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Instructor Humor as a Tool to Increase Student Engagement

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INSTRUCTOR HUMOR AS A TOOL TO
INCREASE STUDENT ENGAGEMENT

A Dissertation
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
in
Educational Leadership

by
Carl Stephens Christman
December 2018

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ABSTRACT

As various stakeholders examine the value and quality of higher education, a greater emphasis is being put on educational outcomes. There is constant focus on improving the quality of undergraduate education and one of the keys to this is understanding what makes a good instructor. Effective instructors rely on a variety of tools and techniques to engage their students and help them learn. One common tool that instructors in higher education rely on in the classroom is humor.

The primary research question this study is attempting to answer is: In what ways, if any, does humor infused instruction promote high levels of affective, cognitive, and participant perceptions of behavioral engagement among college students? The researcher's hypothesis is that college students who view video clips of humor infused instruction will be significantly more affectively, cognitively, and behaviorally engaged than students who view video clips of the same instructional content without humor.

In order to test whether instructor use of humor in class increases student engagement, students were randomly assigned to one of two groups. One group watched a lecture on fallacies that includes humorous illustrations and examples while the other group watched a lecture that does not include these humorous illustrations and examples. Immediately after watching the lecture students were asked to complete an 18-item questionnaire that measured their engagement.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

As various stakeholders examine the value and quality of higher education, a greater emphasis is being put on educational outcomes. There is constant focus on improving the quality of undergraduate education and one of the keys to this is understanding what makes a good instructor (Umbach & Wawrzynski, 2005). Effective instructors rely on a variety of tools and techniques to engage their students and help them learn.

Purpose of the Study

One common tool that instructors in higher education rely on in the classroom is humor. Cornett (1986) claimed that humor is an instructor's "most powerful resource" to achieve a wide variety of positive educational outcomes (p. 8). Research tends to support her assertion that humor is helpful in instruction. As Banas, Dunbar, Rodriguez, and Liu (2011) point out, "the overwhelming majority of instructional communication research on humor has focused on the *positive* consequences of classroom humor" (p. 116).

Studies show that college instructors use more humor in their classrooms than their high school counterparts (Neuliep, 1991). Research also shows that more experienced teachers tend to use more humor in their classes than less experienced ones (M. N. Javidi & Long, 1989). And finally, research shows that

students believe their best instructors are those who use humor in the classroom (Fortson & Brown, 1998). Many studies show that competent instructors use humor as a pedagogical tool in their classes (Bruschke & Gartner, 1991; Check, 1986; Korobkin, 1988; Lei, Cohen, & Russler, 2010). The purpose of this study is to explore whether this tool is effective in helping get higher education students engaged.

Humor can be useful in many forms of human interaction, but specifically in the classroom setting. As Kane, Suls, and Tedeschi (1977) pointed out, people do not generally take action unless there is something to be gained from it. This is usually in the form of either a positive reward for taking action or the hope of avoiding a punishment for not taking action. In line with that assumption, they assert that people do not make humorous statements unless they hope to gain something by doing so. If individuals use humor in the hopes of gaining something, we can assume that instructors who use humor in their classes do so for the same reason. Gorham and Christophel (1990) noted that:

When teachers use humor in the classroom, they are likely to do so for some reason: to reduce tension, to facilitate self-disclosure, to relieve embarrassment, to save face, to disarm others, to alleviate boredom, to gain favor through self-enhancement, to entertain, to convey goodwill, or to accomplish some similar goal. A common (but not often empirically tested) assumption has been that humor, in serving these functions, enhances teacher-student relationships

and thus enhances learning (p. 58).

The purpose of this research is to empirically test one of these assumptions about humor in the higher education classroom, specifically that instructor use of humor has a positive impact on student engagement.

Research Question

The primary research question this study is attempting to answer is: In what ways, if any, does humor infused instruction promote high levels of affective, cognitive, and participant perceptions of behavioral engagement among college students?

Hypothesis

The researcher's hypothesis is that college students who view video clips of humor infused instruction will be significantly more affectively, cognitively, and behaviorally engaged than students who view video clips of the same instructional content without humor.

Significance of the Study

There has been extensive research into the positive impacts of instructor humor in higher education classes (Bryant, Comisky, & Zillmann, 1979; Goodboy, Booth-Butterfield, Bolkan, & Griffin, 2015; Gorham & Christophel, 1990; Scott, 1976; M. B. Wanzer & Frymier, 1999; Welker, 1977). Not much focus, however, has been put on the impact that instructor use of humor has on

student engagement. This study hopes to address this void in the literature and test a theory of cause and effect.

Assumptions

The researcher operates from the assumption that student engagement is a good indicator of student success. Thomas (2012) pointed out the direct connection between student engagement and student success. She said that “It has become increasingly clear that ‘success’ means helping all students to become more engaged and more effective learners in higher education, thus improving their academic outcomes and their progression opportunities after graduation” (p. 10). Kuh (2009) claimed that student engagement can be used “as a proxy for student academic achievement and persistence” (p. 688). Research has also found that it is often predictive of student learning (Carini, Kuh, & Klein, 2006), academic performance (Lee, 2014), college graduation (Flynn, 2014), and early career earnings (Hu & Wolniak, 2010).

The researcher also operates under the assumption that having students observe a short video of a class lecture is valid and that their overall impressions would be consistent with those they would have if they sat in the class for an entire semester. This assumption is based on the concept of thin slicing, which is the ability of people to make quick judgements of others with surprising accuracy (Ambady & Rosenthal, 1991).

Ambady and Rosenthal (1993) showed different groups of participants ten-second, five-second, and two-second video clips of teachers and asked them

to do a teacher evaluation. They then compared the results with end of course evaluations. They found that “there were no significant differences in the accuracy of judgments based on video clips 10s, 5s, and 2s in length” (p. 437). They also found that the judgment of these complete strangers “predicted with surprising accuracy the ratings of the same teachers by people who had substantial interactions with those teachers” (p. 438).

Delimitations

The researcher intentionally limited this study to only undergraduate college students in the United States of America. This study is not focused on how to implement humor in the classroom.

Definitions of Key Terms

For the purpose of this study, the researcher is relying on Warren and McGraw’s (2016) definition of humor as being:

a psychological response characterized by the positive emotion of amusement, the appraisal that something is funny, and the tendency to laugh. Thus, humor is indicated by at least one of three responses: behavioral (laughing), cognitive (appraising something as ‘funny’), or emotional (experiencing the positive emotion of amusement. We refer to a stimulus as humorous to the extent that it elicits greater perception of humor (on average). (p. 407)

Furthermore, it is necessary to define appropriate and inappropriate humor.

Appropriate humor adheres to social norms, rules, and expectations. This type of humor is often used to achieve a positive goal, whether that be laughter or learning. (Wanzer, Frymier, Wojtaszczyk, & Smith, 2006) Inappropriate humor violates social norms, rules, and expectations. This type of humor is often disparaging toward others, exhibits signs of verbal aggression, and can hurt others. (Wanzer et al., 2006)

For the purposes of this study the researcher is relying on Axelson and Flick's (2011) definition of student engagement as "how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other" (p. 38). Furthermore, it is appropriate to define the three main types of engagement, behavioral, cognitive, and affective (also referred to as "emotional" in the literature). Behavioral engagement relates to participation in academic or extracurricular activities and is believed to be important to keeping students in school and helping them achieve desirable academic outcomes. Cognitive engagement relates to how much effort students are willing to invest in learning the class content or mastering the related skills. And emotional or affective engagement relates to positive or negative feelings related to instructors, classes, classmates, and the broader school. (Fredricks, Blumenfeld, & Paris, 2004)

Summary

This research is aimed at determining whether instructor use of humor in the classroom is an effective way of increasing student engagement.

CHAPTER TWO

LITERATURE REVIEW

Student Engagement

Student engagement is a popular construct that has taken hold in recent years. Franklin-Guy and Schnorr (2016) assert that it is an integral part of the learning process. Axelson and Flick (2011) explain that “The phrase ‘student engagement’ has come to refer to how involved or interested students appear to be in their learning and how connected they are to their classes, their institutions, and each other” (p. 38). In some ways “student engagement” has become a new buzzword (Kahu, 2013) that is used to describe a plethora of academic phenomena. Some even view the concept as being so ubiquitous that it has become a sort of academic orthodoxy (Zepke, 2014).

The term “student engagement” serves a variety of purposes up and down the higher education hierarchy. Governments use the concept to talk about school performance, schools see it as the secret to gaining a competitive advantage, administrators rely on it to promote academic excellence, and educators often use it to justify new teaching approaches (Baron & Corbin, 2012). Vuori (2014) questioned whether student engagement “in its fashionability conceals even the contradicting goals of different stakeholders” (p. 510).

