedback that instructors deliver to students varies in quantity and quality across disciplines. Research has shown that students’ interpretations of instructor feedback on written work vary due to internal factors and contribute to their ability to achieve writing proficiency. One such factor may be writing self-efficacy. The current study analyzed whether students’ writing self-efficacy altered their interpretations of written instructor feedback. Participants were undergraduate students between the ages of 18 and 47. It was hypothesized that students scoring lower on the Self-Efficacy for Writing Scale (SEWS) would interpret written instructor feedback as more “harsh” and less “positive and encouraging” than those scoring higher.

Keywords: self-efficacy, instructor feedback, writing, students
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The initial idea to develop this research paper came graciously through my work with Ball State University’s Honors College and Dr. Jill K. Walls through the Honors Undergraduate Fellowship program. After a year-long study observing students’ reception and beliefs regarding written feedback and writing ability, I found myself fascinated by the topic of feedback reception. My desire to assess feedback reception to self-efficacy, a psychological concept regarding beliefs about one’s own capabilities, came from my extensive experience as a teaching assistant within the Ball State University Department of Psychological Science. As a student observing the growth of other students along their path towards writing proficiency, I began to wonder what factors influenced students’ perception of the feedback they receive.

What began as a small survey became a massive undertaking of cross-disciplinary research in Higher Education, Educational Psychology, Psycholinguistics, and Cognitive Psychology. This began the initial two-month process in understanding current research regarding what feedback is, what makes it most effective, and how it is strategically utilized by instructors in secondary and post-secondary academic settings to facilitate positive learning outcomes in students. I constructed an Instructor Feedback Vignette using research-based best practices regarding effective feedback in higher education, attempting to measure students’ perceived harshness of instructor feedback.

Continuing from this research I began researching current measurements of writing self-efficacy (WSE), or a student’s beliefs regarding their writing capabilities, and became confounded by the misuse/false-parallels between self-esteem, academic self-concept, and self-efficacy in research. While self-efficacy is a measurement of beliefs regarding capability, self-esteem is a measurement of confidence regarding capability. This led to a series of comparisons,
detractions, and further clarifications that I made evident in my literature review for this project. I discovered the Self-Efficacy for Writing Scale (SEWS) by Bruning et al. (2013), a validated measure of WSE for students, and decided to use this as a correlate towards feedback perception.

My desire for this research utilizing the two measures was to find correlations between a students' WSE and their perceptions of instructor feedback, attempting to discern what influences students' perception of instructor feedback. To test this, I conducted a survey of 139 undergraduate students at Ball State University regarding their writing self-efficacy, their beliefs regarding writing and reception of feedback, and their interpretation of instructor feedback.

I believe that my thesis (1) identifies the difficulty that instructors (and students) face in understanding what constitutes implementation of effective and meaningful instructor feedback, (2) documents the similarities and underlying differences between multiple domains of student belief assessment (self-efficacy versus self-esteem versus self-concept), and (3) provides critical evaluation and reflection upon the role of feedback in academic settings, and how working to improve upon students' WSE may lead to improved writing proficiency and performance.

The challenges towards completing an interdisciplinary work of this size were many. It remains my sincere belief that further collaboration between individuals in educational and psychological settings must work to improve our understanding of feedback, the evaluation of its effectiveness, and improvement upon students' belief in their own capability. I stand firm in belief that education is our most precious resource to our development as a society. It is imperative that we work to understand and encourage students as not only learners of knowledge, but also themselves as teachers and advocates to ourselves, educational institutions, regarding best practices in academic environments.
Effects of Students' Writing Self-Efficacy on Interpreting Instructor Feedback

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Self-Efficacy is a widely researched psychological concept, spanning various academic disciplines (Bandura, 1977; 1997). It has been found to be related to the ability to perform tasks and assignments satisfactorily. Recent research has attempted to apply the concept of self-efficacy to student performance within academic domains, such as writing. The development of students' writing proficiency, and the improvement of grades, is linked to the feedback they receive from instructors (Hyland, 2000). However, a student's ability to interpret the feedback they receive can be altered by their personal reactions (e.g. decreased academic confidence) (Young, 2000). Little research exists investigating the relationship between students' writing self-efficacy and their effects upon the interpretation of instructor feedback.

Instructor Feedback

Engaging in the student learning process requires professors to act as a supplier of knowledge and a customer of academic discourse fueled by the student (Brady, 2013). This discourse is often initiated through feedback towards the student. However, various forms of feedback exist within the domain of student-centered assessment. Black & William (1998) have identified the fact that various definitions of instructor “feedback” exist, which they define as “…any information that is provided to the performer of any action about that performance” (p. 37). Sadler (2005) has summarized from existing educational literature that “students deserve to be graded on the basis of the quality of their work alone,” and “to know the criteria by which judgements will be made about the quality of their work” (p. 178).

The purpose of feedback varies within the academic world. Instructor feedback has been shown to be one of the most important predictors of student learning, but the effects of feedback are not the same across all types and formats (Hattie, 1999). Although the main purpose of
feedback is to improve student learning, there is a good deal of variation in the effectiveness of feedback (Hattie & Timperley, 2007). Despite its complexity and functionality, feedback is commonly misconstrued as a form of grading by both students and instructors (Fenwick & Parsons, 2009). However, feedback serves as an evaluative tool for students to comprehend their level of understanding on task performance (Hounsell, 1987). Additionally, feedback allows instructors to facilitate student development and task improvement in educational settings (Hester, 2014). A systematic breakdown of the instructor feedback process has been suggested by Alverno College Faculty (1994) wherein the instructor: (1) defines explicitly observable criteria for effective performance, (2) creates a stimulus, such as a task or assignment, that elicits student performance, (3) observes that performance to characterize it in view of the criteria, (4) judges the performance quality relative to those criteria, (5) shares the results of the judgement with the student, and (6) provides advice to the student for the purpose of improving subsequent performances.

**Written Instructor Feedback**

Educational trends imply that post-secondary institutions of higher learning prioritize writing proficiency as a crucial learning outcome for undergraduate students (Association of American Colleges & Universities, 2015). Dan Berrett from *The Chronicle of Higher Education* maintains that writing is a crucial way to “assess learning and ... [deepen] that learning,” (Berrett, 2012, p. A4). Instructors maintain a variety of roles in helping to achieve universities’ goals related to writing proficiency. A student’s ability to communicate effectively, both in writing and verbiage, is a core requirement in many academic disciplines and occupational fields. Instructors value the place of written feedback within academic discourse due to their ability to learn through practice outside of the classroom (Emig, 1977). Students continue to
identify assessment feedback as crucial to identifying their own strengths and weaknesses in their writing proficiency. In addition, written feedback enhances student motivation and is reported to improve future grades (Hyland, 2000).

