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The Impact of Instructor Workload on the Use of Written Corrective Feedback

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Abstract

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Abstract

The personal and professional feedback instructors provide impact of their workload. Moore's theory of transactional distance was the theoretical foundation for this study. The purpose of this study to is to examine whether number of students, number of classes, and years of online teaching experience determine what written corrective feedback types (direct and indirect feedback) instructors use. There was a gap in literature concerning number of students, number of classes, and years of online teaching experience among university instructors. The questionnaire along with demographics were distributed to 40 university instructors who were members of an accredited university. The findings determined that one variable or a combination of variables did not determine what written corrective feedback (WCF) type instructors use in relation to workload. The findings may be used by university administration for positive social change in order to better sever faculty and students.

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Chapter 1: Introduction to the Study

Introduction

Online instructor workload (e.g. number of students, number of classes, and years of online teaching experience) is a critical factor in the type and amount of written corrective feedback (WCF) instructors use. Number of students, according to Orellana (2006) promotes the most significant challenge of the type of feedback (direct and indirect feedback) instructors use in online education. Despite Kenzig's (2015) assertion that instructors adapt to courses without proper training, optimal class size (Taft et al., 2011), and variations in the method of feedback and its effects (Van der Kleij et al., 2015) have implications that may impact the type of WCF instructors use. Hence, the number of students, number of classes, and years of online teaching experience affect the type of feedback instructors use.

Beyond these challenges, educational researchers continue to reveal a growing problem in the university workload domain. Instructors spend countless hours providing well organized and clearly explained written dialogue (Kenzig, 2015) to students. Increased workload and growth in higher education enrollments, may impact the method of WCF instructors use. The number of students could have a significant positive influence on the method of feedback type (Amrhein & Nassaji, 2010).

It is unclear if workload could negatively affect the type of feedback instructors provide to students (Gibbs & Taylor, 2015). The type of WCF of instructors use to help students understand where they went wrong and encouraging self-improvement through

their feedback may be impacted by workload (Gibbs & Taylor, 2015), and the perception that students pay more attention to the grade awarded rather than using the feedback provided (Anders, 2012). The online learning and teaching environment involve shifting from oral to written communication (Amrhein & Nassaji, 2010).

This chapter include summaries of the literature that I used to create an overview of number of students, number of classes, and years of online teaching experience as they relate to online instructor workload. In the problem statement, I highlight the relevant gaps in the literature regarding workload and method of feedback. I also highlight if differences exist in relation to current workload that determine the feedback instructors use.

Background

In well-documented extant literature, number of students, challenges associated with extensive amounts of dialogue to students, online written communication, and computer-based learning environments impact what type of WCF instructors use (Bailey, 2012; Eslami, 2014; Taft et al., 2011). For university instructors, class size had been positively correlated to feedback type (Amrhein & Nassaji, 2010; Orellana, 2006), with additional information linking experience in online teaching (Anders, 2012). Hence, a complication may lie between their workload views and the method of WCF they use to promote student learning outcomes (Gibbs & Taylor, 2016).

Regarding to the feedback process, Taft et al., (2011) observed the differential impacts of extensive amounts of dialogue and optimal number of students for achieving high levels of interaction. Such findings were later corroborated in a study conducted by

Bailie (2012) with evidence supporting the importance of feedback that enhanced student learning through a sense of instructor presence. Instructor feedback should increase a sense of connectedness and human interaction to students. Van der Kleij et al., (2015) revealed that the type of feedback instructors use and offer to students can increase students identifying and correcting errors and reduce misconceptions in feedback as a result of computer-based educational environments. Tichavsky et al., (2015) found that the physical separation remains a concern for the instructor in both communication and timely responses. Previous researchers have provided ample evidence in supporting WCF and the effects of different WCF types (e.g. direct and indirect feedback) have been examined in previous research (Amrhein and Nassaji, 2015). Despite the support of WCF, the different types and amounts of WCF continue to remain unclear, and research findings demonstrate varied results of WCF. Physical separation between instructor and student may become more challenging in creating a social, cognitive, and teaching presence, and thus should not compromise purposeful and consistent communication (Tichavsky et al., 2015).

In this study, I examined the impact of the current WCF that instructors use on number of students, number of classes, and years of online teaching experience and whether number of students, number of classes, and years of online teaching experience determine what WCF instructors use. For example, the number of students instructors have can create changes in the formality of communication as a result of physical separation of the online environment (Bailie, 2012; Conceicao, 2006; Tichavsky et al., 2015).

Problem Statement

Given the difference in feedback types among university instructors, the workload of the instructor may impact the type of feedback they provide to students (Anders, 2012; Amrhein & Nassaji, 2010). As reflected in a study conducted by Kenzig (2015), online education continues to substantially grow, and a sizeable portion of educators are engaging in online education. Over the past decade more than 25% of students have enrolled in higher education which is forcing many instructors to adapt to their online courses without proper or sufficient training (Kenzig, 2015). During 2008, more than four million students were enrolled in distant education with an increase of enrollments in 2010 to 29% more enrollments (Wladis et al.,, 2014). The increase in enrollments is contributed to online universities offering core courses (Wladis et al., 2014), that results in instructor concerns about the effectiveness of online course. These concerns not only enhance how effectively they can adapt to their online course (Kenzig, 2015), but also how instructors create a social, cognitive, and teaching presence (Tichavsky et al., 2015).

Further, challenges also exist in what WCF instructors want to use compared to the type of feedback they provide in relationship to their workload. Because the online learning environment is shifting from oral to written communication, instructors are faced with a challenge in regard to their workload and the ability to provide enough information to their students to be useful. Some instructors provide direct corrective feedback (CF) by providing the answer to the student, and thus not encouraging the student to adjust their performance. Other instructors provide indirect corrective feedback specifying

errors are made and encouraging students to adjust their performance. Yet other instructors prefer to provide a direct or indirect with the inclusion of metalinguistic feedback (Anders, 2012; Benson & DeKeyser, 2018; Eslami, 2014; Fenesi et al., 2014; Van der Kleij et al., 2015). A primary concern of university instructors is responding to extensive amounts of dialogue to students written assignment, that is, concisely communicating their feedback in written words so the student clearly understands what the feedback represents (Gallien & Oomen-Early, 2008). A study conducted by Orellana (2006) found the optimal number of students was 15.9 students for instructors to achieve high levels of interactional feedback. In contrast, Taft et al., (2011) found that a smaller number of students ranging from four to 12 students was seen as optimal for instructor to provide a method of feedback to the students in relation to their workload.

Instructors in asynchronous learning environments provide feedback through written communication to help the student reflect on their knowledge. Kenzig (2015) found a common mistake among new as well as seasoned instructors is students give more attention to the grade awarded rather than the feedback provided. In contrast, Blair et al., (2012) found that some instructors believe the method of feedback they use is helpful to students despite student beliefs; other instructors believe their method of feedback they use is helpful despite what students believe the content of the feedback should be (i.e. too much or not enough explanation). In educational research, this may be a complication for the nature of feedback, specifically the differences of views held by instructors (Blair et al., 2008; Gibbs & Taylor, 2015). The primary complication may lie in instructor views between what type of feedback they use that not only results in

students being able to apply the feedback effectively, but also results in students understanding the grade awarded by encouraging self-improvement from the feedback.

Purpose

The purpose of the current study was to further understand instructor use of feedback regarding the type of WCF, specifically direct and indirect feedback with goals of improving student learning. Blair et al., (2012) defined feedback as information provided by an agent (i.e. instructor) in regard to student understanding and performance and the consequences of student performance and crucial to improving knowledge. Although Anders (2012) suggested that feedback is the response to an assignment task, Kenzig (2015) suggested that feedback be not only organized and clearly explained, but also help the student close the gap between the present and desired performance. Amrhein and Nassaji (2015) suggested that a major problem lies in the perspective that WCF is provided, that is, often teachers may change the students' language to what they think the student is trying to say.

I examined whether current workloads have a greater impact on what WCF instructors use between the types of WCF (e.g. direct and indirect feedback). I also examined whether the workload variables (i.e. number of students and number of classes, and years of online teaching experience) determined the method of WCF provided by instructors in a post-secondary course.

Research Questions

Quantitative

In this study, I posed two specific research questions about the relevance between instructor workload and the method of WCF instructors use most in post-secondary courses:

RQ1: What percentage are the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?

H_1: The percentage of instructors use direct corrective feedback method on a written assignment in an online post-secondary course.

H_a: The percentage of instructors use indirect corrective feedback method on a written assignment in an online post-secondary course.

Research Question 2 (RQ2): Do methods of WCF differ, depending on instructor online workload?

H_1: Number of students is not significantly related to the method of WCF.

H_1: Number of classes is not significantly related to the method of WCF.

H_1: Years of online teaching experience is not significantly related to the method of WCF.

H_a: Number of students is significantly related to the method of WCF.

H_a: Number of classes is significantly related to the method of WCF.

H_a: Years of online teaching experience is significantly related to the method of WCF.

Theoretical Framework of the Study

I used Moore's theory of transactional distance as the framework for this study. Reyes (2013) stated that the theory of transactional distance is used to go beyond the setting of the traditional classroom to meet the needs of instructional teaching and student learning. Transactional distance in education typically occurs between teachers and learners in an environment of separation between teachers from learners. Separation may lead to special patterns of learner and teacher behaviors that may affect both teaching and learning. Moore's (1989) theory of transactional distance shows how the 'transactional' distance may result as sense of psychological separation due to a lack of verbal communication and instruction between geographically separated students and instructors. In addition to their pedagogical and administrative actions, instructors may need to enhance the focus of their interpersonal and contextual interactions demonstrated in the online environment to improve learning experiences. Bailie (2012) suggested that although this geographical separation between students and instructors exists, instructors should (a) initiate and maintain an on-going contact (i.e. proactive communication); (b) adapt communication to learning styles; (c) create channels of personalization (i.e. supportive rapport), and (d) generating impetus through communication (i.e. demonstrating high presence through regular interactions). Previous researchers found that greater instructional communication conveyed by instructors (i.e. primarily feedback), in relation to psychological and communication space is the transactional distance (Bailie, 2012).