There are a variety of perspectives from which to approach the concept of student engagement. Although there is some overlap, Kahu (2013) identified four fairly distinct perspectives in the literature; the behavioral perspective, the

psychological perspective, the socio-cultural perspective, and the holistic perspective. The behavioral perspective focuses on effective teaching practices. The psychological perspective sees engagement as an internal and highly individual process. The socio-cultural perspective focuses on the importance of socio-cultural context in engagement. And the holistic perspective works to bring the other perspectives together. (Kahu, 2013) Although there is a value in all of these perspectives, this research focused on student engagement from a psychological perspective.

Despite an abundance of research on student engagement within the psychological perspective, its actual definition is often overlooked. One review of literature found that 31 of the 45 articles reviewed, did not clearly define the terms (Jimerson, Campos, & Greif, 2003). Fredricks et al. (2004) pointed out the difficulty in defining engagement. Since there has been so much research on how students behave, think, and feel, it is harder to conceptualize and examine literature that is labeled “engagement.” This can lead to a plethora of concepts, definitions and measurements of those concepts that are slightly different, but do not do much to help improve our conceptual understanding of the issues. Instead, they suggest that engagement be viewed as a multidimensional construct or “meta” construct involving three commonly defined dimensions, behavioral, affective, and cognitive. Behavioral engagement relates to participation in academic or extracurricular activities and is believed to be important in keeping students in school and helping them achieve desirable

academic outcomes. Affective engagement relates to positive or negative feelings related to instructors, classes, classmates, and the broader school.

Cognitive engagement relates to how much effort students are willing to invest in learning the class content or mastering the skills. (Fredricks et al., 2004)

Behavioral engagement, within the psychological perspective, is generally defined in three ways, positive conduct, involvement in academic tasks, and participation in extracurricular activities. Positive conduct includes following rules and norms in the class and not being disruptive or getting into trouble or skipping classes. Involvement in academic tasks includes things like attention, concentration, persistence, contributing to class discussions, and asking questions. Participation in extracurricular activities such as student government or athletics is the final way of looking at behavioral engagement. (Fredricks et al., 2004)

The concept of cognitive engagement focuses on two aspects, student investment in learning and the use of strategic learning tactics. Student investment in learning moves past external actions and looks at psychological investment of mental energy toward learning. Examples of this would be a preference to be challenged, a desire to go beyond the minimum requirements in the class or assignments, and positive coping mechanisms for failure. (Fredricks et al., 2004) Newman, Wehlage, and Lamborn (1992) defined this type of engagement as a “student’s psychological investment in and effort directed toward learning, understanding, mastering the knowledge, skills or crafts that the

academic work is intended to promote” (p. 12). And Wehlage, Rutter, Smith, Lesko, and Fernandez (1989) defined it as “the psychological investment required to comprehend and master knowledge and skills explicitly taught in schools” (1989, p. 17).

Strategic learning, the second component of cognitive engagement, is focused on strategic student self-regulation and learning techniques. This can include mental activities such as organizing, summarizing, elaborating upon, or making connections between, learned information. This type of deep level learning is different from behavioral engagement. Behavioral engagement focuses on external signs such as completion of task assignments, while cognitive engagement focuses on internal thought processes and learning strategies. When a student is both invested in the learning process and employs internal strategic learning tactics, he or she is cognitively engaged (Fredricks et al., 2004)

Affective engagement, also referred to as emotional engagement in the literature, is the final type of engagement within the psychological perspective. The focus of this research is similar to an earlier body of research on student attitudes toward education. (Fredricks et al., 2004) Affective engagement includes feelings of happiness, sadness, interest, boredom, and anxiety (Skinner & Belmont, 1993). There are also similarities between the concepts of emotional engagement and motivation (Fredricks et al., 2004). In the report *Engaging*

Schools (National Research Council & Institute of Medicine, 2004), the authors used the terms “engagement” and “motivation” interchangeably.

When these three distinct forms of engagement are combined, however, it is possible to get a much richer understanding of various ways that students may be engaged. As Conner and Pope (2013) point out, by looking at the presence or absence of the three types of engagement (affective, behavioral, and cognitive), students can be placed into seven more categories. These types of engaged students are listed in Table 7.

Purposefully engaged students study hard because they know that understanding the content will be important for their futures, but do not like studying. Fully engaged students spend a lot of time studying because they truly want to learn, see it as a good use of time, and enjoy what they are studying. Rationally engaged students see the value in learning, but do not enjoy the content that needs to be learned or the process of learning and do not put forth the effort necessary to learn. Busily engaged students work hard to finish assignments, but are bored by the content, do not enjoy it, and do not see the value in learning it. Pleasurably engaged students enjoy the content but do not see it as being valuable and do not put forth the effort necessary to actually learn it. Mentally engaged students enjoy the content and see the value in it, but do not put forth the effort necessary to actually learn it. And recreationally engaged students enjoy learning and put forth the effort to learn, but they do so because it

is fun or a good challenge, but not because they see the value in actually learning the material.

One problem with this conceptual framework is that it makes the assumption that these forms of engagement are binary. From this perspective, a student is either cognitively engaged, or not. In reality, as Conner and Pope (2013) point out, these forms of engagement are graduated and fluid. Students may have different levels of engagement within these types and those levels may change over time.

Table 1

Typology of Engagement

| Engagement type | Enjoy Affective | Put in effort Behavioral | See value Cognitive |
|------------------------|--------------------|-----------------------------|------------------------|
| Purposefully engaged | | ✓ | ✓ |
| Fully engaged | ✓ | ✓ | ✓ |
| Rationally engaged | | | ✓ |
| Busily engaged | | ✓ | |
| Pleasurably engaged | ✓ | | |
| Mentally engaged | ✓ | | ✓ |
| Recreationally engaged | ✓ | ✓ | |

(Conner & Pope, 2013, p. 1430)

Conner and Pope (2013) pointed out the importance of focusing on affective or emotional engagement. They discuss the idea of “robo-students” who are seemingly just going through the motions, but are not really engaged. It is possible for a student to get good grades and appear successful in school, but not actually learn or retain the course material (Pope, 2001). It is possible to exhibit behavioral or cognitive engagement, without having affective or emotional engagement. According to Fredricks et al. (2004) however, “it is likely that emotional engagement leads to increases in behavioral and cognitive engagement, both of which mediate subsequent achievement” (p. 83). If emotional or affective engagement is present it is likely the other forms of student engagement will follow.

Instructional Strategies for Achieving Engagement

There has been a great deal of research on what instructors may do to foster student engagement in their classes. Flipping the classroom with the use of video and online elements (Moore, Gillett, & Steele, 2014), using clickers in the classroom (Sternberger, 2012; Tlhoaele, Hofman, Naidoo, & Winnips, 2014), just in time teaching (Novak, 2011), and even role playing (Stevens, 2015) have been suggested as useful techniques to increase student engagement.

Sun, Martinez, and Seli (2014) focused on how online polling during class may be used to promote student engagement. In their quasi-experimental study,

they used 209 undergraduate and graduate students in various classes. The control group of 95 students, used online clickers to participate in class, while the experimental group of 114 students used an online poll via PollEverywhere.com. Following each class, the researchers had the students complete a questionnaire, which included the Self-Efficacy for Learning and Performance scale from the Motivated Strategies for Learning (MSLQ) (Pintrich, Smith, Garcia, & McKeachie, 1991) and an Engagement Scale (Fredricks, Blumenfeld, Friedel, & Paris, 2005). Sun, Martinez, and Seli (2014) found that students in the group that used web-based polling had higher levels of affective engagement, cognitive engagement, and overall engagement.

Jagger (2013) analyzed the extent to which classroom debates help foster affective engagement. She used a sample group of 49 undergraduate students who were enrolled in a required ethics module as part of a B.Sc. program. Students participated in group debates on a variety of technology related topics including things like violent video games, Internet censorship, and illegally downloading music. Jagger (2013) video recorded the audience during the question portion of the debate and observed how much of the time, in one minute intervals, the students exhibited affective responses, which indicated valuing or higher in Bloom's Taxonomy (Krathwohl, Bloom, & Masia, 1999). She found that the time that students demonstrated affective engagement ranged from 20% in some debates to as high as 70% in others, depending on the intensity of the debates. Jagger (2013) concluded that classroom debates are a good

pedagogical method for fostering student affective engagement at the college level.

Bolkan (2015) looked at the relationship between intellectually stimulating students, intrinsic motivation, and student engagement. He hypothesized that instructor use of intellectually stimulating behavior would likely increase student engagement, which would in-turn enhance students' intrinsic motivation. Bolkan (2015) began with a sample group of 234 undergraduate students who were enrolled in upper-division communication classes. He had them complete a questionnaire which measured intellectual stimulation with the 10-item interactive teaching style scale (Bolkan & Goodboy, 2010).