Instructors in writing-intensive courses value writing proficiency by engaging in various roles across academic disciplines, especially regarding encouraging collaboration and correction in the feedback process (Chinn & Hilgers, 2000). Furthermore, studies have shown that students continue to demonstrate greater need for occupationally-oriented writing due to globalization and technological advancements within fields of study; the linguistic needs of students now transcend those of standard English grammar requirements (Monroe, 2003).

**Writing Across the Curriculum (WAC).** The concept of transferrable writing proficiency and discipline-specific writing competency has been termed “Writing Across the Curriculum,” or WAC. WAC is a commonly-adopted institutional philosophy that prioritizes a student’s ability to write proficiently in courses outside of composition and literature (National Council of Teachers of English, 2013). The WAC philosophy encompasses “Writing in the Disciplines,” or WID, which alternatively emphasizes the unique differences that exist within each academic discipline and the need to emphasize writing proficiency within each academic field (Monroe, 2003). WID gives students the opportunity to engage in “writing conventions within a particular area of study,” (Keifer, LeCourt, Reid, & Wyric, 2013). This indicates a need for writing skills to be transferable across fields of study, transcending traditional standards of English grammar and composition.

**The Effects of Written Feedback**

The ways in which students are assessed influence the quality of their learning (Sadler, 1983; Hyland, 2000). Previous studies suggest that most students form conscientious
interpretations of written instructor feedback, becoming intrinsically motivated to improve their writing proficiency (Higgins, Hartley, & Skelton, 2002). In addition, students hold serious concern for the quality of written feedback received, as feedback appearing “negative” can erode a student’s confidence in their writing proficiency, and their desire to improve their writing ability (Elbow, 1997; McGrath, Taylor, & Pychyl, 2011). The level of attention students pay to instructor commentary indicates a crucial need for instructor feedback to function as a tool for student learning (Higgins et al., 2002). In response to written feedback, when provided with model examples of written work versus receiving personalized feedback on their own written work, students report a preference for receiving personalized feedback to improve their own writing (Huxham, 2007). However, students perform significantly better when provided model answer questions, indicating that a “hybrid approach” that personalizes feedback and better explains instructor expectations may yield more favorable student improvement (Huxham, 2007, p. 601).

Facets of Effective Instructor Feedback

**Depth of feedback.** Performance-evaluative feedback must be understood in terms of depth of processing, meaning that feedback must be critical enough to allow students to process it on a more analytical level (Mastumura, Pattthey-Chavez, Valdes, & Garnier, 2002). Feedback is attributed as valuable when students must process it at a deeper analytical level due to its ability to span a greater range of performance tasks (i.e. transferability). This is because feedback that lacks depth is usually restricted to immediate performance assessment, meaning it cannot aid in improving student performance in other domains. It is observable that WAC and WID programs thrive off deeper performance feedback, as it allows students to improve writing competency across curriculums and within disciplines (National Council of Teachers of English,
2013; Monroe, 2003). Feedback that helps improve critical analysis has also been found to be favored by students (Lizzio & Wilson, 2008).

**Positive feedback.** It is crucial to include positive aspects of feedback to improve adverse effects of negative feedback on students’ self-esteem (Lizzio & Wilson, 2008; Lizzio, Wilson, Gilchrist, & Gallois, 2003). Researchers consistently assert that feedback is most effective when including both negative and positive components, causing students to become more likely to accept negative comments (Hyland & Hyland, 2001). Feedback that explains why mistakes have occurred, and provides guidance about improving future arguments, also appears more positive to students (Black & William, 1998; Lizzio & Wilson, 2008).

**Clarity of feedback.** Students in previous research have reported difficulty interpreting instructor feedback (Norton & Norton, 2001; Chanock, 2000). In Lea & Street’s (2000) student feedback interpretation study, students and tutors were found to hold implicit assumptions that changed their interpretation of comments from their intended purpose. Whereas the comment “evidence of some wider reading shown” was intended to imply that a tutor did not see enough evidence of ‘wider reading’ (i.e. outside readings brought into their assignment) upon analyzing the student’s writing, some students literally interpreted the comment as an indication that they had completed the ‘wider reading’ required (Lea & Street, 2000, p. 8). This demonstrates a need for assessment expectations to be explicitly defined (Lizzio & Wilson, 2008; Hounsell, 1987). Additionally, research has found that students report higher preference for feedback that is directed toward the task assessment rather than the student (Black & William, 1998; Orsmond, Merry, & Reiling, 2005).

**Justification of feedback.** Feedback that appears more ‘fair’ in the eyes of students includes providing appropriate explanations or justifications for grades, identifying why points
were deducted, and exchanging responses/discussions of feedback (Lizzio & Wilson, 2008; Whitington, Glover, & Harley, 2004). This consists of feedback that would aid in the completion of future assignments (e.g. non-contradictory and easy to comprehend) (Lizzio & Wilson, 2008).

**Factors Influencing Written Feedback Interpretation**

While the purpose of feedback varies between instructors within the academic world, students' perceptions of instructor feedback may be attributed to a multitude of internal factors. In the context of higher education, research indicates that students may express problematic reactions regarding their reception of instructor feedback (e.g. decreased academic confidence) (Young, 2000). Many intrinsic and external factors can influence a student's comprehension of written feedback. An instructor’s intention can become misconstrued by poorly constructed written feedback, generating a host of negative interpretations from the student (Chanock, 2000). Students may misinterpret comments, experience demotivation, or feel devalued due to poorly-written feedback (Higgins, Hartley, & Skelton, 2001; Chanock, 2000).

Students may express unfavorable reactions upon interpreting received feedback (e.g. decreased academic confidence) due to personal motivation issues (Young, 2000). Motivational problems can stem from a variety of factors, including the intellectual maturation of the student and previous academic experience (Perry, 1970; Ramsden 1992). In addition, the desire for instructors to deliver feedback in a timely manner may also influence the effectiveness it provides to students' motivation, as hastened delivery can depersonalize written feedback to students, causing student misinterpretation (Huxham, 2007).