This type of separation creates psychological and communication space for potential misunderstandings between the feedback of the instructor and the learner. It is this psychological and communication space that is the transactional distance. Moore's theory is useful in distance learning programs because it can be used to identify the impact of separation. The theory is useful for the explanation that may bridge the gap of understanding and communication between student learning and instructor (Reyes, 2013).

Nature of Study

Quantitative

This was a quantitative study. I used a logistical regression design and employed a closed web-based questionnaire to examine (a) what WCF instructors use on number of students, number of classes, and personal characteristics of years of online teaching experience, and (b) whether a variable or a set of variables in regard to instructor workload predict the method of WCF in a post-secondary course. Closed questions are designed using Likert-scale or multiple-choice responses. The questionnaire items are based on items from questionnaires used in previous studies by Amrhein and Nassaji (2010) and Sayyar and Zamanian (2015) with minor changes to wording and descriptors of the Likert-scale to increase clarity and accuracy. Similar WCF questionnaires were previously examined before Ferris (1995) and used in earlier research examining the use of WCF. Therefore, using these questionnaires are the base for this study should not only support validity, but also allow productive comparisons with previous research. To keep the focus on how instructor workload impacts the use of WCF is consistent with Moore's

theory of transactional distance (Reyes, 2016), and thus has a greater explanation to help bridge the gap of instructor feedback due to geographical distance.

Definitions of Key Terms

Corrective Feedback Types: Many educational researchers favor direct feedback because it allows students to focus more on the feedback resulting from the written work; whereas, other educational researchers favor indirect feedback method because students need a more detailed feedback to avoid misleading or confusing information (Baleghizadeh & Dadashi, 2011). Corrective feedback types not only provide students with an understanding of their performance, but also act as a motivational instrument for future work (Anders, 2012; Blair et al., 2012). Instructors should provide feedback to students that can help them learn faster, more effectively, and what areas need improvement. Blair et al. (2012) found that good feedback should include (a) clarifying goals; (b) facilitate reflection for the development of learning; (c) high quality of information; (d) provide motivation, and (e) helps the student close the gap between the present and desired performance.

Direct Feedback: Provided the correct information to the student faulty written work, thereby not encouraging the student to self-assess performance. Detection and correction become solely the responsibility of the instructor in this method of feedback. Mupinga and Maughan (2008) found that as the number of students increases so does the time commitment needed for quality of this method of feedback.

Feedback: Information provided by an instructor to student in regard the aspects of the understanding and performance of the student in response to assignment tasks

(Blair et al., 2012). Feedback is also the consequences of student performance and crucial to improving skill acquisition, knowledge, and achievement (Anders, 2012). Furthering the definition of feedback suggested that feedback may come from wide and/or various sources that help explain clearly and support the student through the learning process to close the gap between the present and desired performance (Kenzig, 2015). This quantitative analysis could provide additional information to instructors on the relationship between workload and the type of feedback they provide.

Indirect Feedback: Indicates errors have been made but does not provide the correct answer, thereby leaving the student to identify and correct performance. Previous studies by Anders (2012) and Blair et al., (2012) found this method of feedback is not only helpful in students adjusting performance, but also helps close the gap between present and desired performance.

Number of Classes: Responding to student writing is the core responsibility of the instructor, many faculty members are skeptical about the quality of online courses (Mandernach et al., 2012). Some online instructors perceive certain courses are less amendable for online learning and instructors become more critical of feedback as fulfilling responsibilities and/or lesser amounts of feedback to respond more positively (Ackerman & Gross, 2010).

Number of Students: The number of students maintained after the drop period and not necessarily reflecting the number of student enrollments set by the institution (Orellana, 2006). Increase in online education, institutions are increasing class size that results in higher student/instructor ratios increasing instructor workload impacting

feedback types. This results in concerns for instructors in the time commitment for extensive amounts of dialogue for students and may impact their method of feedback (Orellana, 2006).

Years of Online Teaching Experience: As an instructor becomes an online instructor, three faculty roles emerge: cognitive, affective, and managerial (Conceicao, 2006). A common mistake for both new and seasoned online instructors is not providing enough information through their feedback to assist the student. Some instructors taught a specific course for years may use the direct feedback assuming that students understand the material; whereas, new instructors may identify the course as a dual learning process, to help identify student concerns of their feedback.

Assumptions

For this research study, I assumed that all instructors have a background in online teaching from accredited universities and colleges. The assumption will be accounted for by obtaining data from submitted surveys from participant background eligibility. It is assumed that all participants have taught in the online format for a minimum of six months. It is assumed that all participants have communication skills that foster student critical thinking through feedback type. It is assumed that all participants have taught more than one class in the online learning environment. It is assumed that all participants have students' needs in mind while grading. It is assumed that all participants use various feedback types to promote successful learning outcomes. It is assumed the assessment tool used for the study is appropriate for the identified sample of instructors

with a minimum of six months online teaching experience. It is assumed that anonymity and confidentiality is preserved by utilizing data, and that the same data obviate potential ethical concerns.

Scope and Delimitations

The study examined the impact of instructor workload on WCF type of university instructors that taught a 10 to 12-week course. This area is chosen for the study because prior research identified adverse effects on feedback types but revealed a gap on the impact class size, number of classes, and years of online teaching experience on feedback types over a 10 week to 12-week period (Amrhein & Nassaji, 2010; Eslami, 2014).

The sample of instructors was chosen to represent online instructors in higher education (HE). Though this sample represents online instructors in HE, the study did not have unmeasured variables such as age, race, and gender due to the small sample size. Instructors that did not have a minimum of six-month online teaching experience are excluded from the study. Existing literature identified contrasting effects of feedback types; however, this study looked specifically at the impact of feedback types on class size, number of classes, and personal characteristics of years of online teaching experience on feedback types instructors use. The primary issue of validity was anticipating instructors completing the questionnaire provide correct information regarding their use of feedback type in relation to their workload.

Limitations

Limitations of the study pertained to problems related to the study design. For example, the universities where the data was gathered represented only the United States, and may not adequately represent the online instructor population use of feedback types in regard to instructor workload. Data was drawn from a specific population; therefore, the population is limited as a result of the study requirements (a) participants needing a minimum of six months online teaching experience and (b) low enrollment versus high enrollment of classes which may yield inaccuracies in outcomes. This study did include every geographic background, age bracket, race, and socioeconomic status to represented within the online instructors.

Significance

This study will help fill a gap in understanding instructor workload (number of students, number of classes, and years of online teaching), and the method of WCF instructors use between direct CF and indirect CF in online educational settings. Evidence in the available literature on the effects of the types of feedback in computer-based learning environments supports some general conclusions; however, they do not provide a complete picture on the interplay of feedback types and magnitude of the effects (Van der Kleij et al., 2015). Variations in the views of WCF types and the effects continue to remain a debate in higher education (Van der Kleij et al., 2015). Often as online instructor workload increases, the amount and type of feedback may change as the class becomes more demanding for the instructor (Amrhein & Nassaji, 2010; Orellana, 2006).

Research is unclear on the primary type of WCF instructors use. Few studies have researched the effects of workload, particularly number of students (class size) on the method of WCF used by instructors on written assignments in a post-secondary course in DE. This research addressed an under-researched area of instructor workload (number of students, number of classes, and years of online teaching experience) in regard to the method of WCF used by instructor on written assignments in a post-secondary course in DE. The results from this study will provide an insight into the views held by instructors to further understand their method of feedback regarding the type of WCF of online instructors in relationship to workload and whether workload variables predict their method of WCF they use.

Insights from this study should aid online instructors in awareness for adjusting their method of feedback based on workload that helps students adjust their performance more to the feedback. Institutions limiting the number of students per class may help instructors provide a more individualized method of feedback, increasing student potential and fewer dropout rates.

Summary

Chapter 1 provided a brief overview of existing literature in this studies topic area identifying a gap in the literature regarding the relationship between instructor workload and feedback types. Also reported in this chapter was a brief overview of Moore's theory of transactional distance for the theoretical framework of this study. The introduction presents an overview of the evidence-based online communication practice regarding feedback and the impact of instructor workload has on the method of WCF instructors

provide. Educational researchers continue to research on the impacts of instructor workload and focus on helping instructors provide feedback to students despite their workload. Number of students may be the greatest predictor in providing feedback that students understand (Orellana, 2006, Taft et al., 2011).

In Chapter 2, I provide a more comprehensive overview of the transactional distance theory, which provides a theoretical framework for studying the impact of instructor workload on the use of feedback types. Additionally, Chapter 2 reviews greater detail the inconsistencies in the extant literature regarding the impact of instructor workload on the use of feedback types.

Chapter 2: Literature Review

Introduction

In this chapter, I provide an overview of the search strategies I employed in this literature review. The purpose of this quantitative research was to go beyond the current literature to examine the impact of instructor workload (number of students and number of classes, and years of online teaching experience) on the method of feedback instructors provide. I used the dependent variables, direct and indirect feedback as measured by the independent variables number of students, number of classes, and personal characteristics years of online teaching experience to provide a better explanation of what method of WCF instructor use. I reviewed literature regarding instructor workload (number of students, number of classes, and years of online teaching experience) and relevant issues such as professors' content knowledge, specific time set aside for grading, and length of written assignments. This chapter begins with a description of the search strategy. The next section of this chapter reviews Moore's theory of transactional distance and is followed by a review of studies on the rise on higher education. I discuss study variables (i.e. number of students and number of classes, and years of online teaching experience) and give an explanation of the impact of instructor workload on the method of feedback instructors provide. Finally, I conclude with a gap in literature related to the variables of interest.

Literature Search Strategy

In the following review, I employed comprehensive search strategy that I could choose filters that exclusively selected peer-reviewed journals: Sage Journals, PsycINFO,

ProQuest Central, Education Resource Information Center (ERIC), and ScienceDirect. Key terms that I employed in this search were feedback, online, instructor, direct feedback, indirect feedback, class size, experience, transactional distance, feedback structure, graduate courses, and university.

Theoretical Framework

In the following theoretical review, I highlight the framework employed in the current study: Moore's theory of transactional distance (1997). Moore's theory is useful in this study as the theory is used to identify the impact of separation between instructor and student, and the type and amount of feedback provided.