In order to measure student engagement, Bolkan (2015) focused on sustained attention, involvement, and boredom. Sustained attention was measured with a six-item scale that focused on attention paid to lectures, discussions, and classroom activities (Wei, Wang, & Klausner, 2012). Involvement was measured with a seven-item sub-scale from the perceived behavioral engagement scale (Miserandino, 1996). Boredom was measured with an adapted five-item sub-scale from the larger perceived emotional engagement scale (Miserandino, 1996). Finally, intrinsic motivation was measured with a four-item scale from the Motivated Strategies for Learning Questionnaire (Pintrich & Smith, 1993).

Bolkan (2015) found that intellectually stimulating students is positively correlated with student engagement and engagement is positively correlated with

intrinsic motivation. As Bolkan (2015) put it, “when students become engaged in the classroom and enjoy their coursework they work harder in their classes with the goal of mastering the material instead of simply working for a grade” (p. 87).

Tews, Jackson, Ramsay, and Michel (2015) researched the relationship between fun in the classroom and student engagement. A sample group of undergraduate students were asked to “describe their experiences with fun in the classroom” (2015, p. 18). The researchers had another group of students rank those items in order to further validated their scale. They arrived at two principle components, fun activities and fun delivery. Fun activities included things like games, field trips, and the instructor’s bringing food for everyone. Fun delivery included creative examples, real-life examples, and, most importantly for the purposes of this study, humor.

A group of 722 freshmen from a variety of disciplines were given the 13-item Fun in the Classroom Survey and a 12-item student engagement survey that was adapted from Rich, Lepine, and Crawford (2010), which measured emotional, cognitive, and physical engagement. Tews et al. (2015) found that fun delivery was positively correlated with all three types of student engagement. Contrary to their hypothesis, however, they did not find a significant correlation between fun activities and student engagement.

If there is a positive correlation between fun delivery in the classroom and student engagement, it stands to reason that there would also be a correlation between instructor humor and student engagement.

Instructor Use of Humor

There has been extensive research on the subject of humor and its pedagogical uses at the college level. The study of instructor humor in higher education generally falls into one of the following categories; the use of humor as it relates to student retention, student effort and participation (Goodboy et al., 2015), improved perception of the teacher (Scott, 1976), positive student evaluations of instructors (Bryant, Comisky, Crane, & Zillmann, 1980; Gorham & Christophel, 1990; Tamborini & Zillmann, 1981; M. B. Wanzer & Frymier, 1999), enjoyable classroom environments (Chapman, & Crompton, 1978; Davies & Apter, 1980; Gorham, 88; Hauck & Thomas, 1972; Hays, 1970; Kaplan & Pascoe, 1977; Kelley & Gorham, 1988; Sanders & Wiseman, 1990; Vance, 1987; M. B. Wanzer & Frymier, 1999; Ziv, 1988), teacher-student immediacy (Gorham & Christophel, 1990; M. Javidi, Downs, & Nussbaum, 1988), improved student-teacher relationships (Welker, 1977), and effective learning (Chapman, & Crompton, 1978; Davies & Apter, 1980; Gorham, 88; Hauck & Thomas, 1972; Hays, 1970; Kaplan & Pascoe, 1977; Kelley & Gorham, 1988; Sanders & Wiseman, 1990; Vance, 1987; Ziv, 1979).

Bryant et al. (1980) randomly selected 70 undergraduate courses and then randomly chose one student from each class. These students were asked to unobtrusively record one class session. Immediately after recording that class, but before being told the purpose of the study, he or she was asked to complete a questionnaire concerning the instructor's use of humor during that session. The

survey consisted of 14 bipolar rating scales ranging from -10 to +10 and sought the student's opinion about their teacher's ability. After transcribing humorous portions of each recording and performing a factor analysis, the researchers concluded that there was a positive correlation between instructor use of humor and students' positive evaluations of their instructors.

Gorham and Christophel (1990) surveyed 206 undergraduate students in a non-required communication course. Students were given a questionnaire that asked them to rate their instructors on how often they engaged in 17 verbal (Gorham, 88) and 6 nonverbal (Richmond, Gorham, & McCroskey, 1988) types of immediacy. Students were also asked two questions to measure their assessment of their own learning (Gorham, 88; Richmond, Gorham, McCroskey, & McLaughlin, 1988; Richmond, McCroskey, Kearney, & Plax, 1987). The questions were, "On a scale of 0-9, how much did you learn in this class?" and "How much do you think you could have learned in the class if you had had the ideal instructor?" By subtracting the score from the first response from the score from the second response the researchers got the "Learning Loss" score. This score attempts to separate the teacher from the perceived value of the course. Students were also given four bi-polar scale questions to measure their attitude toward the course content (J. C. McCroskey, Richmond, Plax, & Kearney, 1985). And finally, the researchers measured behavioral intention. The researchers concluded that instructor use of humor was positively correlated with verbal and nonverbal immediacy behavior and immediacy behavior was highly correlated

with student learning.

Wanzer and Frymier (1999) had 314 undergraduate students, who were enrolled in an introductory communication course, complete a questionnaire and regarding the instructor they had in the class immediately preceding their communication class. The survey included the humor orientation scale, a nonverbal immediacy scale, a socio-communicative style survey, and questions regarding level of learning.

The 17-item Humor Orientation (HO) Scale measures the extent to which people appreciate and use appropriate humor (Booth-Butterfield & Booth-Butterfield, 1991). In this study students were asked to report on their own HO as well as their instructor's HO (Wanzer & Frymier, 1999). The 14-item Nonverbal Immediacy Scale measured how often their teachers exhibited specific immediacy behavior (Richmond et al., 1988). Wanzer and Frymier (1999) used Richmond and McCroskey's (1990) 20-item Assertiveness-Responsiveness Scale to measure socio-communicative styles. In ten of the questions students were asked to report how assertive their instructors were, while in the other ten they were asked to identify how responsive their instructors were.

To measure learning, Wanzer and Frymier (1999) used portions of the Affective Learning Scale (Gorham, 88). In this 16-item measure students were asked their attitudes about the course, instructor, and course recommended behaviors. They were also asked whether they would take a related course, take another class with that instructor, and exhibit behaviors recommended in the

current course. They also measured learning with the eight-item Learning Indicators scale where students were asked how often they engaged in specific learning behaviors (Frymier & Houser, 1999).

Wanzer and Frymier (1999) found that there was positive correlation between students' perceptions of their instructors' humor orientation and their affective learning as well as learning indicators. The authors concluded that when students believed their instructors were humorous they had greater affinity for the instructor and engaged in more learning activities. They also found a positive correlation between instructor humor orientation and nonverbal immediacy. The authors concluded that appropriate and successful humor can be viewed as an immediacy strategy. When it came to socio-communicative style the researchers found a significant association between instructor humor orientation and both assertiveness and responsiveness. And finally, they found a positive correlation between instructor humor and affective student learning.

Goodboy et al. (2015) had 292 undergraduate students complete a questionnaire regarding the class and instructor they last had. The survey included six measurement tools, the Humor Orientation (HO) Scale, the LOGO-II Scale, Revised Cognitive Learning Indicators Scale, Extra Effort Scale, Class Participation Scale, and Out of Class Interaction Scale. The 17-item Humor Orientation (HO) Scale measures the extent to which people appreciate and use appropriate humor (Booth-Butterfield & Booth-Butterfield, 1991). In this study students were asked to report on their instructor's use of humor.

The 32-item LOGO-II measures the extent to which students are learning-oriented (LO) or grade-oriented (GO) (Edison, Pollio, & Milton, 1986). The seven-item Revised Cognitive Learning Indicators Scale measures behaviors associated with cognitive learning (Frymier & Houser, 1999). The three-item Extra Effort Measure asks students how much their teachers motivated them to put forth extra effort in class (Bass, 1985). This tool was adapted from an organizational leadership perspective and the word “manager” was changed to “teacher.” The six-item Class Participation Scale measures how often students participate during class (Fassinger, 1995). The Out of Class Interaction Scale measures how often students communicated with their instructors out of class (Knapp & Martin, 2002). All scales use 5-point Likert scales.

The Goodboy et al. (2015) study found instructor humor orientation (HO) to be a significant predictor of cognitive learning, extra effort, participation, and out of class communication, for students. This is true regardless of whether students are grade oriented (GO) or learning oriented (LO).