**Self-Efficacy**

The concept of self-efficacy is well-documented within fields of psychological study. Singularly, efficacy is defined as “the power to produce an effect,” (Merriam-Webster, 2017).
Psychologist Albert Bandura (1977) defined self-efficacy as a person’s belief in their ability to succeed in specific situations or accomplish a task. Self-efficacy is described as a derivative of “efficacy expectations,” or a person’s belief that they can successfully execute a behavior required to produce a desired outcome (Bandura, 1977, p. 193). An individual’s perception that they have mastered a task affects their behaviors, influencing their choice of behavioral setting(s). Perceived self-efficacy directly influences an individual’s social behaviors; people tend to fear and avoid “threatening situations they believe exceed their coping skills,” while they will otherwise engage in activities or tasks when they judge themselves capable (p. 194). Additionally, these efficacy expectations determine the level of effort an individual will expend, and the longevity of their resistance, towards aversive experiences (Bandura, 1977; Bandura, 1997). There are four sources of efficacy expectations that affect an individual’s perceived self-efficacy:

**Performance Accomplishments.** This source of efficacy is based upon an individual’s “personal mastery” of a task (Bandura, 1977, p. 195). After performance accomplishments occur, task improvement transfers to both similar situations and activities that are substantially different from the original accomplishment (Bandura, 1977). This allows individuals to achieve a level of task performance that is generalizable, which may also be applied to different domains.

**Vicarious Experience.** This domain is opposite to that of performance accomplishments; vicarious experience is the source of efficacy derived from seeing “others perform threatening activities without adverse consequences,” which encourages an individual to persist in their own efforts (Bandura, 1977, p. 197). This allows individuals to persuade themselves to achieve mastery due to another’s ability to do so (i.e. modeled behavior) (Bandura & Barab, 1973). This also includes the provision of model examples, in addition to model behavior.
Verbal Persuasion. Verbal persuasion is used to lead individuals to the believe that they can cope with past failures and overwhelming experiences (Bandura, 1977). However, one may discern that verbal persuasion is less effective than performance accomplishments and vicarious experience because there is no "authentic experiential base" for them (Bandura, 1977, p. 198). It may be difficult to verbally persuade an individual to personal mastery in spite of previous failures and shortcomings.

Emotional Arousal. This occurs when an individual experiences stress or taxation that elicits emotional arousal, especially regarding information concerning one's personal competency (Bandura, 1977). Individuals that receive heightened emotional arousal become desensitized to stressful performance situations, causing "elevated levels of anxiety that far exceed the fear experienced during the actual threatening situation" (Bandura, 1977, p. 199). As with verbal persuasion, desensitization reduces avoidance behavior; modeling behavior reduces anxiety arousal to threats because of this desensitization, which improves individuals' perceived self-efficacy (Bandura & Barab, 1973; Bandura, Blanchard, & Ritter, 1969; Blanchard, 1970).

Self-Efficacy & Feedback

An individual's expectation that they are able to master a task may affect both initiation in and persistence towards a behavior (Bandura, 1977). Self-efficacy correlates with one's willingness to engage or persist through difficulties and distractions (Bandura, 1997, 2006). Individuals scoring higher in self-efficacy overall experience a variety of positive outcomes, such as lowered anxiety and improved performance, specifically regarding academic environments (Bong, 2006). Additionally, individuals scoring higher in self-efficacy experience greater learning capabilities, including improvement of academic performance when presented with feedback on task performance and assessment (Bong, 2006).
**Self-Efficacy versus Self-Esteem.** Within research regarding Higher Education and Educational Psychology, the term “self-efficacy” has been used interchangeably with “self-esteem.” The concept of academic self-esteem is largely based upon the work of Brockner (1988), which focuses on an individual’s perception of their own worth and confidence in regard to work and task performance. This varies from the construct of self-efficacy, which focuses on an individual’s perceived belief of their capability to perform a task or overcome an obstacle in response to measurable anxiety (Bandura, 1977).

Bandura (1997) addressed this confusion between the two: “It should be noted that the construct of self-efficacy differs from the colloquial term ‘confidence.’ Confidence is a nondescript term that refers to strength of belief but does not necessarily specify what the certainty is about. ... The terms [self-efficacy] used to characterize personal agency, therefore, represent more than merely lexical preferences,” (p. 382). This relates back to the gap in literature differentiating between a student’s perceived beliefs regarding their abilities to perform tasks (self-efficacy), and their confidence about their own self-worth in relation to their abilities (self-esteem) (Wang & Castañeda-Sound, 2008; Bong & Skaalvik, 2003; Gardner & Pierce, 1998).

**Self-Efficacy versus Self-Concept.** Educational Psychology research focuses on the idea of the “academic self-concept” of students. Self-Concept refers to the “cognitive and affective responses toward the self and is heavily influenced by social comparison,” (Bong & Clark, 1999, p. 139). By contrast, self-efficacy concerns cognitive judgements about an individual’s capabilities based upon achievement and mastery. Bong & Clark (1999) assert that because of the differences in measurement, self-efficacy maintains “superior predictive and explanatory utility in past research” when compared to self-concept research, which focuses more on
“correlational rather than on experimental data,” (p. 139). Self-concept is associated with self-esteem because of its similar focus on determining the motivation of students, and consequently predictors of student success thereof (Bong & Skaalvik, 2003). Variables such as race, gender, academic interest, course grades, or related factors that may influence students’ self-esteem in relation to their academic environment are usually compared to measures of students’ self-concept (Marsh et al., 2005; Trautwein, Lüdtke, Köller, & Baumert, 2006; Guay, Marsh, & Boivin, 2003; Bong & Skaalvik, 2003).

Bong & Skaalvik (2003) assert that while self-efficacy and self-concept both focus on mastery of experience, social comparison, and reflected appraisals, they differ significantly. The measures differ in terms of “integration vs. separation of cognition and affect, heavily normative vs. goal-referenced evaluation of competence, aggregated vs. context-specific judgment, hierarchical vs. loosely hierarchical structure, past vs. future orientation, and relative temporal stability vs. malleability,” (Bong & Skaalvik, 2003, p. 1). Additionally, they argue that self-efficacy is an active precursor of students’ self-concept, suggesting that self-concept research further develop its components and subprocesses to remove “[preoccupation] with normative ability comparisons in school,” (p. 1).

Self-Concept & Feedback. Within the context of Higher Education and Educational Psychology research, literature focuses on evaluating student’s receptions of instructor feedback regarding their academic self-concept. One notable study regarding differences in student reception of feedback and self-concept is by Craven, Marsh, & Debus (1991). Primary students who scored in the lowest three quarters of their class on academic self-concept received an intervention of internally focused performance feedback and attributional feedback, significantly
improving the students’ self-concept in target facets (e.g. reading and mathematics, school and general).

*Reception versus Perception.* Because of this conflation of terminology, current research focuses on the self-esteem (e.g. confidence) of students within learning environments (Osmanaga, 2014; McNair, 2004; Kususanto & Chua, 2012). Consequently, current empirical research focused on developing effective instructor feedback is based upon whether it alters the self-esteem of the students receiving it. Furthermore, most literature currently available focuses on students’ reception of feedback, not their interpretation of that feedback. Due to these factors, there is little information on what causes students’ interpretations of feedback to differ, especially regarding students’ self-efficacy.