Moore's Theory of Transactional Distance

Moore's theory of transactional distance goes beyond the setting of the traditional classroom to meet the needs of instructional teaching and student learning (Reyes, 2013). Transaction in distance education (DE) typically occurs between teachers and students in an environment consisting of physical separation between teachers from students. Physical separation may lead to a lack of understanding from written feedback that may profoundly affect both teaching and learning. This type of separation may create potential misunderstandings between the input of the instructor feedback and the student understanding the feedback meaning. It is this psychological and communication space that is the transactional distance. Moore's theory may be more flexible in its ability to support all distance learning programs by identifying the impact of physical separation. Moore's theory may also have a greater explanation that may bridge the gap of

understanding and communication between student learning and instructor corrective feedback (CF) (Reyes, 2013).

Tichavsky et al., (2015) found that most educational learning environments and motivation regardless of the delivery format is interaction. Physical separation remains a concern for both instructor and student in the area of timely responses and clear communication (Tichavsky et al., 2015). Instructors in online learning environments must establish a presence, to project their personal characteristics into the community thereby presenting themselves to the students as real people (Tichavsky et al., 2015). Because the physical separation between the instructor and student in the online environment may make it more challenging in creating social, teaching, and cognitive presence, it should not compromise purposeful and consistent communication (Tichavsky et al., 2015). The distance between student and instructor in online learning environments raises questions about how to assist student learning through instructor feedback.

Rise in Higher Education to Support Feedback

Online education enrollment has continued to substantially grow over the past decade, and a sizable portion of educators engaging in online learning (Kenzig, 2015). Hence, institutions are encouraging instructors in providing online learning opportunities to broaden the reach of stakeholders and, the training for instructors to offer online courses may not be the same for each institution (Blair et al., 2008; Kenzig, 2015). However vital it is that instructors develop courses that effectively meet learning outcomes, gaining the necessary skills to create online learning modules typically means

forgoing more discipline-specific opportunities of professional development (Kenzig, 2015). Between 2000 and 2001, 90% of 2-year and 89% of 4-year public institutions offered courses in distance education (DE) with 82% at the undergraduate level and 43% offering internet courses (Tallent-Runnels et al., 2006). In 2010, the number of students enrolled in online course rose 17% and an estimation of 4.6 billion students enrolling in online courses with 82% of these enrollments being undergraduate students (Tallent-Runnels et al., 2006). Student enrollment has increased per year in the United States at 33% yearly (Tallent-Runnels et al., 2006).

Online education has dramatically increased over the past decade with over 25% of students enrolling at institutions in higher education (HE) (Kenzig, 2015; Tallent-Runnels, et al., 2006). Consequently, many instructors that teach both face-to-face and online HE institutions adapt to their courses, developing feedback styles to meet the needs of their students in regard to their workload. From 2001 to 2011, the growth rate of higher education (HE) was 2.7% and the growth rate for online courses was seven times that at 17.3% (Kenzig, 2015). With the continued growth of online HE and no indication of online education tapering off soon, over 85% of educational institutions offer online courses, and 62% of those institutions offer complete academic programs (Kenzig, 2015).

Instructors in asynchronous learning environments must provide feedback that students use to reflect on their knowledge and be able articulate that knowledge from the course material and feedback to the instructor. This means instructors regularly read student postings, comment on student postings, and employ direct instruction consisting

of confirming understanding through assessment and explanatory feedback, diagnosing misconceptions of students, and injecting knowledge from diverse sources as personal experiences (Conceicao, 2006). Often as instructors provide feedback, they may change the students' language according to what they think the student is trying to say or should say. This results in a mismatch of ideas between what the student expressed and what the teacher assumes is correct (Black & Nanni, 2016). The effectiveness of WCF may also hinge on the students' usefulness of WCF. The amount or type of WCF the student finds more useful, the more likely the student will use and pay attention to the WCF. Previous research indicated WCF continues to have great conflict and uncertainty in regard to the effectiveness of type of WCF instructors provide. If the student does not agree with the feedback they may be less likely to use it (Amrhein & Nassaji, 2010; Black & Nanni, 2016. A common mistake for new online instructors as well as some seasoned instructors is not providing enough support through to allow the student to grasp the complicated concepts and apply the feedback more effectively (Kenzig, 2015). Another mistake both new and seasoned instructors make is the perception that students give more attention to the grade awarded rather than using the feedback provided (Anders, 2012). Other research suggested that instructors believe the method of feedback they provide is helpful to students; whereas, other instructors believe the method of feedback they provide is more helpful than students consider it to be (Blair et al., 2008). This further complicates the picture of feedback, specifically the difference in the views on the value of feedback communication (Blair et al., 2008; Gibbs & Taylor, 2015). The majority of the

complication may lie in what type of feedback instructors use, such as comments on the content or grammatical, surface, and structural errors (Black & Nanni, 2016).

Definition of Feedback and Online Higher Education

Definition of Feedback

Feedback "is information provided by an agent (e.g. instructor, parent, experience) regarding the aspects of the students understanding and performance; therefore, feedback is the consequences of the students' performance and crucial to improving knowledge, achievement, and skill acquisition" (Blair et al., 2012). Further, feedback definition suggested that feedback can come from wide and/or various sources (e.g. instructors, experience, and other students), and that the instructor feedback is a response to an assignment task (Anders, 2012). Kenzig (2015) suggested the content of instructor feedback be organized and explained clearly and supports the students through the learning process that helps the student close the gap between the present and the desired performance. However, for this to occur the student must be able to possess a concept of the goal being aimed at their actual performance to their desired performance (Anders, 2012; Blair et al., 2012).

Direct Feedback

For direct CF, the instructor provides the correct information for the errors in the students' faulty written work (Anders, 2012; Baleghizadeh & Dadashi, 2011; Eslami, 2014; Fenesi et al., 2014; Van der Kleij et al., 2015). Therefore, the detection and correction are entirely the responsibility of the instructor. This method of CF does not encourage the students to self-assess their writing. Number of students may impact this

method of CF because as the number of students per class increases, the amount of time set aside for detailed feedback may decrease (Baleghizadeh & Dadashi, 2011; Blair et al., 2015; Gibbs & Taylor, 2016; Kenzig, 2015; Koh, 2010; Taft et al., 2011). Time constraints are essential to feedback if the instructor wants the students to act upon the guidance from the feedback (Blair et al., 2015). Mupinga and Maughan (2008) found that the more time required per student feedback suggested that the number of students may impact the amount of time needed for quality feedback.

Indirect Feedback

Instructors providing indirect CF to the students specify the error made but does not provide the correction, thereby leaving the student to identify and correct the error. Previous research suggested this type of CF helps students in adjusting their performance to close the gap between the current and desired performance (Anders, 2012; Blair et al., 2012; Eslami, 2014; Fenesi et al., 2015; Van der Kleij et al., 2015). Therefore, the detection and correction are entirely the responsibility of the student. The number of years of experience with online teaching may influence what type of CF instructors provide to the students.

Corrective Feedback Types

The greatest concern in English speaking language (ESL) educational settings is the question of how to provide error correction or whether or not to provide feedback (Baleghizadeh & Dadashi, 2011; Eslami, 2014; Fenesi et al., 2014). Many strategies have been used by instructors. For example, instructors may provide partial corrections by marking some major errors on the students' paper rather than marking all the errors of

the students' paper (Kang & Han, 2015). Although some researchers favor direct feedback because direct feedback helps students focus on more serious areas of their work, other researchers favor indirect feedback because students need more detailed feedback so that they are not misled and mistakenly believe the rest of their writing is completely correct (Baleghizadeh & Dadashi, 2011; Eslami, 2014; Kang & Han, 2015). However, Black and Nanni's (2016) study revealed that teachers use indirect feedback most.

Online instructors should provide feedback that not only provides the students with the understanding of their performance, but also act as a motivational instrument for future work (Anders, 2012; Blair et al., 2012). Feedback plays a vital role in learning and development, and is considered as the most powerful, single moderator that enhances student achievement (Blair et al., 2012; Fenesi et al., 2014). The type of feedback instructors provide can help the students learn faster and more effectively when it is clear to the students' performance and areas of improvement. Previous research favoring direct feedback suggested this feedback reduces confusion and helps students sort out more complex errors (Benson & DeKeyser, 2018). A critical factor in determining what type of WCF is the students' knowledge, that is, is the student does not have a clear declarative knowledge, then direct feedback would be more effective. However, if the student does have a declarative knowledge, direct or indirect WCF may suffice.

Literature Review Related to Key Variables

The Impact of Instructor Workload

Before discussing the effects of what type of feedback instructors use on student performance, I define the different components that may influence the type of feedback instructors provide to the students current and desired performance. Feedback is defined as supporting the students through the learning process that helps the learner close the gap between the present and the desired performance (Anders, 2012; Blair et al., 2008; Cox et al., 2015; Fenesi et al., 2014; Kenzig, 2015). Jenkins et al., (2015) found that the effectiveness of instructor feedback may be the result of the different impressions instructors perceive about their type of feedback that impacts what and how much feedback they provide to students. In traditional classrooms, feedback is often orally communicated in a relatively short amount of time; however, in DE, instructors must concisely communicate their feedback in written words so that each student clearly understands what the feedback represents (Gallien & Oomen-Early, 2008; Orellana, 2006). Previous research has investigated the complexities of instructor feedback communication, particularly the type of written text provided to students, and emphasized the importance that students understand the meaning of the text and use the feedback they receive (Anders, 2012; Cox et al., 2015; Fenesi et al., 2014; Getzlaf et al., 2009; Joyner et al., 2014; Ley & Gannon-Cook, 2014).

Feedback has continued to be the center of discussion about the effectiveness of the types of feedback in asynchronous learning environments during the past decade. Many instructors have differing perceptions of the value and purpose of their previously

used feedback which may be part of the problem. Some instructors believe that the students continue to give more attention to the grade rather than the content of the feedback; whereas, other instructors believe the students give more attention the comments rather than the grade (Anders, 2012). This may further complicate the value of the type of feedback of instructors in the area of the pressure in favor of grade inflation and lowering standards of the course (Kingsley & Sharon, 2014). Existing evidence suggest that students have a greater tendency in misinterpreting the feedback comments in a different way than the original views of the instructor because the feedback provides overtly negative, disparaging comments rather than critical comments (Anders, 2012; Fenesi et al., 2014; Koh et al., 2010). Often instructors may change the students language to what they believe the student is trying to say or what they think the student should write (Amrhein & Nassaji, 2010). This often creates misunderstandings between the instructor and student. Another problem lies in that students only do not understand the meaning the WCF on their papers, but also do not know what they are expected to do with the WCF. Another concern is whether students find the type of WCF useful, that is, what students find most useful, they may be more likely to pay more attention to the WCF corrections (Amrhein & Nassaji, 2010).