Bolken and Goodboy (2015) surveyed 299 undergraduate students who were enrolled in upper-division communication studies classes. They were asked to complete the questionnaire in reference to the instructor they most recently had. The survey included six measurements, instructor humor, affective learning, sustained attention, cognitive engagement, basic needs, and perceived cognitive learning. To measure instructor humor they used the 17-item Humor Orientation (HO) Scale (Booth-Butterfield & Booth-Butterfield, 1991). Affective learning was

measured with three subscales that focused on students' affect toward their instructors, course content, and behaviors recommended in the course (McCroskey, Richmond, Plax, & Kearney, 1985). Sustained attention was measured with a six-item tool that asked students how easily they were able to focus during lectures, discussions, and classroom activities (Wei, Wang, & Klausner, 2012). Cognitive engagement was measured by asking students to rate how much they identified with statements like, "The first time my teacher talks about a new topic I listen very carefully" (Miserandino, 1996, p. 213).

To measure students' basic needs, Bolkan and Goodboy (2015) focused on perceived competence, relatedness, and autonomy. They defined competence as confidence in one's own abilities within a specific area (Ryan & Deci, 2002), which they measured with McCroskey and Teven's (1999) credibility measurement tool. This six-item scale used semantic differentials anchored with terms like "Intelligent/unintelligent" and "informed/uninformed" (p. 95). They defined relatedness as feeling connected with others (Ryan & Deci, 2002) and, in reference to students, they saw this as a student's perception of his or her relationship with an instructor (Ryan & Deci, 2000). To measure this they used the 11-item Instructor-Student Rapport Scale (Frisby & Martin, 2010). In it students are asked to rate the extent to which they agree with statements such as "I have a close relationship with my instructor" and "I look forward to seeing my instructor" (p. 153). They defined autonomy as engaging in behaviors that people value or enjoy (Ryan & Deci, 2002) and, in reference to students, this

would be their believing that they are involved in educational activities that they want to do (Fortier & Vallerand, 1995). They measured this with a six-item scale modified from the Work-Related Basic Need Satisfaction Scale (Van den Broeck, Vansteenkiste, De Witte, Soenens, & Lens, 2010). Students were asked to what extent they agreed with statements such as, “The tasks I have to do in this class are in line with what I really want to do” and “I feel forced to do things I do not want to do” (Bolkan & Goodboy, 2015, p. 52).

Finally, perceived cognitive learning was measured with a 10-item scale developed by Frisby and Martin (2010) that asked students to what extent they agreed with statements about their perceived learning. These statements included things like “My knowledge on this class topic has increased since the beginning of class” (Frisby & Martin, 2010, p. 10).

Bolkan and Goodboy (2015) concluded that humor had a positive impact on students’ perceived cognitive learning. They did, however, disagree with prior research as to why this was the case. Bolkan and Goodboy (2015) determined that, humor positively influenced perceived cognitive learning by fulfilling student needs rather than by fostering sustained attention. In other words, they found that students in classes with humorous instructors did not learn more because they were paying more attention. They learned more because the use of humor helped fulfill their basic needs of competence, relatedness, and autonomy. This promoted the students’ interest in the subject matter and enhanced their intrinsic desire to learn. Bolkan and Goodboy (2015) theorized that instructors could

create a positive classroom climate and promote a real passion for learning by using humor.

Humor Within Specific Disciplines

There has been research looking at instructor use of humor in a variety of specific disciplines. Researchers have focused on the use of humor in teaching math (Grawe, 2016; Matarazzo, Durik, & Delaney, 2010; Vinik, 1978), physics (Worner, Romero, & Bustamante, 2010), chemistry (André, 2013), nonfiction writing (Hogue, 2011) adult education (Warnock, 1989), and even outdoor education in Australia (Hoad, Deed, & Lugg, 2013). There has been research on the use of humor in introductory economics classes (Jones, 2014), ESL classes (Ziyaeemehr, Kumar, & Abdullah, 2011), how librarians can use humor in the classroom (Osborne, 1992), and even how humor can be used to teach students how to do proper bibliographies (Arnsan, 2000).

There has been quite a bit of research on the use of humor to teach within the medical field. Studies have looked at how instructors can help students studying nursing (Chiang-Hanisko, Adamle, & Chiang, 2009; Englert, 2010; Ulloth, 2002), learning occupational therapy (Southam & Schwart, 2004), and going through medical training (Menon, Shankar, Kiran, Mathew, & Varghese, 2013; Narula, Chaudhary, Agarwal, & Narula, 2011; Ziegler, 1998). There have also been specific studies on the use of humor when it comes to both sex education (Allen, 2014) and education about HIV/AIDS (Cooper & Dickinson, 2013).

Some of the research on the use of humor in classes focused on specific humorous instructional aids. Gardner and Davidson (2010) discussed the use of Three Stooges films as a tool for teaching introductory statistics. Stark (2003) looked at techniques for teaching media literacy with the use of the satirical *Mad Magazine*. Doring (2002) dealt with the use of cartoons in adult education. Rafiee, Kassaian, and Dastjerdi (2010) focused on learning English as a foreign language with the use of humorous songs. Bloch (2011) described how television shows can be used to teach job interview skills. Cantu (2015) discussed the use of *The Three Little Pigs* to illustrate failure analysis in engineering. And Cecil (2014) researched the use of situational comedies to teach about federal income taxes.

There has been research on how instructors can use technology to make their classes more humorous both in-person and online. Berk (2014) offered insights into how instructors may utilize PowerPoint to bring humor to their classes. James' (2004) research focused on the need for humor in online courses. As we can see, there is quite a bit of research on the way humor can be used in a variety of disciplines and with a variety of teaching modalities.

Humor Typology

Humor is highly subjective so the first step in an exploration of the use of humor is to define it. It is important to know exactly what is considered humorous and what humor is considered appropriate in the classroom setting. This can be

somewhat problematic since research shows that students and teachers often differ in what they perceive to be humorous (Neuliep, 1991).

In order for instructor attempts at humor to be successful, the instructor needs to be tuned in to what his or her students may or may not find humorous. A disconnect in what students and teachers find funny may result from differences in age, educational level, gender, culture, or life experiences (Wanzer, 2002).

Freud (1960) discussed the idea of humor appropriateness. He proposed two types of humor, tendentious and nontendentious. He viewed nontendentious humor as being harmless and abstract. This type of humor often lacks a specific purpose. A good example of this is wordplay, puns, and riddles. He viewed tendentious humor as being more aggressive. This type of humor often targets an individual, group, or ideology. A good example of this is satire, blond jokes, and roasts.

There have been attempts to categorize humor and create lists of humor types most often used by instructors. Bryant et al. (1979) was one of the first groups of researchers to create a typology of humor used by instructors in higher education. They had a group of undergraduate college students record and analyze their instructors' lectures in order to identify and categorize the uses of humor. The researchers came up with a list of six types of humor: jokes, puns, riddles, funny comments, funny stories, and other/miscellaneous. This final broad category included things ranging from visual/vocal comedy to the use of Donald

Duck sound effects. They also categorized humor as being either hostile or non-hostile, sexual or non-sexual, related or unrelated to the class content, and prepared or spontaneous. Bryant et al. (1979) determined that most of the instructor humor was spontaneous and related to the class content. They also determined that almost half of the instructor humor in classes had either sexual or hostile messages.

Gorham and Christophel (1990) asked a group of 206 undergraduate college students who were enrolled in basic non-required communication courses to keep a log of their instructors' use of humor over five consecutive class sessions. They were told to take note of "things this teacher did or said today which shows he/she has a sense of humor" (Gorham & Christophel, 1990, p. 51). The humor categories they created are listed in Table 1.

Table 2

Humor Categories

1. Brief tendentious comment directed at an individual student.
 2. Brief tendentious comment directed at the class as a whole.
 3. Brief tendentious comment directed at the university, department, or state.
 4. Brief tendentious comment directed at national or world events or personalities or at popular culture.
 5. Brief tendentious comment directed at the topic, subject, or class procedures.
 6. Brief tendentious comment (self-deprecating) comment directed at self.
 7. Personal anecdote or story related to the subject/topic.
 8. Personal anecdote or story not related to the subject/topic.
 9. General anecdote or story related to the subject/topic.
 10. General anecdote or story not related to the subject/topic.
 11. Joke
 12. Physical or vocal comedy (“schtick”).
 13. Other*
-

“The ‘Other’ category was used to code comments which were not sufficiently described to assign them to another category (such as ‘teacher cussed’). A small number of incidents which did not occur often enough to warrant a separate

category were also included in this category.” (Gorham & Christophel, 1990, p. 52)

Neuliep (1991) critiqued the typologies created by Bryant et al. (1979) and Gorham and Christophel (1990). He argued that because 16% of the humorous events in Bryant et al.’s (1979) study were coded as “other,” the categories were not exhaustive. He argued that while the categories in Gorham and Christophel’s (1990) study were more encompassing, they were often vague. He pointed out that of the 13 categories, six were labeled “brief tendentious comments” directed at various groups, but did not specify the content of the message. Therefore, these comments could have comprised a variety of different types of humor. As a result of these perceived deficiencies, Neuliep (1991) created his own list of humor types based on questionnaire responses from 388 high school teachers. They were asked if they used humor in their class and why or why not. And finally, they were asked to describe in as much detail as possible the last time they used humor in their class. Approximately 44%, or 177, teachers responded to this open-ended question. Neuliep coded the responses and placed them into categories based on characteristics that distinguished them from other humorous incidents. The humor categories he created are listed in Table 2.