**Writing Self-Efficacy (WSE)**

Bandura, Barbaranelli, Caprara, & Pastorelli (1996) identified that children’s self-efficacy beliefs contribute to scholastic achievement independently and by promoting academic aspirations and prosocial behavior. This contributes to reduced vulnerability, futility, and depression experienced by students, enabling them to succeed academically. In an academic setting, an instructor must provide written feedback to students as a tool to improve their own academic performance and writing proficiency, in addition to performing satisfactorily on written assignments. However, a student’s interpretation of written feedback may change due to internal factors (Higgins, Hartley, & Skelton, 2001; Chanock, 2000; Young, 2000). Demanding and unmotivating environments present a critical need for self-efficacy, such as being presented with writing tasks (Bandura, 1997; Bruning et al., 2013). Self-efficacy is critical during demanding task performances, when motivation is lowered; writing and composition tasks...
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require a great deal of intrinsic motivation and self-efficacy to complete at an acceptable level (Bruning et al., 2013).

**Previous Measures of WSE.** Despite confusion between the construct of self-efficacy and the measures of students' academic self-concept and self-esteem, research exists within Higher Education and Educational Psychology regarding self-efficacy and students' writing performance. However, this research tends to focus on students' self-efficacy in correlation with their writing performance (Rayner, Papakonstantinou, & Gleadow, 2016; Williams & Takaku, 2011). This has contributed to the gap in research regarding students' self-efficacy towards their own beliefs regarding the domain of writing, rather than correlating students' self-efficacy scores with their writing task performance.

*McCarthy, Meier, & Rinderer.* One of the first studies to empirically test WSE as a construct was carried out by McCarthy, Meier, & Rinderer (1985), in which an index of writing quality (focused on writing mechanics) was developed to judge 19 skills used by students in developing essays. McCarthy et al.'s WSE measure was focused on students' personal judgements of the degree of certainty they believed they could perform these 19 writing skills during writing.

*Shell & Associates.* Shell, Murphy, & Bruning (1989) followed this study by surveying college students on two subscales, task and component skills, to determine relationships between WSE, efficacy expectations, and students' writing achievement. Students then created writing samples which were independently rated and correlated to their WSE survey responses.

*Pajares & Associates.* Most current research on Writing Self-Efficacy (WSE) has been developed based upon the work of Frank Pajares' research beginning in the 1990's. Pajares' work has focused on the development of WSE as an independent construct based upon
Bandura’s (1977) four hypothesized sources of self-efficacy (efficacy expectations). Findings indicate that writing skills self-efficacy predicted student performance in essay composition, but not writing task self-efficacy (Pajares, 1994). Both Pajares’ & Associates and previous research indicate that writing self-efficacy measures focusing on basic writing skills positively correlate to a student’s writing proficiency (Pajares, 1994; Shell et al., 1989).

Zimmerman & Associates. Zimmerman & Bandura (1994) developed the Writing Self-Regulatory Efficacy Scale, which consisted of 25 items in which students rated their ability to plan and revise writing, respond to creative requirements, and self-manage their activities. Self-efficacy scores were found to predict students’ self-evaluation and confidence in earning higher grades. Zimmerman & Kitsantas (1999, 2002) found in subsequent studies that modeling and directive attention towards improving writing were effective in raising students’ self-efficacy in experimental interventions. This indicated that their WSE scales were not appropriate for use in generally assessing students’ WSE overall.

The Self-Efficacy for Writing Scale (SEWS). The Self-Efficacy for Writing Scale (SEWS) is a multi-factor scale measuring the writing self-efficacy of students derived from Bandura’s (1977) self-efficacy construct and three dimensions of writing identified through educational research (Bruning et al., 2013). The SEWS model provides independent information on WSE regarding meeting cognitive, linguistic, and self-regulatory demands (Bruning et al., 2013). Unlike previous WSE measures discussed, the SEWS generally assesses students’ WSE overall using three dimensions based upon the work of previous research (Bruning et al., 2013; Pajares, 2007; Shell, Colvin, & Bruning, 1995; Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 2007).
Ideation. The first dimension of the SEWS is based upon writers’ “beliefs about their abilities to generate ideas,” which they have termed ideation (Bruning et al., 2013). This is based primarily on Flower & Hayes’ (1984) writing process model, which portrays idea generation as an ongoing process that causes working memory to influence all aspects of one’s ability to write (Bruning et al, 2013). Ideation includes semantic knowledge and one’s ability to “generate the content and ordering of their thoughts,” (Bruning et al., 2013, p. 28; Cruse, 2004; Evans & Green, 2006).

Conventions. This dimension includes any given language’s standards for expressing ideas in writing, such as spelling, punctuation, capitalization, and sentence structure (Bruning et al., 2013). Because writing lacks contextual support, the process can be automatized or require conscious responses in which great effort must be expended (Graham, 2006). This causes self-efficacy for the execution of ‘writing conventions’ to vary (Bruning et al., 2013).

Self-Regulation. Self-regulation is a writer’s self-efficacy that they are able to direct themselves through the multiple facets and tasks of writing (Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 2007). Bruning et al. (2013) argue that in a writing self-efficacy scale, self-regulation is necessary for writers to generate productivity and manage anxieties that occur during the writing process, in addition to “having ideas to write about and command of writing conventions,” (p. 29).

The SEWS utilizes one of many potentially useful frameworks to measure writing self-efficacy. Bruning et al. (2013) found significant differences between students in higher-level and lower-level composition courses, which supports Bandura’s (1986) arguments that performance assessment in all domains (including writing) is the most effective way to raise an individual’s self-efficacy. Additionally, both middle- and high-school students’ responses indicated utility in
measuring each of the SEWS’ three dimensions separately, as responses within each dimension varied depending upon what writing-intensive course each student was enrolled in (Bruning et al., 2013).

The Present Research

Persistent conflation between self-efficacy, academic self-concept, and self-esteem have altered the focus of research on students’ WSE. Additionally, current research focuses on the development of effective instructor feedback in relation to students’ reception of that feedback regarding their self-esteem. Because of this, factors altering students’ interpretation of instructor feedback on written assignments need further examination. One such factor that may influence interpretation of instructor feedback is students’ WSE. The purpose of the present study is to examine the relationship between undergraduates’ WSE using the SEWS by Bruning et al. (2013) and their interpretation of instructor feedback on written assignments.