Impact of Number of Students

Number of students is defined as the number of students per class maintained after the drop period and does not necessarily reflect the number of students initially enrolled or the limit of students set by the institutions (Orellana, 2006). Institutions have been witnessing an increase in number of students per class resulting in higher

instructor/student ratios that in turn increased the grading load for instructors. This further complicates the ability of instructors to provide an individualized feedback due to the instructors' workload resulting in less time for instructors to write detailed feedback, and less opportunity for dialogue pertaining to the content feedback. A main concern of online instructor workload is the number of students due to the extensive amounts of written dialogue from the students (Orellana, 2006). Online number of students per class may affect the instructors' method of WCF on students' written assignments.

A study conducted by Orellana (2006) found the average online number of students of a class size was 15.9 graduate students and seen as both average and optimal by instructors for achieving a high level of interaction for a method of feedback. Taft et al., (2011) presented study summaries that suggested smaller number of students in relation to class size ranging from 4 to 12 students was optimal for the method of WCF instructors use. Taft et al., (2011) found that in many institutions small class size benefited considerably; whereas, in other institutions small number of students was either disadvantaged or not beneficial. Many states have adopted a class reduction program limiting the number of students to 15 students to generate more effective instructor feedback to student writing (Ackerman & Gross, 2010). However, size reduction was not a factor for other institutions because of the differences in school contexts and/or if the number of students' effect is negative in a considerable proportion of the school (half of the school).

Differing levels of feedback seem to be mixed in that students that received more feedback were likely to feel comment were unfair; whereas, other students that received

low feedback were more satisfied with their performance. However, the greatest concern is that instructors should be aware about the emotions they arouse by the feedback they provide (Ackerman & Gross, 2010). The inconsistencies of the number of students have not been thoroughly discussed, and thus have not gained a good understanding about the variability of the effects of class size (Taft et al., 2011). The idea that the number of students can impact which method of WCF the instructor uses between the amount and type they use remains a debate in educational research (Taft et al., 2011).

Previous research is unclear on a significant relationship between instructor number of students and the method of WCF type (direct and indirect feedback) instructors use in relation to workload (Amrhein & Nassaji, 2010; Gallien & Oomen-Early, 2008; Taft et al., 2011; Orellana, 2006). Specific research-based determinants of the number of students are not sufficient enough to support a standardized enrollment recommendation for all online number of students of class courses (Taft et al., 2011). However, Qui et al., (2012) suggested to overcome the problems (i.e. perception of information overload) appropriate number of students should be set in order to ensure minimum critical mass for participation to reduce overload, reach goals associated with collaborative learning, and make it easier to establish social presence and encourage greater interactivity. Previous studies of the number of students of online classes for online courses suggest to help overcome problems associated with instructor overload encourage future research for optimal number of students of a class for quality education. According to Qui et al., (2012) optimal number of students of a class "must be

sufficiently large to encourage activity, but not so large that the sense of connectedness is lost" (p. 425).

Impact of Number of Classes

Online instruction has emerged as an alternative to face-to-face instruction. An instructor plays a vital role as a facilitator and teacher in several classes they teach, and thus important for the instructor to make thoughtful comments to student writing that can stimulate high order thinking of students (Arslanyilmaz & Sullins, 2013). Responding to student writing is a core responsibility of any instructor (Laflen & Smith, 2017). Instructors that teach more than one class have higher demands in instructor presence. Further, as instructor presence increases, it makes students feel more comfortable about their writing and gives them direction during discussions and greater navigation for task related feedback (Arslanylimaz & Sullins, 2013). It is worth noting that an important that instructors should establish trust and comfort between them and the students (Elison-Bowers et al., 2011). However, this may be difficult for instructors that teach large classes and/or multiple classes because of the challenges in establishing a community with so many students (Elison-Bowers et al., 2011). Therefore, communication from online instructors to students can become overwhelming as it includes the overall number of students per class taught (Elison-Bowers et al., 2011). Although communication of larger classes can become overwhelming, it is necessary that instructors provide communication guidelines to students that includes expected response times for feedback of graded papers, emails, and phone conversations. It is also important that instructors continue providing timely responses and/or feedback to student to avoid discouraging

students higher order thinking and trust. In search of explanations for faculty resistance to online education, lack of structured classrooms, and fear that students teach themselves, faculty may perceive certain courses as less amenable for online learning and more credibility for courses deemed as acceptable in online format (Mandernach et al., 2012).

Instructors of online courses play a crucial role in student construction of knowledge by scaffolding for each class they teach. Not only has online education had a subsequent growth that transcended geographical boundaries, but also has instructors reframing the content and rethinking traditional methodology practices for each class taught (Schnetter et al., 2014). Online instructors must choose from a learning management system (LMS) that provides a platform to support distance education and support teaching for their classes (Schnetter et al., 2014). It is estimated that instructors spend 20-30 minutes responding to each student of each of the classes they teach (Ackerman et al., 2017; Laflen & Smith, 2017). Previous qualitative research highlighted the differences in the ways that online instructors perceive a student response and found a not entirely reliable comparison of instructor's perception of responses to actual responses (Laflen & Smith, 2017). Instructor presence not only determines student expectations for the courses they teach, but also the quality of interaction in these courses taught (Moore, 2014).

Some previous research indicated that the quality of interaction was more important than the quantity; whereas, other research indicated frequent online instructor, more instruction and feedback, and more responsive to students (Moore, 2014). The act

of providing feedback in course programs is not to alerts students to their strengths and weaknesses of their work, but also allows students to assess their performance and make improvements on future work (Ackerman et al., 2017), which may be overwhelming to complete for larger classes (Elison-Bowers et al., 2011). Critical feedback seems to be twofold in that on one hand, instructors may want to provide more critical feedback as part of fulfilling their responsibilities, but on the other hand, students may want a lesser amount of feedback in order to respond more positively (Ackerman et al., 2017). Previous literature did not reveal much discussion of instructor evaluation in online courses (Tallent-Runnels et al., 2006). In any course, managing student assignments, assessing student learning, and providing feedback are all key factors.

Impact of Years of Online Teaching Experience

The literature describes the instructors' role in higher education using various terms and perspectives with the most common descriptor found in literature is facilitator (Conceicao, 2006). When facilitators become virtual instructors three faculty roles emerge: cognitive, affective, and managerial. The cognitive role is connected to the learning process, thinking, and storing of information. The affective role is influenced by the relationship between instructor and student. The managerial role relates to the course and class management (Conceicao, 2006). This can create changes in the instructor's persona as a result of formality of communication and lack of spontaneity while interacting with students. Formality communication is directly related to the precision of instruction provided to students. Previous studies by Anderson et al., (2001) found a different perspective on the role of the instructor in that instructors must be more

transparent and explicit in planning. In addition, supported tasks encountered by the instructor can change the role of the instructor including facilitating discourse. This implies that instructors regularly read student postings, comment on student postings, and employ direct instruction that consist of confirm the students understanding through the provided assessment and explanatory feedback, addressing misconceptions students may have, and injecting knowledge from diverse sources (i.e. suggested readings) and personal experiences (Conceicao, 2006).

Summary and Conclusions

Various factors of online instructor workload as number of students, number of classes, and personal characteristics of years of online teaching experience may influence the use of WCF types. A study by Orellana (2006) found that the average occupational course study (OCS) was 15.9 with results indicating a strong positive correlation between class size (CS) and OCS. Further, respondents perceived that a smaller OCS was needed to allow for moderate and higher levels of interactive qualities of instructors in their online courses (Orellana, 2006). In a more detailed analysis of the data, 23% of respondents perceived the OCS should be greater than the CS. Out of the 23%, 73% of instructors taught courses with an actual CS less than or equal to the OCS of 15. Out of these courses, 74% were perceived to be highly interactive as statistics courses (Orellana, 2006). Although available research demonstrated that online teaching has major implications related to the role of the instructor (tasks, planning, delivery of instruction), the literature is mostly concerned with the outcome of conventional wisdom, personal experiences, and expert opinions of the research (Conceicao, 2006).

Chapter 3: Research Method

Introduction

A growing problem among university instructor workload in the United States is providing feedback to students in relationship to their workload (Anders, 2012; Kingsley & Sharon, 2014). I conducted the current study in an effort to investigate three areas of inquiry (number of students, number of classes, and years of online teaching experience) to determine the method of feedback. The method of WCF instructors use may be dependent on the number of students, number of courses, and years of online teaching experience. Given the well-documented instructor workload (number of students, number of classes, and years of online teaching experience) exhibited by an increase in online higher education nationwide.

The purpose of this logistical regression quantitative design was to examine the impact of instructor workload on the views instructor hold on the method of WCF (i.e. direct and indirect feedback) they use. The independent variable is instructor workload (number of students, number of classes, and years of online teaching experience), and the dependent variables direct and indirect feedback are measured by closed questions. In this chapter, I provide a detailed overview of the sample under analysis, in addition to the procedures for sampling, recruitment, participation, data collection, operationalization of constructs, and instrumentation. Also presented in this chapter are the research questions, hypotheses, and statistical tests used.

Research Design and Rationale

Adhering to the tradition of quantitative design, I used a logistical regression analysis to describe what method of online instructor's WCF (e.g. direct and indirect feedback) instructors use. As described in Chapter 2, previous research studies described the different impacts on the method of WCF instructors use and the workload variables that may predict what type of WCF instructors use (Amrheim & Nassaji, 2010; Black & Nanni, 2016; Sayyar & Zamanian, 2015). Based on previous research results, a logistical regression approach can help identify the method of WCF instructors use they in a post-secondary course.

1. What percentage are the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?
2. Do methods of WCF differ, depending on instructor workload?