Table 3

Twenty Item Taxonomy of High School Teacher Humor

| Category | Description |
|---------------------------------------|--|
| <i>Teacher Targeted Humor</i> | |
| 1. Self-Disclosure--Related | Teacher self-discloses to the class a humorous incident that is related to the course. |
| 2. Self-Disclosure--Unrelated | Teacher self-discloses to the class a humorous incident unrelated to the course. |
| 3. Self-Disclosure-- Embarrassment | Teacher self-discloses an embarrassing situation. |
| 4. Teacher Role Play--Related | Teacher role plays some character related to the subject in humorous fashion. |
| 5. Teacher Role Play-- Unrelated | Teacher role plays some character unrelated to the subject in humorous fashion. |
| 6. Teacher Self-Deprecation | Teacher makes a humorous self-deprecating remark. |
| <i>Student Targeted Humor</i> | |
| 7. Error Identification | Teacher identifies a student error/mistake and jokes about it. |

| | |
|------------------------------------|--|
| 8. Friendly Insult | Teacher mildly insults a student in a nonhostile manner. |
| 9. Teasing | Teacher teases a student in a nonhostile manner. |
| 10. Student Role Play | Teacher assigns a role playing exercise that is humorous. |
| <i>Untargeted Humor</i> | |
| 11. Awkward Comparison/Incongruity | Teacher humorously points out some incongruity or makes an awkward comparison. |
| 12. Joke Telling | Teacher simply tells a joke. |
| 13. Punning | Teacher creates a play on words. |
| 14. Tongue-in-cheek/Facetious | Teacher engages in witty or whimsical interaction with a student or class using exaggerated or clumsy analogies. Teacher “B.S.’s” with a student or class. |
| <i>External Source Humor</i> | |
| 15. Historical Incident | Teacher relates a humorous historical event. |
| 16. Third Party Humor-- Related | Teacher brings in an example of something humorous created by, or that happened to, some external source (e.g., cartoon) that is related to the subject. |

| | |
|--------------------------------------|---|
| 17. Third Party Humor-- Unrelated | Teacher brings in an example of something humorous created by, or that happened to, some external source (e.g., cartoon) that is not related to the subject. |
| 18. Natural Phenomena Humor | Teacher demonstrates natural phenomena that students find humorous (e.g., letting the air out of a balloon and letting it fly all over the room to demonstrate low pressure). |
| <i>Nonverbal Humor</i> | |
| 19. Affect Display Humor | Teacher makes a funny face to the class or student. |
| 20. Kinesic Humor | Teacher engages in some form of physical bodily humor. |

(Neuliep, 1991, p. 350)

Appropriate and Inappropriate Humor

Even though several studies have focused on identifying the types of humor that instructors most often use in their classes (Bryant et al., 1979; Downs, Booth-Butterfield, & Nussbaum, 1988; Gorham & Christophel, 1990), they were descriptive and not evaluative. These studies did not explicitly

differentiate between appropriate and inappropriate types of humor (Wanzer, Frymier, Wojtaszczyk, & Smith, 2006).

Wanzer, Frymier, Wojtaszczyk, and Smith (2006) focused on types of teacher humor students considered appropriate and inappropriate for the classroom. They asked 284 undergraduate students who were enrolled in introductory communication courses to fill out an open-ended questionnaire concerning humor that they had observed in the classroom. The students were asked to list examples of appropriate humor their teachers had used and examples of inappropriate humor their teachers had used.

A coder unitized the student's responses and placed them into 774 separate examples of appropriate humor and 541 examples of inappropriate humor. A second coder then used the analytic induction technique to create categories of appropriate and inappropriate instructor humor. This process involved putting the examples of humor in different categories based on their conceptual similarity. (Wanzer et al., 2006)

The researchers placed the students' examples of appropriate humor into four categories, including "related humor," "humor unrelated to course material," "self-disparaging humor," and "unintentional humor." "Related humor" included humorous content that was related to the class content. "Unrelated humor" included humorous content that was not related to the class content. "Self-disparaging" humor included humorous content that the teacher directed toward him or herself. And "unintentional humor" included any humorous content that

was apparently unplanned or spontaneous. (Wanzer et al., 2006) The humor categories they created are listed in Table 3.

Table 4

Categories and Subcategories of Appropriate Teacher Humor

I. Related Humor. This category included any humor used by the professor that related to the material or enhanced learning in the classroom.

Humor Related to Material Without a Specified Tactic—Students indicated that the teacher employed humor related to course material but did not describe a specific tactic. For example, “One of my teachers uses humor related to class topics.”

Using Media or External Objects to Enhance Learning—Humor attempts that were related to the course material and used props or different types of media to enhance learning. For example, “He regularly dressed up in costume for theme of class,” “Playing with a slinky to demonstrate a physics experiment,” “Used a related cartoon,” or “Showed movies of research that were funny because they were outdated.”

Jokes—Teacher used jokes that related to the course material. For example, “What’s someone who likes to go out a lot? Answer: Fungi.”

Examples—Teacher used humorous examples to illustrate course concepts. For example, “Math teachers have used names in word problems that were

humorous.”

Stories—Teacher used humorous stories to illustrate course concepts or reinforce learning. For example, “Using a funny story about their kids, past college experiences, other family members and relating it to class discussion.”

Critical/Cynical—Teacher was critical or cynical about course material in an effort to be humorous. For example, “A teacher using sarcasm to get a point across,” or “teacher making fun of the book.”

College Life Stereotypes—Teacher used humor attempts related to the course material and targeting stereotypical college behaviors. For example, “Teacher uses stereotypical behavior, e.g., partying, not studying, as examples,” “Ask us what types of beer we prefer when they need examples to show the demand of things,” or “Using ‘slang’ that students use when they are discussing topics.”

Directed Towards Student/Teasing—Teacher employed humor attempts related to the material and, at the same time directed towards students. For example, “Using a student in a demonstration that was humorous and harmless.”

Teacher Performance—Teacher used humor attempts related to class material that involved some type of animated performance. For example, “A marketing professor runs around the classroom and gets really excited about topics,” “My teacher made a rap about math,” or “Doing the voice of Columbus while talking about voyages to America.”

Role Playing/Activities—Teacher used humor attempts related to course material that involved student role play or activities. For example, “Staged events in class

that were funny but made a point,” or “We did a skit about what we were learning.”

Creative Language Usage—Teacher used humor attempts related to the course material that involved creative language or word play. For example, “Teachers come up with funny mnemonic devices to help us remember important material,” or “Talks of bacteria as little beasties or little guys.”

II. Humor Unrelated to Class Material. This category included any humor used by the professor that did not relate to learning or classroom enhancement.

Stories—Teacher humor attempts that involved stories that were not related to the class material. For example, “Sometimes teachers will go off on tangents and just tell stories for the heck of it.”

Jokes—Teacher humor attempts that involved jokes that were not related to the course material. For example, “He said that they are celebrating 15 years of not killing one another, also known as an anniversary.”

Critical/Cynical—Teacher humor attempts that involved critical or cynical humor that was not related to the course material. For example, “Poking fun at ignorant behaviors, negative ways of thinking, or other professors,” or “General sarcasm.”

Directed Towards Student/Teasing—Teacher humor attempts that were not related to the course material and involved teasing or making fun of a student. For example, “My teacher teased a girl in my class about a guy she has seen her with.”

College Life Stereotypes—Teacher used humor attempts that were not related to the course material and targeted stereotypical college behaviors. For example, “They have made funny comments on the typical college student (procrastinators, clothing, weekend habits, etc.)”

Teacher Performance—Teacher used humor attempts that were not related to class material and involved some type of animated performance. For example, “Making faces at the class,” or “Jumped up on desk and started acting like a monkey.”

Creative Language Usage—Teachers used humor attempts that were not related to the course material and involved creative language or word play. For example, “Teachers using puns,” or “Plays on words which are humorous.”