The anticipated relationship between self-efficacy and feedback interpretation is based upon cross-disciplinary research between findings on self-esteem, self-concept, and perceptions of feedback. Bandura (1997) noted that generalized ‘confidence,’ a measure of self-esteem, refers to certainty of belief, which is an aspect utilized in the construct of self-efficacy. Self-esteem has been found to significantly influence an individual’s perception of performance and feedback (Sargeant, Mann, Sinclair, Van der Vleuten, & Metsemakers, 2006; Jussim, Coleman, & Nassau, 1987; Kille, Eibach, Wood, & Holmes, 2017). Furthermore, high self-esteem has been found to act as a buffer towards negative feedback, enabling individuals to retain motivation through difficult task performance (Brown, 2010). Similarly, self-efficacy has been found to influence individual’s perceptions of various types of feedback (Dimotakis, Mitchell, & Maurer, 2017; van de Riddler, Peters, Stokking, de Ru, Ten Cate, 2009; Tolli & Schmidt, 2008; Narciss,
It is discernible that an individual's self-esteem in relation to their perception of written feedback would likely yield similar results when testing self-efficacy in relation to written feedback.

Although some studies have failed to find a significant positive effect of fully-developed feedback on students' writing performance, little research exists regarding the effects of perceived harshness of feedback on students' writing performance (McGrath et al., 2011). Self-concept, a domain measuring self-esteem in academic research, is comparable to the construct of self-efficacy in terms of mastery of experiences, social comparison, and both concepts reflect appraisals from instructors (Bong & Skaalvik, 2003). Self-concept has been found to influence individuals' perceptions of the harshness of feedback (Chen, Thompson, Kromrey, & Chang, 2011; McConnell, Rydell, & Brown, 2009). It is observable that the previously established relationships between self-esteem and feedback interpretation may also apply to self-efficacy and feedback interpretation. The current study proposed a relationship between students' writing self-efficacy and perception of instructor feedback.

It was hypothesized that there would be a negative relationship between students' cumulative score on the SEWS and perceived harshness of feedback on the Instructor Feedback Vignette. In other words, it was expected that the more self-efficacious students are with respect to their writing, the less they will tend to interpret instructor feedback as harsh. To test this hypothesis, data was collected from undergraduate students through an online survey.

Method

Participants

Participants were 139 Midwestern college students representing 23 academic majors enrolled in one of three writing-intensive social work courses at Ball State University. However,
data was used from only 124 of these participants due to blank or incomplete response forms. Instructors from seven sections of three eligible classes agreed to distribute an email invitation to their students, which contained a link to the online survey. Students were only allowed to participate once, even if recruited in multiple courses. All participants were required to be 18-years-old or older. The majority of these students were white ($N = 98$), female ($N = 109$), sophomores ($N = 46$), with an average age of 21 years old (see Table 1).

**Procedure**

If participants wished to take part in this study, they accessed a link in a recruitment email forwarded by their course instructor that redirected them to a survey on Qualtrics.com. In Qualtrics, participants first saw a consent form. After agreeing to participate, the participants reported their demographic information. Then, participants responded to questions regarding their self-reported writing performance. Next, participants were asked to respond to the instructor feedback vignette. Following the instructor feedback vignette, participants responded to the Self-Efficacy for Writing Scale (SEWS). Next, participants responded to the four-item Liking Writing Scale (LWS). To prevent priming effects, the tasks were always presented in this order.

After completing the survey, participants were taken to an anonymized link where they submitted their first name, last name, course number, and instructor’s name for five to 10 points extra credit towards their course grade as an incentive for either completing the survey or completing an alternative assignment of equal effort determined by the instructor of the course. The applied point value was determined by the overall points available in the course in which they were recruited, and adjusting to ensure equal percentage of distribution between courses. Students’ names were discarded after awarding extra credit for participation in the study.

**Materials**
An online survey was prepared using Qualtrics software and contained both fixed-response and open-ended questions. Students were asked to provide personal background information (e.g., gender, race) to better understand the sample and examine associations between demographic variables and other key variables under investigation. The online survey included the SEWS, the LWS, and student ratings of an instructor feedback vignette using Likert-scale responses. Additionally, students’ reported their perceptions and interpretations of written feedback, such as self-reported writing performance, details regarding the frequency of writing assignments, and writing assignment requirements.

Demographics. Participants were asked to provide basic demographic information including age, primary language, gender, and race. See Appendix A for all specific questions.

Self-Reported Writing Performance. Participants were asked to rate their written assessment performance and to provide descriptive information on the assignments and feedback they received. This was exploratory and descriptive with no associated hypotheses. See Appendix B for all specific questions.

Instructor Feedback Vignette. Participants were asked to read a short vignette of instructor feedback provided to a student. The vignette was constructed with positive and negative feedback, following research regarding what students interpret as effective feedback (Lizzio & Wilson, 2008; Black & William, 1998; Lea & Street, 2000; Hyland & Hyland, 2001). Participants were asked to then rate whether the feedback was “positive and encouraging” or if it included “harsh criticism,” which was reverse-coded. These items were averaged to reflect participants’ perceived harshness of feedback (PERHARSH). Participants were also asked to rate three other statements regarding their interpretation of the effectiveness of the feedback. These items were distractors from their emotional interpretation of the feedback and not used in the
computation of perceived harshness. Response options ranged from 1 (strongly agree) to 5 (strongly disagree), with 3 indicating a neutral response. The PERHARSH measure was found to have low reliability (2 items; $\alpha = .51$). See Appendix C for all specific questions.

**Self-Efficacy for Writing Scale (SEWS).** Participants were asked to respond to 16 statements regarding their writing self-efficacy indicating their confidence towards each on a scale of 0 (no confidence) to 100 (complete confidence). Although the SEWS can be divided into three subscales (*ideation*, *conventions*, and *self-regulation*), the mean score, using all 16 items, was used in all analyses for the present study. The SEWS was found to have high reliability (16 items; $\alpha = .90$). See Appendix D for all specific questions.

**Liking Writing Scale (LWS).** Participants were asked to rate four statements to provide information about the extent of their positive attitudes about writing. Response options ranged from 1 (strongly agree) to 5 (strongly disagree), with 3 indicating a neutral response. Two items were negatively worded and subsequently reverse-coded. A mean score was computed for analyses in the present study. These items were taken directly from Bruning et al.'s (2013) SEWS analyses. See Appendix E for all specific questions.

**Results**

**Preliminary Analyses.** The distributional properties of scores for key model variables were examined prior to hypothesis testing. Perceived harshness scores ($n = 116$) were computed into a composite variable (PERHARSH) and ranged from 1 to 4.5 ($M = 2.50, SD = .86$). Writing self-efficacy (SEWS) scores ($n = 112$) ranged from 0 to 99.69 ($M = 76.97, SD = 14.4$). Descriptive summaries may be found in Table 1.