To answer these research questions, I report results from a logistical regression analyses from quantitative questionnaire responses, followed by a *t* test analysis to test the null hypothesis that variables can predict continuous outcome as feedback types. As maintained by Field (2015), simultaneously adding predictor variables into the equation as a means of identifying the variable with the greatest strength of the relationship between predictor and criterion can explain the extent that each predictor variable contributed to the relationship. Field maintains that a *t* test is also based on ratio of explained variances, that is, if the value of *b*-value is significant and the predictor variable the researcher gains confidence the predictor variable contributes significantly to

the value of the outcome. The methodological approach is expected to provide sufficient analysis of the current research questions.

Methodology

Population

The initial target population for the study is a minimum target sample size of 43. Amrhein and Nassaji (2010) surveyed a sample size of instructors ($n = 31$) and found significant relationships between instructors using indirect WCF most and number of students. Sayyar and Zamanian (2015) surveyed a sample size of instructors ($n = 28$) and found a significant relationship of instructors using direct WCF and number of students most. Amrhein and Nassaji (2010) surveyed a sample size of instructors ($n = 21$) and found significant relationships of instructors using indirect WCF and number of students most. Cohen (1988) suggests the effect size should be .02 (small), .15 (medium), and .35 (large). Sayyar and Zamanian (2015) found little differences between the views of the use of WCF with both students and teachers using direct feedback most. However, Norouzan and Farhani (2012) found a significant discrepancy between student understanding and knowledge. Cohen's $f^2 = .15$ with the standard parameters for statistical power of .80, $p = .05$ is detectable with a sample size of 43 using a logistical regression model with three continuous, normally distributed independent variables for what online instructors WCF use in regard to their workload. I presented my survey to Walden participant pool website, Facebook online teaching groups, and Reddit. Participants registered in the participant pool before locating my study and completing my survey via Survey Monkey.

Sampling and Sampling Procedures

Recruitment methods can dramatically influence sampling variability, and thus the researcher must decide which sampling method is most effective in yielding the results that supported the research inquiry (Frankfort-Nachmias & Nachmias, 2008). Hence, the researcher determines how precise they want their sample results to be, how the results are analyzed, and whether the sample size is satisfactory for one variable is adequate for the other variables. I employed a convenience sampling method in the current study—a nonprobability, specifically-based selection when the researcher does not have a way of estimating the representative of the population sample will be (Frankfort-Nachmias & Nachmias, 2008, p. 168). In the current study, one may argue that university professors possess the most accurate awareness of their inherent challenges associated with graduate-level writing perceptions of workload (number of students and number of classes, and years of online teaching experience). Instructors are assumed to hold significant value of the use of WCF (e.g. direct and indirect feedback) provided to students based on instructor workload.

Sampling Procedure

Frankfort-Nachmias et al., (2015) argued it is critically important in establishing a distinguishable sampling frame, implicating that the lack of a clear sampling frame can result in errors in sampling frames that can not only produce valid empirical outcomes, but also reflect inaccuracies in the population. Researchers must ensure a correspondence between a sampling frame and the sampling population in order to evaluate the sampling frame for potential problems. Kearns (2016) identified two

orientations of teaching: teacher-centered, content oriented and student-centered. Much of the role of instructors is changing as they move from face-to-face to online teaching or as a shift from teaching-centered "*sage on the stage*" to student-centered "*guide on the side*" model (Kearns, 2016). Many virtual instructors have to rethink face-to-face teaching roles in order to adapt to teaching virtual learning environments (Badia et al., 2014). Instructor experience surveys of how online teaching affected classroom teaching reported that 90% of instructors agreed that development and teaching online courses provided an opportunity to reflect on teaching (Kearns, 2016). However, more than 80% believed experience in online teaching would improve teaching, structure of online classrooms, organization, and thoughtfulness (Kearns, 2016).

Sampling Frame

Frankfort-Nachmias et al., (2008) argued the critical importance of distinguishing a sampling frame is to avoid potential problems that may result in the ability to produce valid empirical outcomes. Because the population, sampling stages, and actual selection (Frankfort-Nachmias & Nachmias, 2008, p. 165) are influenced by the accuracy of the sampling design, the researcher establishes a distinguishable sampling frame that will produce valid empirical outcomes. In the current study, the criteria for participants include a minimum of 6 months online teaching experience at graduate level of various courses, being efficient in computer skills, and belonging to an accredited university. Participants not considered for the study only teach in a face-to-face education, and thus excluded from the study.

Recruitment, Participation, and Data Collection Procedures

Recruitment procedures

After the Institutional Review Board (IRB) granted permission for the study, Walden will distribute a notice describing the study to the participant pool, and I will post a link for the study in Facebook online teaching groups, and Reddit. Volunteers received a direct link containing the informed consent and a survey URL to a site.

Informed consent provisions

Informed consent process includes a thorough overview of the potential risks and benefits associated with the preceding participation in the online survey. As participants accessed the survey URL, they were immediately directed to the informed consent page. Once the participants reviewed the informed consent, they were directed to the survey portion. In the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association [APA], (2010), pursuant to Section 8.02 (a), the informed consent process explicitly the participant of the purpose of the research study, his or her right to decline or withdraw from the study, limits to confidentiality, participant incentives, and contact information if questions or issues arise during the study. In addition, pursuant to Section 8.02 [b] (APA, 2010) I fully informed the participants of the nature of the study and the nature of participation (i.e. non-compensatory).

Data Collection Method

I employed a logistical regression to analyze data from the quantitative questions addressing the method of WCF of online instructors use and compared against means, standard deviation, and correlations to identify if the predictor contributes to the outcome.

This type of survey process had a significant reduction in the cost and time compared to paper surveys. Amrheim and Nassaji (2010) and Black and Nanni (2016) inspired this study that attempted to investigate how instructors method of WCF types in an attempt to further explain what method of WCF instructors use. Previous research identified possible number of reasons for the discrepancies of measured effectiveness of WCF such as students may not understand the reasons of the WCF they received, and another possibility is teachers may change the language according to what they think the student wants to or should say. Additionally, students may not pay attention the WCF they receive because it is not in the format they find most useful (Black & Nanni, 2016).

Indirect feedback constituted low-levels of scaffolding by instructor that use neither edits nor comments to regulate student learning. Rather, the instructor highlights errors and allows the student to correct them. Direct feedback constitutes a high-level of scaffolding by the instructor as they provide both edits and comments to regulate student learning. The purpose of my study was to describe what type of WCF online instructors use.

Practical Considerations Regarding the Use of Web-Based Surveys

Current research reveals a problem in web-based surveys if coverage error exists when there is a mismatch between the population investigators want to sample and the population that has access to the internet (Matteson et al., 2011). However, web-based surveys are becoming especially useful to professional associations (i.e. colleges and universities) as much of the university based instructors spend more time at computers working, and are more likely to complete surveys online (Matteson et al., 2011). In

addition, not only can web-based surveys improve the quality of data but also improve the ease of data analysis which could easily improve the validity of the results (Matteson et al., 2011). Web-based surveys can also be purported as the means of quickly collecting data from large sample groups at minimal costs (Greenlaw & Brown-Welty, 2009). Cost rates for paper-based surveys averaged $4.78 and yielded an average of 42% response rate; web-based surveys averaged $0.64 and yielded an average of 52% response rates (Greenlaw & Brown-Welly, 2009). An additional factor associated with the cost with survey administration is the time required for data entry. Time required for paper-based surveys averaged 39 hours to complete while web-based surveys are downloaded in digital format for analysis reducing errors in inputting responses (Greenlaw & Brown-Welty, 2009) by directly transferring information, expediting collection, data analysis, and reporting data (Wyrick & Bond, 2011). Taking into consideration the dramatic shifts in computer technology in modern science research since the 2000s (Matteson et al., 2011), I anticipated the web-survey method to elicit the greatest outcome in the study.

Considerations Pertinent to Participant-Researcher Communication

APA ethical standards (2010), Section 8.08 specifies the researcher is obligated to grant participants access to post-study research outcomes. If deception is in an IRB approved component of the experimental methodology, the researcher must take immediate measures in disclosing all misconceptions regarding the nature and outcome of the study (8.08[a], APA, 2010). The current research study did not use any deceptive approaches, threaten psychological harm to participants, and did not use a follow-up

study; the participants of the study were encouraged to report any adverse effects or events that arose at any time during participation of the study. However, if any effects or events did arise during the study, the results of such events would have been discussed as considerations for future research.

Instrumentation

In the current study, I employed a survey instrument containing a 14-item questionnaire from Amrhein and Nassaji (2010) and Sayyar and Zamanian (2015). The first item, 1a-d are determined quantitatively using dichotomous responses from the questionnaire where participants rate what method of WCF on a yes/no format they use, and Items 2 –11 will elicit demographics. Research question 2 is matched with item 1a-d. For item 1, a refers to indirect, b refers to indirect, c refers to direct, and d refers to direct. Survey question 1a and b are designated as "Yes"- used, and 1 c and d are designated as "No"- not used. The questionnaire items were based on items from questionnaires used in previous studies by Amrhein and Nassaji (2010) and Sayyar and Zamanian (2015) with minor changes to wording and descriptors of the Likert-scale to increase clarity and accuracy. Similar WCF questionnaires were previously examined before Ferris (1995) and used in earlier research examining the use of WCF. Therefore, using these questionnaires as a base for this study should not only support validity, but also allow productive comparisons of previous research. Previous research provided ample evidence in support of written corrective feedback such as the different types of WCF (e.g. direct and indirect) and examined in previous studies (Amrhein & Nassaji, 2010; Black & Nanni, 2016). The uncertainty of the effectiveness of the method of WCF

continues to be problematic between instructors and students, that is, as instructors correct errors, they often change the students meaning to what they think the student wants to or should say and often students do not understand the meaning or what to do with the WCF on their papers.

The purpose of the study examined whether instructor workload (number of students, number of classes, and years of online teaching experience) impacted what method of WCF instructors use. Beta coefficients values compared the differences between expected frequencies for instructor workload (number of students, number of classes, and years of online teaching experience) regarding online instructors method of WCF types. The study will examine the types of what WCF online instructors use. Quantitative data is collected from closed-ended questions as yes/no items. Data were analyzed through a *t* test, identifying beta coefficient values through a chi-test to test the null hypothesis that the beta coefficient value is 0 or the beta coefficient value is significant from 0, that is, the predictor variable contribute to the outcome. Results of the two research questions will be discussed in the discussion section of the study.