Current Events/Political—Teachers used humor attempts that were not related to the course material and involved current events or politics. For example, “He brings in current issues in the world and finds humor out of them.”

Using Media or External Objects—Humor attempts that were not related to the course material and involved the use of props or different types of media to enhance learning. For example, “Showing pictures of funny things,” or “He likes to play random assortments of music before class.”

III. Self-Disparaging Humor. This type of humor involves jokes, stories or comments in which an instructor criticizes, pokes fun of or belittles himself/herself.

Make Fun of Himself/Herself (nonspecific)—Humor attempts targeting the teacher in a general way. For example, “A teacher making fun of himself.”

Make Fun of Personal Characteristics—Humor attempts targeting personal characteristics of the teacher. For example, “When a teacher joked about his eyesight and clumsiness.”

Tell Embarrassing Stories—Teacher shares embarrassing stories in an attempt to be funny. For example, “Teacher telling life stories that may have been embarrassing for them, or put them in a awkward situation.”

Make Fun of Mistakes Made in Class—In an attempt to be funny the teacher makes fun of a mistake he/she made. For example, “Poking fun at themselves for a mistake they have made in class.”

Make Fun of Abilities—In an attempt to be funny the teacher might make fun of his/her abilities. For example, “Teachers often refer to themselves as stupid.”

IV. Unintentional or Unplanned Humor. The teacher did not intend to be funny, but the students found his/her behavior to be humorous. Examples: Unintentional puns and slips of the tongue.

(Wanzer et al., 2006, pp. 186–187)

When it came to appropriate humor, 47% of the student examples were put in the “related humor” category, 44% were put in the “humor unrelated to

class material” category, 9% were put in the “self-disparaging humor” category, and 0.5% were put in the “unintentional or unplanned humor” category. (Wanzer et al., 2006)

The most common types of “related humor” were “external media or external objects to enhance learning” at 19%, “jokes” and “examples” at 14% each, and “stories” at 13%. These four categories accounted for 60% of the related humor. Among the other categories, “humor related to material (tactic not specific)” and “critical/cynical” accounted for 7%, “college life stereotypes” and “directed toward student/teasing” each accounted for 6%, “teacher performance” accounted for 5%, while “role playing/activities” and “creative language usage” each accounted for 4%. (Wanzer et al., 2006)

The most common types of “humor unrelated to class material” were “stories” at 20%, “jokes” at 17%, and “critical/cynical,” “directed towards student/teasing,” and “college life stereotypes” at 14% each. These five categories accounted for 79% of unrelated humor. Among the other categories, teacher performance accounted for 10%, “creative use of language” accounted for 5%, while “current events/political” and “using media/external objects” each accounted for 3%. (Wanzer et al., 2006)

The most common types of “self-disparaging humor” were “make fun of personal characteristics” at 33%, “make fun of himself/herself (nonspecific)” at 27%, and “tell embarrassing stories” at 20%. These three categories make up 80% of self-disparaging humor. The other two categories, “make fun of abilities”

and “make fun of a mistake made in class” accounted for 9% and 8% respectively. There was only one sub-category for “unintentional or unplanned humor,” and it was called “unintentional humor.” (Wanzer et al., 2006) The results are listed in Table 4.

Table 5

Appropriate Humor Frequencies

| Category | Percentage of category |
|---|------------------------|
| Related Humor | |
| Humor Related to Material (tactic not specific) | 7 |
| Using Media or External Objects to Enhance Learning | 19 |
| Jokes | 14 |
| Examples | 14 |
| Stories | 13 |
| Critical/Cynical | 7 |
| College Life Stereotypes | 6 |
| Directed Towards Student/Teasing | 6 |
| Teacher Performance | 5 |
| Role Playing/Activities | 4 |
| Creative Language Usage | 4 |
| Total | 47 |

Humor Unrelated to Class Material

| | |
|----------------------------------|----|
| Stories | 20 |
| Jokes | 17 |
| Critical/Cynical | 14 |
| Directed Towards Student/Teasing | 14 |
| College Life Stereotypes | 14 |
| Teacher Performance | 10 |
| Creative Language Use | 5 |
| Current Events/Political | 3 |
| Using Media/External Objects | 3 |
| Total | 44 |

Self-Disparaging Humor

| | |
|---|----|
| Make Fun of Himself/Herself (nonspecific) | 27 |
| Make Fun of Personal Characteristics | 33 |
| Tell Embarrassing Stories | 20 |
| Make Fun of Mistakes Made In Class | 12 |
| Make Fun of Abilities | 8 |
| Total | 9 |

Unintentional or Unplanned Humor

(Wanzer et al., 2006, p. 188)

Wanzer, Frymier, Wojtaszczyk, and Smith (Wanzer et al., 2006) placed the students' examples of inappropriate humor into four categories, including "offensive humor," "disparaging humor: student target," "disparaging humor: 'other' target," and "self-disparaging humor." "Offensive humor" included humorous content that was clearly offensive in nature, but did not necessarily target a specific individual. "Disparaging humor: student target" included humorous content that was clearly disparaging and was targeting either a specific student or a group of students. "Disparaging humor: 'other' target," included humorous content that was clearly disparaging and was targeting either an individual or group aside from the students. And "self-disparaging humor" included humorous content where the instructor poked fun at him or herself. (Wanzer et al., 2006) The humor categories they created are listed in Table 5.

Table 6

Categories and Subcategories of Inappropriate Teacher Humor

I. Offensive Humor. Humor in this category included any types of humor that were clearly identified as offensive in nature and not necessarily targeted at a

specific person or persons.

Sexual Jokes/Comments—Teacher tells sexual jokes or makes sexual comments in an attempt to be humorous. For example, “I had a health class in which the teacher would make graphic jokes about sex.”

Vulgar Verbal and Nonverbal Expressions—Teacher uses vulgar verbal or nonverbal expressions. For example, “Swearing,” “Flipping the bird to students in class,” or “Carrying or wearing something that is derogatory.”

Drinking—In an attempt to be funny, the teacher will make references to drinking or alcohol. For example, “When a teacher talks about getting drunk,” or “I find it offensive when professors always use examples pertaining to alcohol.”

Inappropriate Jokes—Teacher tells inappropriate jokes in class. For example, “Teachers crack jokes that do not relate to the lesson,” or “My English teacher told a few inappropriate jokes.”

Personal Life—In an attempt to be funny, the teacher tells stories about his/her personal life. For example, “Teacher always told stories about herself, son, and dog in the middle of lectures. It was basically a waste of time.”

Drugs/Illegal Activities—Teacher humor attempts that involved discussion of drugs or illegal activities. For example, “Talking about inappropriate things such as pornography and drugs.”

Morbid Humor—Teacher humor attempts that involve discussions about death or another related morbid topic. For example, “In a law class, professor tells cases of when people died or got hurt in a humorous manner.”

Sarcasm—Teacher humor attempts that involve sarcasm. For example, “When we asked him how to do a problem he would say something such as ‘with a pencil.’”

II. Disparaging Humor Student Target. Humor in this category is clearly disparaging in nature and targets students as a group or individual students.

Students (as a group)

Nonspecific Response—Teacher humor attempts that targeted students in a nonspecific way. For example, “Jokes that spoke about all students in general and made fun of them.”

Based on Intelligence—Teacher humor attempts that targeted students’ intelligence. For example, “Teacher referred to a group of students as ‘the living brain dead.’”

Based on Gender—Teacher humor attempts that targeted students based on gender. For example, “One teacher actually advised girls to take home education instead of physical education.”

Based on Appearance—Teacher humor attempts that targeted students’ appearance. For example, “A professor making reference to the number of students that wear clothes from Abercrombie & Fitch.”

One Student (singled out)

Nonspecific Response—Teacher humor attempts that targeted a single student in a nonspecific way. For example, “Anytime when a teacher puts another

student down in front of others just to get a laugh from the class.”

Based on Intelligence—Teacher humor attempts that target a specific student’s intelligence. For example, “Calling someone stupid in a humorous way,” or “Making fun of a student’s answer, even though the student was serious about it.”

Based on Student’s Personal Life/Opinions/Interests—Teacher humor attempts that target a specific student’s personal life, opinions or interests. For example, “A comment made to demean someone who has expressed their opinion,” or “Making fun of a student’s personal life.”

Based on Appearance—Teacher humor attempts that involved targeting a specific student’s appearance. For example, “A particular teacher would personally attack people by making fun of their clothes or the way they looked.”

Based on Gender—Teacher humor attempts that involved targeting a specific student based on gender. For example, “Teacher made a very sexual comment in class towards a female and then laughed.”

Based on Religion—Teacher humor attempts that targeted a specific student based on religion. For example, “The student was of Indian decent and a practicing Hindu. The teacher mocked her by saying, ‘Go worship your cow’.”