**Hypothesis Analyses.** The initial hypothesis proposed a negative association between students' SEWS responses and their overall perceived harshness of feedback score. To investigate the
relationship between PERHARSH and SEWS, Pearson’s correlation coefficient was computed. The result was not significant, \( r = .01, p = .94 \) (see Table 2). This finding indicated that there was no correlation between a students’ score on the SEWS and their overall perception of harshness of feedback.

A multiple regression was run to predict perceived harshness of feedback from gender, age, class standing, ethnicity, and cumulative GPA. These variables did not statistically significantly predict perceived harshness of feedback, \( F(5, 106) = 1.125, p = .35, R^2 = .05 \) (see Table 2). All five variables did not add statistically significantly to the prediction.

Post Hoc Analyses. Due to the exploratory nature of the present study, post hoc analyses were conducted to explore possible relationships between variables related to writing and feedback (i.e., writing self-efficacy, perceived harshness, liking writing) and other variables collected as part of this study. To investigate the relationship between the SEWS and the LWS, Pearson’s correlation coefficient was computed. The result was significant and negative, \( r = -.40, p = .00 \). Recall that higher scores on the SEWS reflected greater writing self-efficacy, whereas higher scores on the LWS reflected a stronger dislike for writing. Thus, a negative correlation between these variables indicates that the higher a student’s writing self-efficacy, the more they report liking writing. To investigate the relationship between GPA and SEWS scores, Pearson’s correlation coefficient was computed. The result was not significant, \( r = .13, p = .16 \). To investigate the relationship between GPA and the LWS, Pearson’s correlation coefficient was computed. The result was not significant, \( r = -.06, p = .58 \).

Further post hoc analyses were conducted using Pearson’s correlation coefficient for six other exploratory questions within the survey, with several significant findings (see Table 3). SEWS scores were found to be statistically significantly negatively correlated with students’
average reception of feedback on written work ($r = -0.32, p < 0.01$), students’ overall rating of their writing skills ($r = -0.38, p < 0.01$), and students’ beliefs regarding the importance of writing skills ($r = -0.26, p < 0.05$). Recall that higher scores on the SEWS reflected greater writing self-efficacy, whereas higher scores on exploratory questions reflected stronger disagreement towards the question. Thus, a negative correlation between these variables indicates that the higher a student’s writing self-efficacy, the more positive the relationship is. Perceived harshness of feedback was not found to be statistically significantly correlated with any items for exploratory analyses.

Students were asked several open-ended questions to gain a better understanding of their perceptions and experiences with written assignments and instructor feedback. Specifically, open-ended questions assessed students’ perceptions of the quality and quantity of their written work, in addition to their use of instructor feedback. Responses were examined for common themes and to provide insights into quantitative findings. A noticeable trend within the data suggested that students who scored at or below average on the SEWS tended to have negative perceptions of themselves and their ability to write. For example, when asked for reasons why feedback is not used to improve their writing, one student responded, “I’m a lazy piece of shit.” Two other themes emerged regarding students’ decision not to use feedback to improve their writing, including insufficient feedback (“Very rarely have I received feedback on how to improve the paper”) and a sense of urgency to complete writing tasks (“I just want to get the assignment done”).

Most respondents ($n = 102$) indicated that they do use feedback to improve their writing. Several themes emerged from responses to this question, with the most common being that identifying why points were deducted motivated students to improve their writing on future
assignments. As one student explained, “I like being able to improve upon my understanding of the criteria that was given to me when I make an error.” In addition to reporting why they utilize feedback to improve their writing, many students also reported an absence of positive feedback from instructors. One student commented, “...praise always makes someone feel good.” In contrast, other students reported inconsistencies in the provision of complete feedback regarding why points were awarded or deducted. One student responded, “Sometimes you get ‘good job!’ and sometimes no response,” while another noted, “...the comments back will only reflect what I did correct so I never understand why I lost points.”

**Discussion**

Prior research has supported that a student’s self-efficacy may be applicable to domains that are demanding and un-motivating, such as completing writing tasks (Bandura, 1997; Bruning et al., 2013). Self-efficacy has been found to influence individual’s perceptions of feedback (Dimotakis, Mitchell, & Maurer, 2017; van de Riddler, Peters, Stokking, de Ru, Ten Cate, 2009; Tolli & Schmidt, 2008; Narciss, 2004). The purpose of this study was to investigate possible relationships between writing self-efficacy in relation to students’ perceptions of instructor feedback on written assignments. It was hypothesized that there would be a negative relationship between students’ cumulative score on the SEWS and perceived harshness of feedback on the Instructor Feedback Vignette.

Results suggested that students’ perceived harshness of instructor feedback was not associated with writing self-efficacy, meaning that the hypothesis was not supported. It is possible that the low reliability of the perceived harshness measure affected the results. The Instructor Feedback Vignette used in the current study had low reliability when measuring perceived harshness of feedback as a 2-item composite variable.
Previous research suggests that including positive and negative feedback increases a students' likeliness to accept negative comments (Hyland & Hyland, 2001). This may provide explanation as to why students perceived the positive and negative aspects of the vignette more neutrally, as the inclusion of positive feedback may have reduced students' initial perception of negative feedback within the vignette. Furthermore, the Instructor Feedback Vignette may have been constructed too broadly in attempting to incorporate all five items identified throughout interdisciplinary research as foundational for 'effective feedback' (Lizzio & Wilson, 2008; Lizzio, Wilson, Gilchrist, & Gallois, 2003). Rather than measuring each component individually, using one vignette to measure all five items may have reduced the liability of the measure used in the current study. Additionally, including only negative feedback in the Instructor Feedback Vignette may have increased validity by attempting to independently assess students' perception of the degree of 'harsh criticism' it contained.