Question 1a – 1d, dichotomous method of WCF of the questionnaire are determined quantitatively where respondents rate what type of WCF they use from dichotomous yes/no responses. For this study, "No" means that participants did not use this the method of corrective feedback; whereas, "Yes" means participants did use this method of corrective feedback. Therefore, beta coefficients values from participant responses regarding their method for those questions are observed for frequencies and then compared across instructors indicating a lower beta coefficient value is indicative of

direct feedback and higher beta coefficient value significant from 0 is indicative of indirect feedback. I examined the beta coefficient value of responses to each question (e.g. higher beta coefficient value from 0 is indicative of indirect feedback and lower beta coefficient value is indicative of direct feedback) to determine if the beta coefficient nulls the hypothesis. For example, an instructor with a few years of online teaching experience may use indirect feedback because they do not want to correct all errors to discourage a student; whereas, an instructor with several years of online teaching experience may use indirect feedback because students want to know the correct form.

Item 1a – d of the dichotomous questionnaire examined what method of WCF participants use. Participants will rate their responses No = do not use and Yes = do use for each type of feedback as well as a *t* test results to demonstrate significant differences between responses. Participants that select 1a or 1b were identified as using the indirect feedback method and participants that select 1c or 1d were identified as using the direct feedback method. A *t* test showed the significance of each predictor and beta coefficients will show the magnitude of predictions for the differences in regard to their use of WCF. Further, when compared on a *t* test, the beta coefficient value from a chi-test may show a significant variation in beta coefficient values across samples. For example, if a participant selects 1a or 1b, this would be indicative of indirect feedback; whereas, if a participant selects 1c or 1d this would be indicative of direct feedback. This quantitative approach is not to determine whether a specific view held by instructors is correct but rather to further understand their workload in regard to the use of their WCF.

I obtained permission to use adapted questions prior to IRB approval. The questionnaire is not only to determine whether a specific view held by instructors were correct, but also to further understand their use of feedback regarding the type of WCF, specifically direct and indirect feedback with goals of improving student learning in regard to their workload.

When viewed through Moore's theory of transactional distance lens, the purpose of the study was to describe instructor usefulness of feedback within the virtual learning environment. Closed questions were intended to explore what WCF method instructors use in regard to their workload.

Restatement of Research Question and Hypotheses

RQ1: What percentage are the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?

H_1: The percentage of instructors use direct corrective feedback method on a written assignment in an online post-secondary course.

H_a: The percentage of instructors use indirect corrective feedback method on a written assignment in an online post-secondary course.

RQ2: Do methods of WCF differ, depending on instructor online workload?

H_1: Number of students is not significantly related to the method of WCF.

H_1: Number of classes is not significantly related to the method of WCF.

H_1: Personal characteristics of years of online teaching experience is not significantly related to the method of WCF.

H_a: Number of students is significantly related to the method of WCF.

H_a: Number of classes is significantly related to the method of WCF.

H_a: Personal characteristics of years of online teaching experience is significantly related to the method of WCF.

Threats to Statistical Conclusions and Validity

External Validity

The primary aspect of external validity that must be kept in mind is that the term refers to generalization of findings. For example, the external validity of the study related to a descriptive frequency is selecting volunteers that represent the population that scores are normally distributed. Computations of percentiles ranks directly from raw score, and thus make no assumptions about distributions scores (Greene & Salkind, 2014).

Internal Validity

The internal validity of a study refers to the study's ability in determining whether an outcome makes a difference or whether there is sufficient evidence to support the claim (Creswell, 2014; Frankfort-Nachmias et al., 2015). For this study, descriptive frequency is used to determine the beta coefficient value for what type of WCF instructors use in regard to workload. There is a chance this design may increase the risk if internal validity of the dependent variable against the same independent variables; however, there are always different factors that may jeopardize internal validity of a research design. For example, if class size changes from one semester to the next of the same instructor, this can impact outcome changes.

Construct Validity

Construct validity refers to how well the instrument logically and empirically correlated the concepts and theoretical assumptions they employed (Frankfort-Nachmias et al., 2015, p. 134). This study was not exposed to construct validity as hypothesis guessing by participants, researcher expectations, and bias experimental designs. However, the study may have been exposed to a threat of construct validity whereby the theory is difficult to establish special characters of separation in the online learning environment and to distinguish whether feedback outcomes occurred because of psychological and geographical separation of communication between the instructor and learner.

Operationalization of Constructs

Feedback Types

While Moore (1997) described transactional distance to which distance learning scenarios of separation between teachers and students can lead to gaps in communication, a psychological space of potential misunderstandings between instructor behaviors and learners, Falloon (2011) discussed the importance of dialogue and course structure use computer-mediated communication in e-learning scenarios. Falloon (2011) argued a primary concern of instructors to students is communicating information efficiently that may be impacted by larger class size and lengthy time commitment and/or course type and class size in relation to personal characteristics years of online teaching experience. Because of the separation between instructors and students, structuring content to teaching strategies and methods of assessment requires a level of communication

between instructors and learners. Therefore, dialogue is necessary to determine that structure, and thus the amount and degree of structure and dialogue varies for different class sizes, teaching philosophy, and subject matter (Reyes, 2013). Hence, as dialogue increases, transactional distance decreases and as structure increases, transactional distance increases. While Falloon (2011) asserts dialogue varies for different class sizes, Orellana (2006) posits that different online courses have different interactive qualities and both social and instructional messages are exchanged between entities in the class to which messages are both carried and influenced by resources employed.

The role of WCF in educational learning has been an issue to both researchers and practitioners over the past decades (Park et al., 2015). Much of the research on WCF has focused on the effectiveness of the different types of feedback, that is, the degree of effectiveness and whether the feedback is provided direct or indirect. Instructors that support indirect feedback argue it encourages the student to engage in guided-learning and problem-solving activities resulting in greater learner accuracy over time (Park et al., 2015). Other instructors that support the direct feedback argue that students benefit more because it reduces confusion and helps the students resolve certain complex errors. The ability of adhere to a feedback routine despite interference by workload commitments and responsibilities may strongly reflect the type of feedback provided by instructors. In accordance with the theory of transactional distance, this type of separation may create a greater psychological and communication space of potential misunderstandings between the feedback of the instructor and the student.

For the purpose of clarity, I found it necessary to distinguish between instructor workload and the type of feedback provided in the online learning environment. Should instructors spend hours of correcting student errors in their writing, employ a specific feedback on treatable errors whenever appropriate, or provisions of feedback based on instructors' careful evaluation of student prior learning experience, and the amount of knowledge that different students bring to the classroom? It is also important to take into consideration the varied learning contexts of different instructors and their ability to make use of the different types of feedback being mindful not to deprive students of the valuable opportunity to self-correct their own errors and allowing students to process their type of feedback (Park et al., 2015).

Workload

Crews et al., (2008) suggested that although separation exists in the virtual learning environment, instructors should establish a routine, create feedback templates or rubrics, adopt a course development model, and provide specific instructions on assignments. In addition, invite students' feedback at the close of the course, be prepared to make formative decisions throughout the course, and conduct multiple evaluations during course revisions. As reported by Nysse (2014), the primary issue of instructors is how they manage their online teaching, balance their workload, and maintain their quality of life. As previously discussed, a noteworthy distinction should be made in regard to the positive (psychological) and negative (communication) transactional distance. Where the psychological distance refers to the separation that may lead to special patterns of student and teacher behaviors, the communication dialogue refers to alternating statements,

interactions or series of interactions that are both continuous and developmental leading to improved understandings of the student.

Given the need for potential uncertainty, confusion, and indecision experienced by instructors of the type of feedback they provide to students in relation to workload, I focused the study exclusively on the perceptions that resulted on communication, not psychological in distance education. In addition, new instructors need to manage their time, so their time does not manage them; therefore, use time-saving strategies of existing courses to manage their workload. Hence, instructors in virtual separation need to be organized and disciplined in order to distinguish between work and personal life while being flexible in the virtual learning environment (Nysse, 2014). It is worthwhile noting that because of the separation that creates a psychological and communication space of potential misunderstandings, to reduce the perceived workload of online instructors, they may need to do work before the course begins which can ameliorate the perceived workload (Nysse, 2014). In the study, I analyzed data via logistical regression from answers collected from the quantitative questionnaire.

Summary

In Chapter 3, I discussed a quantitative logistical regression design of the current study and the rationale for the researchers use of a quantitative approach with a logistical regression to analyze data. This method ultimately yielded the best descriptive analysis for the findings presented in the upcoming chapters. Data collection procedures were conducted using a statistical analysis via SPSS v.23.0 (IBM, 2013): logistical regression analysis that examined the mean differences and significant beta coefficient values in

number of students, number of classes, and personal characteristics years of online teaching experience scores as they related to the method of WCF (direct and indirect feedback) types. Finally, ethical protections were placed to protect the welfare of participants and opportunities for participant-researcher communications served as a primary role for participants and the greatest component of the research study.

`Chapter 4: Results

Introduction

The purpose of this nonexperimental quantitative study was to examine the impact of instructor workload on the type of feedback provided in an online post-secondary course. Specifically, the study investigated two research questions:

1. What percentage are the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?

2. Do methods of WCF differ, depending on instructor online workload?

In the first hypothesis, I inquired what typical WCF method do instructors use on a written assignment between direct and indirect feedback in a post-secondary online course. For the second hypothesis, I stated there is no significant difference of instructor workload (number of students, number of classes, and years of online teaching experience) on the method of WCF. The hypotheses were tested using a logistical regression. This chapter focuses on the instructors sampled and provides an overview of the design and procedures, and finally summarizes the results and analyses.