III. Disparaging Humor: “Other” Target. Humor attempts in this category are clearly disparaging in nature, and are targeted at individuals or groups other than students.

Using stereotypes in general—Teacher humor attempts that involved use of stereotypes in a general way. For example, “Excessive use of stereotypes in jokes.”

Targeting Gender Groups—Teacher humor attempts that involved targeting males or females. For example, “Our teacher sometimes stereotypes certain sexes and makes jokes about them.”

Targeting Ethnic or Racial Groups—Teacher humor attempts that involved targeting particular racial or ethnic groups. For example, “I have a teacher that regularly makes fun of different ethnic/cultural groups,” or “A teacher would make generalizations about a race, and make fun of that race in class.”

Target is University Related—Teacher humor attempts that involved targeting university staff. For example, “Making fun of other teachers,” or “Making fun of certain organizations at the school.”

Targeting Religious Groups—Teacher humor attempts that involved targeting certain religions groups. For example, “Several professors have made references to religion, especially Christianity, in belittling terms.”

Targeting persons of a given sexual orientation—Teacher humor attempts that involved targeting people based on sexual orientation. For example, “Making fun of sexual orientation,” or “Jokes referring to gays.”

Targeting persons of a given appearance—Teacher humor attempts that involved targeting people based on their appearance. For example, “Telling blonde jokes.”

Political motivation—Teacher humor attempts that involved targeting people based on their political affiliations. For example, “Humor which is politically motivated, therefore projecting their views upon you.”

IV. Self-Disparaging Humor. This type of humor involves a professor criticizing, poking fun of or belittling himself/herself. Example: Professor says, “I am such an idiot!” to the class or performs a similar self-disparaging.

(Wanzer et al., 2006, pp. 186–187)

When it came to inappropriate humor, 30% of the student examples were put in the “offensive humor” category, 42% were put in the “disparaging humor: student target” category, 27% were put in the “disparaging humor: ‘other’ target” category, and 1% were put in the “self-disparaging humor” category. Within the “disparaging humor: student target” 17% of the examples were directed toward a group of students while 83% singled out a specific student. (Wanzer et al., 2006)

The most common types of “offensive humor” were “sexual jokes/comments” at 35%, “vulgar verbal and nonverbal expressions” at 27%, and “drinking” at 13%. These three categories accounted for 75% of the offensive humor. Among the other categories, “inappropriate jokes” accounted for 8%, “personal life” accounted for 6%, “drugs/illegal activities,” and “morbid humor” accounted for 5% each, while “sarcasm” accounted for 1%. (Wanzer et al., 2006)

The most common type of “disparaging humor: student target,” that was directed toward a group of students was “based on intelligence,” at 10%. An additional 5% was categorized as “nonspecific response.” The “based on gender” and “based on appearance” categories had 1% each. (Wanzer et al., 2006)

The most common types of “disparaging humor: student target,” that were directed toward a specific student, were “nonspecific response” at 24%, “based on intelligence” at 26%, and “based on student’s personal life/opinions/interests” at 17%. These three categories accounted for 67% of disparaging humor directed toward students. Among the other categories, “based on appearance” accounted for 9%, “based on gender” accounted for 6%, and “based on religion” accounted for 1%. (Wanzer et al., 2006)

The most common types of “disparaging humor: ‘other’ target” were “targeting gender groups” at 34%, “targeting racial/ethnic groups” at “30%, and “target is university related (e.g., teachers)” at 12%. These three categories accounted for 76% of disparaging humor targeting others. Among the other categories, “targeting religious groups” accounted for 7%, “using stereotypes in general” and “targeting sexual orientation” accounted for 5% each, “targeting appearance” accounted for 4%, and “political motivation” accounted for 3%. There was only one sub-category for “self-disparaging humor.” (Wanzer et al., 2006, p. 191)

Some of the same categories of humor were listed as both appropriate and inappropriate. For example, some examples of “self-disparaging humor”

were deemed appropriate by some students, but inappropriate by other students. Cynical humor and sarcasm were also identified as both appropriate and inappropriate by students. Torok, McMorris, and Lin (2004) also identified differences in student's interpretation of appropriate and inappropriate types of instructor humor in the classroom. The results are listed in Table 6.

Table 7

Inappropriate Humor Frequencies

| Category | Percentage of category |
|---|------------------------|
| Offensive Humor | |
| Sexual Jokes/Comments | 35 |
| Vulgar Verbal and Nonverbal Expressions | 27 |
| Drinking | 13 |
| Inappropriate Jokes | 8 |
| Personal Life | 6 |
| Drugs/Illegal Activities | 5 |
| Morbid Humor | 5 |
| Sarcasm | 1 |
| Total | 30 |

Disparaging Humor: Student Target

| | |
|---|----|
| Students as a group (17% of the category) | |
| Nonspecific Response | 5 |
| Based on Intelligence | 10 |
| Based on Gender | 1 |
| Based on Appearance | 1 |
| One student singled out (83% of the category) | |
| Nonspecific Response | 24 |
| Based on Intelligence | 26 |
| Based on Student's Personal Life/Opinions/Interests | 17 |
| Based on Appearance | 9 |
| Based on Gender | 6 |
| Based on Religion | 1 |
| Total | 42 |

Disparaging Humor: "Other" Target

| | |
|---|----|
| Using Stereotypes in General | 5 |
| Targeting Gender Groups | 34 |
| Targeting Racial/Ethnic Groups | 30 |
| Target is University Related (e.g., teachers) | 12 |
| Targeting Religious Groups | 7 |
| Targeting Sexual Orientation | 5 |
| Targeting Appearance | 4 |

| | |
|----------------------|----|
| Political Motivation | 3 |
| Total | 27 |

Self-Disparaging Humor

| | |
|------------------------|---|
| Self-Disparaging humor | 1 |
|------------------------|---|

(Wanzer et al., 2006, pp. 186–187)

Because of the ambiguous nature of some forms of humor, it is important to understand what influences perceptions of humor. It is important to know how students view various types of instructor humor as appropriate or inappropriate and funny or unfunny, but we must also know why.

Perception of Humor Appropriateness

Students' perceptions of the appropriateness of instructor humor may also be influenced by individual differences (Frymier, Wanzer, & Wojtaszczyk, 2008). It is important to look at the relationship between humor appreciation and personality (Derks, 1995). Research has shown that extraverts have a greater preference for aggressive and sexual humor than introverts (Eysenck, 1942, 1943). Extraverts also laugh more often in humorous situations and regard some types of humor as being funnier (Ruch, 1993). And the intensity with which a

person responds to humor is closely related to his or her appreciation of humor (Ruch, 1993).

One way of measuring this appreciation of humor is through one's humor orientation. This is the extent to which people appreciate humor and have a "predisposition to enact humorous messages" (Booth-Butterfield & Booth-Butterfield, 1991, p. 32). Research shows that those who scored high on the humor orientation scale were rated by objective judges and other participants as being funnier when telling jokes (Wanzer, Booth-Butterfield, & Booth-Butterfield, 1995). It is likely that students who are more humor oriented would be more open to humor in general and therefore would view more types of instructor humor in the classroom as appropriate (Frymier, Wanzer, & Wojtaszczyk, 2008).

Communication competence is another possible factor that influences what humor some people find appropriate, while others do not. According to Spitzberg and Cupach (1984) communication competence is "the extent to which objectives functionally related to communication are fulfilled through cooperative interaction appropriate to the interpersonal context" (p. 100). There are two elements at play here, effectiveness and appropriateness. Effectiveness is the ability of a communicator to achieve his or her goals. Appropriateness is the ability to meet the expectations for the situation at hand. (Spitzberg & Cupach, 1984). If one is able to both achieve his or her goals and live up to the social norms, then he or she would be considered a competent communicator (Wanzer et al., 2006).

Communication competence may explain why students differ in what instructor humor they find appropriate in the classroom. As Frymier, Wanzer, and Wojtaszczyk (2008) noted, “students who communicate more effectively and appropriately may be more cognizant of the factors or elements that contribute to message appropriateness than students who are less effective communicators” (p. 272). Some students are more perceptive about what type of communication should or should not be used.

In line with this theory, it is safe to assume that we want college instructors to have a high level of communication competence as well. Good instructors will achieve their goals of student learning and engagement while using communication that is appropriate for the classroom setting. Humor can be a useful tool in achieving this goal.