One significant correlation found in the current study was between students' scores on the SEWS and LWS. The negative correlation indicated that as students scored higher on their writing self-efficacy, their enjoyment of writing increased as well. This is consistent with previous studies utilizing both of these scales that also found positive correlations between both measures (Bruning et al., 2013). As self-efficacy is a measure of students' beliefs regarding their writing capabilities, Bruning et al. suggest that students are more likely to view writing favorably when they maintain belief in their ability to not only write proficiently, but to improve upon their writing as well. This finding is beneficial to instructors in understanding that students' willingness to engage with both writing tasks and the feedback they are provided changes based upon their personal beliefs regarding their writing ability.
Within exploratory analyses regarding SEWS scores and perceived harshness of feedback, some statistically significantly negative correlations were found regarding students’ SEWS scores and exploratory questions (again, noting that negative correlation between these items indicates a positive relationship). Students’ average reception of feedback on written work was negatively correlated with SEWS scores, indicating that students’ holding greater beliefs regarding their writing capability are more likely to receive feedback on written work. Previous research has supported that individuals with higher levels of self-efficacy in multiple domains are more likely to seek feedback in multiple dimensions of work quantity and quality (Renn & Fedor, 2001; Dimotakis, Mitchell, & Maurer; 2017). As those with higher self-efficacy hold stronger beliefs towards their capabilities, one explanation towards greater reception of feedback may be that these students with higher SEWS scores seek out feedback more regularly than their peers, regardless of overall writing proficiency or performance. Implications of this finding for instructors are important in understanding that students’ desire or need for feedback may not be as well-expressed in students with lower writing self-efficacy, as their beliefs regarding their own writing capabilities may be diminished.

Students with higher SEWS scores were more likely to rate their overall writing proficiency higher, indicating that students with stronger beliefs in their writing capabilities rate their writing ability more favorably. As aforementioned, this may be due towards these students’ tendency to seek feedback and critiques on their written work more often, as written feedback has been found to positively influence academic and behavioral performance in students (Kaufman, Codding, Markus, Tryon, & Kyse, 2013; Fawcett & Oldfield, 2016). Within academic settings this finding bears importance regarding improving students’ belief in their
ability to write as a positive contributing factor towards their writing proficiency and academic performance.

Students SEWS scores were also found to correlate with their perceived importance of good writing skills. Recent research has identified that self-efficacy beliefs are related to not only views regarding the importance of writing, but positive writing outcomes (Prat-Sala & Redford, 2012). This further supports the notion that improving upon students' writing self-efficacy may serve as a catalyst toward improved writing proficiency and writing performance in academic settings.

**Limitations & Future Research**

While aspects of beneficial feedback have been identified through research in multiple fields (such as 'justification of points deducted' or 'positivity of feedback'), little research exists regarding best practices to incorporate them into written instructor feedback (Black & William, 1998; Lizzio & Wilson, 2008; Lea & Street, 2000). Further studies should work to establish examples of effective instructor feedback, and methods for use, in order to develop more reliable feedback evaluation tools.

As previously discussed, self-efficacy and self-esteem have been used interchangeably within educational psychology and higher education research (Brockner, 1988). While self-efficacy functions as a measure of beliefs regarding capability, self-esteem functions as a measure of self-worth and confidence regarding capability (Bandura, 1977). The majority of research regarding students' interpretation of feedback has focused on self-esteem, which functions as a measure of self-worth in relation to performance (Wang & Castañeda-Sound, 2008; Bong & Skaalvik, 2003; Gardner & Pierce, 1998). Utilizing measures of writing self-
esteem in relation to perceptions of instructor feedback may be another alternative for future studies to explore.
References


McNair, R. L. Student self-esteem and the looking-glass self: Perceptions of emotional support, role models, and academic success on a community college campus. *Iowa State University: Digital Repository.* Retrieved from http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1801&context=rtd


Table 1

Demographic Variables: Descriptive Statistics (N = 124)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
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<td>4.39</td>
<td>18–47</td>
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<td>1.60–4.0</td>
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<td>Male</td>
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<td>10.5</td>
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<td></td>
<td></td>
<td>20.2</td>
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<td></td>
<td></td>
<td>37.1</td>
</tr>
<tr>
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<td>Non-Hispanic White</td>
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<td>3.3</td>
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</table>

Is English your first language?

- Yes: 99.8
- No: 0.8
Table 2

Summary of Multiple Regression Analysis for Variables Predicting Perceived Harshness

(N = 124)

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<th>Variable</th>
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<th></th>
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<td>B</td>
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<td>β</td>
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<td>Cumulative GPA</td>
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<td>-.05</td>
</tr>
<tr>
<td>Gender</td>
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<td>.18</td>
<td>-.06</td>
</tr>
<tr>
<td>Age</td>
<td>-.01</td>
<td>.02</td>
<td>-.07</td>
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<td>Class Standing</td>
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<td>.09</td>
<td>-.13</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.10</td>
<td>.06</td>
<td>-.15</td>
</tr>
<tr>
<td>$R^2$</td>
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<td>.05</td>
<td></td>
</tr>
<tr>
<td>$F$ for change in $R^2$</td>
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<td></td>
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* $p < .05$. ** $p < .01$
### Table 3

*Student SEWS and Perceived Harshness Scores, Feedback Use, and Feedback Satisfaction: Correlations (N = 124)*

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<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<td>1. SEWS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PERHARSH</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. On average, how often do you receive feedback on written work?</td>
<td>-.32**</td>
<td>-.02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. In general, how satisfied are you with the feedback you receive on written assignments?</td>
<td>-.35</td>
<td>-.07</td>
<td>.29**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. How often do you use the feedback you receive to improve your writing?</td>
<td>-.12</td>
<td>.03</td>
<td>-.05</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Overall how would you rate your writing skills?</td>
<td>-.38**</td>
<td>.01</td>
<td>.12</td>
<td>.14</td>
<td>-.11</td>
<td></td>
<td></td>
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<tr>
<td>7. How often do you use formal resource provided on campus (i.e. the writing center)?</td>
<td>.03</td>
<td>-.02</td>
<td>-.06</td>
<td>-.18*</td>
<td>.20*</td>
<td>-.20*</td>
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<tr>
<td>8. How important are good writing skills?</td>
<td>-.26*</td>
<td>-.11</td>
<td>.22*</td>
<td>.03</td>
<td>.08</td>
<td>.26**</td>
<td>.08</td>
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Table 3

Continued

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<tr>
<td></td>
<td>76.97</td>
<td>2.5</td>
<td>2.09</td>
<td>2.16</td>
<td>1.75</td>
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</tr>
<tr>
<td></td>
<td>14.40</td>
<td>.86</td>
<td>.71</td>
<td>.77</td>
<td>.66</td>
<td>.70</td>
<td>1.08</td>
<td>.72</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01
Appendix A

Demographic Questions

1. What is your gender?
   a. Male
   b. Female
   c. Trans/Transgender
   d. Non-Binary
   e. Other 

2. What is your age (in years)? 

3. What is your class standing?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

4. What ethnicity are you?
   a. Non-Hispanic Black/African American
   b. Non-Hispanic White/European American
   c. Asian
   d. Hispanic
   e. Native American
   f. Pacific Islander
   g. Other

5. Is English your first language?
   a. Yes
   b. No

6. What is/are your academic major(s)? (Please no abbreviation) 

7. Current cumulative GPA: 

Appendix B

Self-Reported Writing Performance

For this block of survey questions, please reflect back to written assignments (e.g., papers, short essays) that have been completed in classes within the current semester. The following questions will inquire about experiences with those written assignments and the feedback received from the instructor. Answers to these questions should be based on overall experiences and not on specific assignments singularly.