Overview of the Study

Previous researchers explored how the factors that influenced the type of WCF instructors use while providing feedback to students. This study was designed to examine the effects of the number of students, the number of courses, and years of teaching experience on the type of WCF provided to students in a post-secondary online environment. The sample consisted of 40 participants: 28 women and 12 men. As presented in Table 1, the mean average number of students in all courses combined was

M = 46.15 (*SD* = 37.13), the mean average number of all courses was *M* = 2.57 (*SD* = 1.39), and the mean average of personal characteristics of years of online teaching experience was *M* = 8.33 (*SD* 6.48). All participants answered a survey questionnaire, adapted by Amrheim and Nassaji (2010) and Black and Nanni (2016) that included the direct and indirect feedback types. Data were collected via Survey Monkey to the degree in which participants viewed the number of all students, number of current courses taught, and personal characteristics of years of teaching experience in a post-secondary online environment as it pertained to WCF.

Table 1

Means and Standard Deviation of Predictor variables

Measure	Mean	SD
Number of all Students	46.15	37.13
Number of Courses	2.57	1.39
Years of Online Experience	8.33	6.48

Data Collection and Demographics of Sample

Data Collection

The survey portion of the study were conducted online via SurveyMonkey and the participation pool of Walden University. Instructors registered for the participation pool of the study and volunteered from social media groups such as Facebook online teaching groups and Reddit. Per IRB regulations, I was not permitted to solicit online instructors directly. I was allowed to post the study link in Facebook online teaching groups and

Reddit for participants to choose to complete my survey. Participants completed the survey voluntary from Walden participant pool, various Facebook online teaching groups, and Reddit.

Demographics

Forty participants volunteered for the study and data were recorded via Survey Monkey. The sample consisted of ages 27 years to 67 years pf age. The mean age of the participants was $M = 48.28$ ($SD = 9.74$). Participants were asked what their level of teaching experience between graduate, undergraduate, both. The mean average level of teaching experience was $M = 1.67$ ($SD = .69$). Participants were asked if they had administrative duties. The mean average administrative for duties was $M = 1.50$ ($SD = 0.51$). Participants were asked how many years of face-to-face teaching and for online teaching experience. The mean average of face-to-face teach experience was $M = 7.70$ ($SD = 6.54$), shown in Table 2.

Table 2

Means and Standard Deviation

Measure	Mean	SD
Age	48.28	9.74
Level of Teaching	1.67	.65
Administrative Duties	1.50	.51
Face-to-Face Experience	7.70	6.54

Data Analysis Results and Major Findings

Data Analysis

The study examined how of number of students, number of courses, and years of online teaching on WCF. Forty online instructors participated in the study. A mean comparison on the three predictor variables used a *t* tests indicated that number of current courses ($M = 2.57$, $SD = 1.39$) were non-significantly lower than number of students ($t(37) = -1.425$ $p = .16$, $d = -.57$). Years of experience ($M = 8.33$, $SD = 6.48$) were also non significantly lower than number of students ($t(37) = .08$, $p = .94$, $d = .03$). The number of students ($M = 46.15$, $S = 37.13$) was significantly higher than number of courses and years of experience ($t(37) = .60$, $p = .55$, $d = .24$) in predicting the typical methods of WCF instructors use on written assignments between direct and indirect feedback in post-secondary online classes, shown in Table 3.

Table 3

Summary Statistics by Predictor Variables and T-test results

	Total Sample		Indirect		Direct		*t*-test		
Measure	*M*	*SD*	*M*	*SD*	*M*	*SD*	*t*	*df*	*d*
Number students	46.15	37.13	44.84	35.04	53.88	47.74	.60	37	.24
Number courses	2.57	1.39	2.77	1.38	2.00	1.31	-1.425	37	-.57
Years experience	8.33	6.48	8.53	6.89	8.34	4.95	-.078	37	-.03

Major Findings

I examined the direct effects of each of the predictor variables on instructor workload. A logistical regression analysis were conducted in which number of all students, number of current courses, and years of online experience were the predictor variables. Classifications were impressive, with 96.8% of indirect feedback and 12.5% of direct feedback predicted, for an overall success rate of 79.5%. The results for the full model were non-significant (χ^2 (3, N = 40) = 4.785, p = .19), indicating that the set of predictor variables reliability did not distinguish direct and indirect feedback from instructor workload. The variance of WCF for the model was moderately large (Nagelkerke R^2) = .181.

Table 4 shows the regression coefficients, (β), Wald statistics (*W*), odds ratios (*OR)* and 95% confidence intervals for odds ratios for each of the predictor variables. Comparing direct groups coded as 1 against indirect groups coded as 2 on significant predictors, indicated number of courses (β = -.852, W = 3.204, p = .07, OR = .43) was non-significantly related to WCF representing a small effect size. That when the number of courses increased by one, the odds of the typical methods of WCF instructors use on written assignment between direct and indirect feedback decreased 57% times less likely to use a typical method of WCF than those teaching one course. The odds ratio for years of experience (β = .016, W = .050, p = .82, OR .984) was non-significantly related to the typical methods of WCF instructors use on written assignments between direct and indirect in a post-secondary class. Indicating that as years of teaching experience changes from year to year, the method of feedback changes 1.0% from the previous year of

teaching experience. The number of students (β = .021, *W* = 2.495, *p* = .11, *OR* = 1.021) was non-significantly related to feedback type - Indicating that as the number of students increased the typical methods of WCF instructors use on a written assignment between direct and indirect feedback in a post-secondary class changes slightly or about 2.0% less likely to use a typical method of WCF. Although the three predictors were non-significant, the effect size (*ORs*) for each predictor variable was small (1.44 = small effect). Results from the logistical regression analysis indicated that the number of current students and years of teaching were related to the decrease likelihood in changing a typical method of WCF instructor used on written assignments in a post-secondary online class. The number of courses increases the a typical method of WCF instructor used on written assignments in a post-secondary online class. The confidence intervals for predictor variables cross 1; therefore, are not reliable predictors of the typical methods of WCF use on written assignments between direct and indirect feedback in a post-secondary online class.

Table 4

Logistical Regression Results

Measure	B	S.E.	Wald	*Df*	*P*	*OR*	95%*CI*	*for OR*
Number of Students	.021	.013	2.495	1	.11	1.021	.995	1.048
Number of Courses	-.852	.476	3.204	1	.07	.427	.168	1.084
Years of Experience	-.016	.072	.046	1	.83	.984	.854	1.134
Constant	-.244	1.065	.053	1	.819	.783		

Summary of Findings

Based on the findings from a sample of (n = 40), the typical method of WCF instructors use on written assignments between direct and indirect feedback in a post-secondary online class is slightly but non-significantly dependent upon the number of students and number of courses. The years of experiences is non-significantly dependent on the typical methods of WCF instructors use on written assignments between direct and indirect in a post-secondary online class. Results from the logistical regression analysis indicated that the number of students and years of experience are related to decreased likelihoods of the typical of WCF methods instructors use on written assignments between direct and indirect feedback in a post-secondary online class, depending upon instructor online workload. The results also indicated that number of courses are related to increased likelihoods of the typical methods WCF instructors use between direct and indirect feedback on written assignments in a post-secondary online class, depending on instructor online workload.

Research Question 1

What percentage are the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?

H_1: The percentage of instructors use direct corrective feedback method on a written assignment in an online post-secondary course.

H_a: The percentage of instructors use indirect corrective feedback method on a written assignment in an online post-secondary course.

Descriptive statistics analysis results indicated that 96.8% of instructors surveyed use indirect feedback as the typical method of WCF on written assignments in a post-secondary online course. The results also indicated that 12.5% of instructors surveyed indicated they use direct feedback as the typical method of WCF on written assignments on post-secondary written assignments.

Research Question 2

Do methods of WCF differ, depending on instructor online workload?

H_1: Number of students is not significantly related to the method of WCF.

H_1: Number of classes is not significantly related to the method of WCF.

H_1: Personal characteristics of years of online teaching experience is not significantly related to the method of WCF.

H_a: Number of students is significantly related to the method of WCF.

H_a: Number of classes is significantly related to the method of WCF.

H_a: Personal characteristics of years of online teaching experience is significantly related to the method of WCF.

A means comparison using t-test found no significant difference between number of students $t(37) = .60$, $p = .55$, the number of courses $t(37) = -1.425$, $p = .16$, and years of experience $t(37) = -.078$, $p = .94$; therefore, there were no statistical difference to reject the null hypothesis. Findings did not support the hypothesis that instructor WCF differ, depending on instructor online workload; therefore, could not reject the null hypothesis.

Results indicated that the number of courses was non-significant and positively related to the typical methods of WCF, depending on instructor online workload. Results

also indicated the number of current students and years of online teaching experience were non-significantly and negatively related to the typical methods of WCF, depending on instructor online workload.

Exploratory Analysis on WCF on Instructor Workload

Although the method of WCF between direct and indirect feedback were the primary analysis of the study, it is possible that other contributing factors, other than the factors examined in the study may play a vital role in instructor method of WCF. Specifically, it may be the instructor may have a better connection with a method of WCF on written assignments in a post-secondary online class. The number of current courses did show significant differences in the method of WCF on written assignments compared to the number of students and years of online teaching experience. In addition, this may also be the result of the type and level of teaching experience on the method of WCF.

Summary

Based on the findings from the analyses, the null hypotheses could not be rejected for the two research questions explored, which examined the impact of instructor online workload on the method of WCF on written assignments in a post-secondary online class. The findings from the study showed that the method of WCF on written assignments between direct and indirect feedback in a post-secondary class was non-significant in relationship to instructor workload (number of students, number of courses, and years of

online teaching). In Chapter 5, a summary of the study procedure and analysis are presented, along with implications and recommendations for future research.

Chapter 5: Discussion, Conclusion, and Recommendations

Introduction

In this chapter, I present the summary and discussion of results, conclusions, and recommendations from the study for future research between instructor workload and the method direct and indirect feedback instructors use. The purpose of the study examined whether instructor workload (number of students, number of courses, and personal characteristics of years of online teaching experience) impacts the method of feedback between direct and indirect feedback in a post-secondary online course. I measured instructor feedback by using an adapted scale by Black and Nanni (2016). Analyses were conducted on the responses from 40 instructors with a minimum of 6 months online teaching experience. Results examined did not show a significant relationship between the variables and instructor workload in the study.

In Chapter 5, I interpret and discuss the findings presented in Chapter 4. Chapter 5, I discuss the interpretation of the findings as they relate to the literature review and the theoretical framework presented in Chapter 1 and 2. I conclude by describing implications for positive social change and recommendations for future research.

Summary of the Research Findings

After the data were gathered, logistical regression was used for hypotheses testing. The first research question analyzed used a descriptive statistics and the second research question analyzed used a *t* test, the beta coefficient value from a chi-test may show a significant variation in beta coefficient values across samples. The research questions for the study were:

Research Question 1: What is the percentage of the typical methods of WCF of a written assignment do instructors use in an online post-secondary course?

Research Question 2: Do methods of WCF differ, depending on instructor online workload?

The target sample was 43 online instructors with a minimum of 6 months online teaching experience. A total of 40 participants responded to the survey. The participant ages ranged from 27 to 67 years of age. There were more female participants than male participants.

Research question 1 used a descriptive analyses that determined instructors method of feedback in a post-secondary online course was the indirect method (96.8%) compared to the direct method (12.5%). For each of the workload variables, a logistical regression determined a non-significant relationship between the number of students, number of courses, and years of online teaching experience. The results non-significantly indicated that as the number of students increase, the method of feedback changes 2%. The results non-significantly indicated as years of online teaching experience increases, the method of feedback changes 1% from year to year. As the number of courses

increases, the method of feedback decreases 57%. Data from the analysis reported that instructors prefer the indirect method of feedback in relationship to their workload for Research Question 1. Data from analysis supported the null hypothesis for Research Question 2; therefore, rejecting the alternative hypothesis that instructor workload affects the method of feedback. There were no significant evidence to reject the null hypothesis.

Literature Review and Theoretical Framework

The study does support previous research findings based on Moore's (2013) theory of transactional distance. However, the theory may lack in its ability for instructors to create a physical presence into their community as real people. Because instructors have the physical separation between students it becomes more challenging to create a social, teaching, and cognitive presence. Although the theory is flexible in identifying the impact of separation, the theory continues to be problematic in the ability to assist learning through instructor feedback. The instructors in the study used indirect method of feedback in relationship to their workload despite the separation of their students. Moore's theory posits that transactional distance in DE typically occurs between teachers and students in an environment consisting of physical separation between teachers from students. Separation may lead to special patterns of behaviors between students and teachers and through this separation may profoundly affect teaching and learning. Moore's theory is flexible in supporting distance learning through identification of separation. Online instructors establish a presence projecting their personal characteristics to present themselves as real people to their students. Because of

the physical separation between instructor and student, it is more challenging to create social, teaching, and cognitive presence to not compromise consistent and purposeful communication.

The heart of most learning environments regardless of the delivery format is interaction. Although instructors are not in the physical environment with the students, they want their communication through feedback to be less misunderstanding and more insightful to student needs. Instructors may often change their feedback to what they think the student is trying to say. The effectiveness of WCF may hinge on the students' understanding of the WCF, that is, the certain amount or type more useful to the student. The feedback may become complicated, specifically in the student views of feedback. Physical separation in virtual feedback may be the lack of communication through the content of feedback identifying grammatical, surface, and structural errors in relation to the instructor workload (Black & Nanni, 2016).

Online instructors should provide feedback on how the student understands their performance to motivate their work (Anders, 2012, Blair et al., 2012). Benson and DeKeyser (2018) discussed how the type of feedback instructors provide may help students learn faster and more effectively. The greatest concern in educational settings of providing feedback is how to provide error correction or whether or not to provide feedback. Some instructors favor the direct method of feedback to help students focus more on the area of their work; whereas, other instructors favor the indirect method for a more detailed feedback and less misunderstanding of what the student needs to correct.

Previous research discussed favoring direct feedback as it may reduce confusion and helps students identify more complex errors (Benson & DeKeyser, 2018). Feedback continues to be the center of discussion and a continued debate about the effectiveness of the types of effective feedback. Some instructors believe students give more attention to the grade provided rather than the feedback content; whereas, other instructors believe students give more attention to the feedback than the grade. Existing researchers indicates that students have a greater tendency in misinterpretation of the feedback comments because the feedback may provide overly negative comments rather than critical comments (Kenzig, 2015). Researchers also suggested that a problem may lie in students do not understand the nature of the feedback; therefore, do not know what to do with the feedback, that is, if the instructor has too many students or more than one course they may not be concise in their feedback. Instructors determine what feedback is most useful and what feedback students pay attention to.

The study was consistent with previous researchers that the number of students non-significantly relates to the method of feedback instructors provide. Previous research is unclear on a significant relationship between instructor and number of students and the method of WCF in relationship to workload. The study results did not indicate the number of students impacted the type of feedback instructors provided. Qui et al., (2012) suggested the optimal number of students in a class be sufficient enough to encourage activity but not large enough that the sense of connectedness is lost. Instructors that teach more than one class face higher demands in instructor task related communication and more responsive feedback to students. Instructor presence may determine student

expectations and courses taught, that is, the quality of interaction, more instruction, and feedback (Moore, 2014). As instructors go from face-to-face interaction to online learning, they emerge three roles, cognitive, affective, and managerial. Instructors must think of purposeful feedback, relationship between instructor and student feedback, and course management as it relates to absence of physical separation of transactional distance. Of the instructors surveyed, 81.8% were content in the type of feedback they provided as purposeful to the student in regard to their workload.

Limitations of the Study

This study was limited by the small sample size of data collected. At the time of the analysis the results included 40 participants out of the 43 needed. Data collection of the sample took 1.5 years of posting in the approved groups on social media, and later permitted to email colleagues. The study was also limited by not collecting information in regard to prior online teaching experience of the instructor. A qualification of the participant was at least 6 month teaching experience. Instructors with more teaching experience with virtual feedback may have a greater understanding of the type of feedback that helps students fully understand the content of their feedback. The study was also limited to text-based feedback rather that email, face-to-face conversations, or phone conversations. The study was also limited by specific variables such as class size, number of courses, and years of online teaching experience. It is unknown whether age, gender, or level of teaching experience would impact the method of feedback. Previous researchers in Chapter 3 found significant relationships between both direct and indirect feedback; however, different variables as age and gender may result in a greater

significant outcome. Another limitation is addressing instructor feedback preference was does experience, number of students, or number of courses significantly impact the type of feedback in regard to age or gender.

Implications

The social change implication of this study is potentially improving writing feedback practices among online instructors. Results of this study may increase an awareness of the sensitivity to student performance of feedback. Results of this study may also encourage instructors to become more active in incorporating student performance and help promote student skill development. Results may challenge instructors who previously believe their feedback method is more purposeful in students understanding or those that thought their method encouraged student skill development. Based on Research Question 2, future studies may need to use more defined variables as age and gender to identify a correlation between predictor variables for a significant outcome.

Recommendations for Social Change

Future studies could involve looking at different variables to enhance the generalizability of findings. Existing research continues to argue on the effectiveness of the method of feedback. This may be the result of differing perceptions on the value and purpose of their previously used feedback. Research is unclear as to which WCF is best based on what instructors think students benefit most from or what students think instructors' feedback should be. Finally, future studies could include a modified survey

to include interviews and phone communication for providing feedback of post-secondary online instructor feedback method.

Conclusion

This study focused the method of feedback instructors used in relationship to their workload on a sample of 40 participants. The design was to identify a relationship between instructor workload and feedback method. The results of the logistical regression indicated a non-significant relationship of a logistical regression between predictor variables. The results of the logistical regression did reveal that as number of students and years of teaching experience increased, the type of feedback did not change. The results from the logistical regression did reveal that as the number of courses taught changed so did the feedback method, that is, as the number of courses increased the type of feedback is slightly but non-significantly related to the type of feedback. This may be the result of the number of students in each course as it pertains to the feedback provided. The results of the logistical regression were non-significant to the type of feedback instructors provided in regard to their workload. It is the study outcome that the findings in the study may bring awareness to feedback methods, that is, why instructors use a specific feedback over another feedback. This may be the result of age and gender in relationship to the years of experience in online teaching.

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Appendix A: Questionnaire

Definition of Key Terms

Feedback: Information provided by the instructor in regard to the students' response of the understanding and performance to assignment tasks.

Direct feedback: Provides general and correct information to the student. Detection and correct is the sole responsibility of the instructor.

Indirect feedback: Specifically indicates errors have been made but does not offer the correct information, thus leaving the student to identify and correct the error.

Please take into consideration the number of students, the number of classes you teach, grading time, years of online teaching experience, age, and gender while answering questions in regard to if you find a **direct feedback** or **indirect feedback** more useful to students for the class(s) you teach.

During the experience of providing **feedback**:

1. The following sentences all have the same error and the teacher has given a different type of feedback for each. Among the four feedback statement scenarios, which single feedback do you find most useful. Please answer Yes or NO to which single feedback you find most useful for an intermediate to advanced EFL student. Yes—Most useful, No—Least useful.

   Look at unit 3 in your book

   a. Since I arrived at Victoria, I am very lonely **Yes**___ **No**___

   b. Since I arrived at Victoria, I <u>am</u> very lonely **Yes**___ **No**___

   Have been (wrong tense)

   c. Since I arrived at Victoria, I ~~am~~ very lonely **Yes**___ **No**___

   Have been

   d. Since I arrived at Victoria, I am very lonely **Yes**___ **No**___

   wrong tense

2. How much experience do you have in teaching in the post-secondary online environment? years_____months_____

3. How much experience do you have teaching a face-to-face post-secondary environment? Years_____Months_____

4. How many post-secondary online classes do you currently teach this term? (Choose One)
    a. 1 course
    b. 2 courses
    c. 3 courses
    d. 4 courses
    e. 5 or more course
5. Do you also have any administrative duties in addition to teaching at this time during this term? How much experience do you have in teaching in the online environment? (Choose one)
    a. Yes
    b. No
6. This term, are you currently teaching….? (Choose one)
    a. Undergraduate students
    b. Graduate students
    c. Both
    d. Neither
7. My age is:

    _____
8. My gender is: (Choose one)
    a. Male
    b. Female
    c. Other
    d. Prefer not to say
9. What is the current number of students for this term, all courses combined?

    _____

10. How many students are in your largest class you are teaching this term?

    _____

11. How many students are in your smallest class you are teaching this term?

    _____

(end of demographic questionnaire)

(end of questionnaire)