8. On average, how often do you receive feedback on written work?
   a. Always
   b. Often
   c. Sometimes
   d. Rarely
   e. Never

9. When it comes to the content of instructor feedback, how often do you receive the following types of comments?

<table>
<thead>
<tr>
<th>Always</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive and encouraging feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Suggestions for improvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifying why points are deducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harsh criticism</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Technical (writing style, grammar, spelling, organization)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Feedback</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

10. In general, how satisfied are you with the feedback you receive on written assignments?
    a. Very satisfied
    b. Satisfied
    c. Neither satisfied nor dissatisfied
    d. Dissatisfied
    e. Very dissatisfied

11. Please explain why you are satisfied or dissatisfied below. __________________________

12. Do you use the feedback you receive to improve your writing?
    a. Yes
    b. No
13. IF YES, How often do you use the feedback you receive to improve your writing?
   a. Always
   b. Often
   c. Sometimes
   d. Rarely
   e. Never

14. IF NO, What is the main reason you do not use the feedback to improve your writing?

15. Overall how would you rate your writing skills?
   a. Highly proficient
   b. Very proficient
   c. Proficient
   d. Somewhat proficient
   e. Not proficient

16. How well do you tend to perform on all or mostly all your written assignments?
   a. A+ or A
   b. B+ or B
   c. C+ or C
   d. D+ or D
   e. F

17. How often do you procrastinate written assignments?
   a. Always
   b. Often
   c. Sometimes
   d. Rarely
   e. Never

18. How often do you use formal resources provided on campus (i.e. the writing center)?
   a. Always
   b. Often
   c. Sometimes
   d. Rarely
   e. Never

19. How important are good writing skills?
   a. Highly important
   b. Very important
   c. Important
   d. Somewhat important
   e. Not important
20. How often do you receive opportunities to submit multiple drafts/revisions of your written work to professors?
   a. Always
   b. Often
   c. Sometimes
   d. Rarely
   e. Never
Appendix C

Instructor Feedback Vignette

Please read the following paragraph and respond to the prompt below.

You are enrolled in an introductory psychology course at Ball State University. You have recently submitted a research paper to your instructor. After it has been graded, your instructor returns the paper with the following comments on the last page:

“This paper is a good start to your topic, but falls short in several instances. Your conclusion is unclear, and you need more research to support your hypothesis. There are no headings, your citations are incorrectly formatted, and many of your claims throughout this paper have not been substantiated with evidence. This paper was underdeveloped in many areas, including wording and sentence choices. However, you do have a good framework of ideas with some sources that can be re-worked into a proper research paper. I want to see where you can take this paper with a little more effort.”

Please rate the following statements regarding the paragraph as to whether you (1) strongly agree, (2) agree, (3) are uncertain, (4) disagree, or (5) strongly disagree below.

21. The feedback was positive and encouraging.
22. The feedback provided specific suggestions for improvement.
23. The feedback included harsh criticism.
24. The feedback identified why points were deducted.
25. The feedback was technical (i.e. focused on writing style, grammar, spelling, organization).
Appendix D

Self-Efficacy for Writing Scale (SEWS)

Please rate your confidence on the following statements, using whole numbers, from (0) no confidence to (100) complete confidence. Please type your response into the blank entry form below each statement.

26. I can think of many ideas for my writing.
27. I can put my ideas into writing.
28. I can think of many words to describe my ideas.
29. I can think of a lot of original ideas.
30. I know exactly where to place my ideas in writing.
31. I can spell my words correctly.
32. I can write complete sentences.
33. I can punctuate my sentences correctly.
34. I can write grammatically correct sentences.
35. I can begin my paragraphs in the right spots.
36. I can focus on my writing for at least one hour.
37. I can avoid distractions while I write.
38. I can start writing assignments quickly.
39. I can control my frustration when I write.
40. I can think of my writing goals before I write.
41. I can keep writing even when it's difficult.
Appendix E

Liking Writing Scale (LWS)

Please rate the following statements as to whether you (1) strongly agree, (2) agree, (3) are uncertain, (4) disagree, or (5) strongly disagree below.

42. I enjoy writing.
43. I don't like to write.
44. Writing is fun.
45. I feel bad when I write.
The Institutional Review Board reviewed your protocol on February 28, 2018 and has determined the procedures you have proposed are appropriate for exemption under the federal regulations. As such, there will be no further review of your protocol, and you are cleared to proceed with the procedures outlined in your protocol. As an exempt study, there is no requirement for continuing review. Your protocol will remain on file with the IRB as a matter of record.

Exempt Categories:

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<tr>
<th>Category 1</th>
<th>Research conducted in established or commonly accepted educational settings, involving normal educations practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.</th>
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<tr>
<td>Category 2</td>
<td>Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior</td>
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<td>Category 3</td>
<td>Research involving the use of educational test (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under category 2, if: (i) the human subjects are elected or appointed officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.</td>
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<td>Category 4</td>
<td>Research involving the collection of study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.</td>
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Category 5: Research and demonstration projects which are conducted by or subject to the approval of Department or agency heads, and which are designed to study, evaluate or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in methods or levels of payment for benefits or services under these programs.

Category 6: Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed which contains a food ingredient at or below the level and for a use found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

Editorial Notes:

1. Requested modifications do not alter the risk or review level.

While your project does not require continuing review, it is the responsibility of the P.I. (and, if applicable, faculty supervisor) to inform the IRB if the procedures presented in this protocol are to be modified or if problems related to human research participants arise in connection with this project. Any procedural modifications must be evaluated by the IRB before being implemented, as some modifications may change the review status of this project. Please contact (ORI Staff) if you are unsure whether your proposed modification requires review or have any questions. Proposed modifications should be addressed in writing and submitted electronically to the IRB (http://www.bsu.edu/irb) for review. Please reference the above IRB protocol number in any communication to the IRB regarding this project.

Reminder: Even though your study is exempt from the relevant federal regulations of the Common Rule (45 CFR 46, subpart A), you and your research team are not exempt from ethical research practices and should therefore employ all protections for your participants and their data which are appropriate to your project.

D. Clark Dickin, PhD/Chair
Institutional Review Board

Christopher Mangelli, JD, MS, MEd, CIP/
Director
Office of Research Integrity