Rationale for Study

While there have been other studies looking at instructor use of humor, there are no studies that look at the correlation between student affective, cognitive, and behavioral engagement. Furthermore, there are very few studies that utilize experimental methodology and have students watch videos of lectures, rather than self-reporting on classes they have attended. In the chapters that follow, the researcher attempts to establish the relationship between instructor use of humor and student engagement. The methodology for this study is discussed in Chapter Three.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The purpose of this study is to find a possible correlation between instructor use of humor in higher education classes and student engagement. Many instructors, including the researcher, use humor in their classes in order to increase teacher/student immediacy, increase student retention, and improve student engagement. Chapter Three outlines the research methodology that was used in this study.

Research Question

The primary research question this study is attempting to answer is: In what ways, if any, does humor infused instruction promote high levels of affective, cognitive, and participant perceptions of behavioral engagement among college students?

Research Design

In order to test for a significant difference between instructor use of humor and non-use of humor in class on student engagement, sample participants were randomly assigned to one of two groups. One group watched a lecture on fallacies that included humorous illustrations and examples while the other group watched a lecture that did not include these humorous illustrations and

examples. Immediately after watching the lecture students were asked to complete an 18-item questionnaire that measured their engagement.

The reason to use logical fallacies as the lecture topic is because it is a general topic that most students are exposed to early in their college experience, regardless of major. Also, learning about logical fallacies does not require any prerequisite knowledge. College students should be able to understand the concept of logical fallacies without having had any specific classes or background in the area.

In order to reduce variables that might arise from having multiple teachers delivering different lectures or one teacher trying to deliver different variations of the same lecture, the researcher used two differently edited versions of the same lecture. It would be very hard for the researcher to get two lectures identical aside from the presence of humor and there would invariably be additional and unaccounted for variables.

The use of video, as opposed to live delivery of lesson plans, is adopted from a study done by Garner (2006) that focused on instructor use of humor. He had a group of 117 undergraduate college students watch three 40-minute videos of research methods and statistics. After each session, students were asked to complete a short questionnaire that measured their thoughts about the asynchronous course delivery as opposed to a more traditional class.

Unlike other research on humor, which relied primarily on students' assessment of how humorous their last instructor was, or current instructor is,

Garner (2006) chose to use humorous and non-humorous versions of a video recorded lecture. As he explained:

This approach allowed us to control for a myriad of subtle and not so subtle differences that could have been introduced by the lecturer—despite the best effort to do otherwise—if the presentations were live. This procedure insured a more consistent presentation and enhanced methodological rigor across experimental conditions. (p. 179)

The researcher video recorded a logical fallacies lecture and edit it into two versions. One video version included the humorous examples and illustrations, while the other one did not. Non-humorous portions were edited out of the humorous video so that both videos were the same length.

In order to make sure one of the videos actually included humor and the other one does not, the researcher enlisted the help of Gabe Abelson, a well-respected professional comedy writer and stand-up comedian. He was the head monologue writer for *The Late Show with David Letterman* and was a writer on *The Tonight Show with Jay Leno*, *Politically Incorrect with Bill Maher*, and *The Late Late Show with Craig Kilborn* (“Gabe Abelson,” 2016). Abelson viewed all the video footage from the recorded classes and choose the most humorous segments. He then assisted in editing the two versions of the video to make sure that one video contained humor, while the other one did not.

Research Setting and Recruitment

The video of the lectures and a questionnaire was placed on the Internet.

Students at multiple schools were asked to participate by going to a specific website. These schools included universities, colleges, and community colleges located throughout the United States. All of the higher education institutions were regionally accredited by agencies that are recognized by the United States Department of Education and the Council for Higher Education Accreditation.

In order to recruit student participants, the researcher gathered a list of student names and corresponding email addresses from directory information at multiple schools. This information was gathered from publicly available student directories on college and university websites or was requested via Freedom of Information Act (FOIA) requests that the researcher made to the schools. Since the schools that were used in this study label current student names and email addresses as directory information, that may be released to the public, they release this information in response to the FOIA request.

Once the researcher gathered a list of names and corresponding email addresses, he sent emails to those students requesting that they participate in the research. If they agreed to participate and clicked on the link within the email they were taken to the researcher's website. Once there, the JavaScript coding within the website randomly had the participants watch either the video with or without humor. They did not know that they were randomly assigned or that there was another version of the video until they completed the questionnaire. At that time, the purpose and methodology of the study was revealed.

Research Sample

The sample group consisted of 448 randomly selected student participants. This included 224 students who watched the video of the lecture with humor and completed the student engagement questionnaire. It also included 224 students who watched the video of the lecture without humor and completed the student engagement questionnaire. Once the first 224 students in each category completed the survey, data collection for that category was closed.

Measurement Tool

In order to measure the engagement of participants, the researcher used an 18-item scale that is adapted from the work of Gunuc and Kuzu (2015). Their research used 805 undergraduate college students to determine the validity and reliability of their scale of student engagement. They collected data from 473 students for EFA and 332 students for CFA. Their scale had two components, campus engagement, which had 20 items, and class engagement, which had 39 items. They broke down campus engagement into three categories: “valuing,” which had five-items; “sense of belonging,” which had 10-items; and “participation,” which had five-items. They broke class engagement into three categories as well: “cognitive engagement,” which had 10-items; “emotional engagement,” which had 19-items; and “behavioral engagement, which had 10-items (pp. 592–595).

The researcher subsequently took the 39-items that focused on class engagement and tailored them to suit the purposes of this study. Since the video

that students watched was only of the instructor and no reference to classmates is made, all questions concerning classmates were removed. This includes questions such as “I have close friend(s) in my class” and “I respect my classmates” (p. 593). Gunuc and Kuzu (2015) phrased their questions to focus on classes in general, but since the researcher conducted research on a specific class, questions were changed to be more focused. For example, questions like “I like my teachers” (p. 593) was changed to “I like this teacher” and “I am interested in my courses” (p. 594) was changed to “I am interested in this course.” Additionally, since students are being questioned about the limited portion of a class they are watching on video as opposed to an actual class or classes they are enrolled in, questions were adjusted to apply to their hypothetically taking the class. For example, questions like, “I try to do my best during classes” (p. 593) was changed to “I would try to do my best during this class” and “I think my courses are beneficial to me” was changed to “I think this course would be beneficial for me” (p. 593). The revised measuring tool for this study includes a total of 18-items, with six-items focusing on affective (emotional) engagement, six-items focusing on cognitive engagement, and six-items focusing on behavioral engagement. The original and revised questions are listed in Table 8.

Table 8

Student Engagement Measurement Tool

| Original question | Revised question |
|--|---|
| Emotional engagement | |
| I like my teachers | I like this teacher |
| I think my teachers are competent in their fields | I think this teacher is competent in his/her field |
| I think my courses are beneficial for me | I think this course would be beneficial for me |
| My classes are entertaining | This class is entertaining |
| I respect my teachers | I respect this teacher |
| I am interested in my courses | I am interested in this course |

Cognitive engagement

I motivate myself to learn

I would motivate myself to learn

In this class

I determine my own learning
goals

I would determine my own
learning goals in this class

I try to do my best during
classes

I would try to do my best
during this class

What I learn in class is important
for me

What I would learn in this class
would be important for me

I enjoy intellectual difficulties I
encounter while learning

I would enjoy intellectual
difficulties I would encounter
while learning in this class

I spend enough time and make
enough effort to learn

I would spend enough time and
make enough effort to learn in
this class

Behavioral engagement

I am an active student in class

I would actively participate in
this class

I attend class willingly

I would attend this class willingly

I carefully listen to my teacher
in class

I would carefully listen to this
teacher in this class

My teachers interact/communicate
with me

I believe this teacher would
interact/communicate with me

I follow the rules in class

I would follow the rules in this
class

I do my homework/tasks in time

I would do my homework/tasks
in time in this class

(Gunuc & Kuzu, 2015, pp. 592–595)

Data Analysis

This data was analyzed using three independent unpaired t-tests. All three t-tests compared student participants who watched the video of the lecture with humor to those who watched the video of the lecture without humor. The first t-test compared the affective engagement score of student participants, which was determined by calculating the mean of the six five-point Likert scale questions in the affective (emotional) engagement sub-scale. The second t-test analyzed the cognitive engagement score, which was determined by calculating the mean of the six five-point Likert scale questions in the cognitive engagement sub-scale. And the third t-test looked at the behavioral engagement score, which was determined by calculating the six five-point Likert scale questions in the behavioral engagement sub-scale.

Positionality of the Researcher

The researcher acknowledges a bias based on experience as both a college instructor and a comedian. He has served as an instructor of communication studies at both La Sierra University and College of the Desert. He has also worked as a professional comedian and performed at venues including the Magic Castle in Hollywood, California and Flappers Comedy Club in Burbank, California.

The researcher has combined these two aspects of his life and made extensive use of humor in the classes he teaches. He believes that this humor helps build better relationships with his students, keeps them engaged in the

class, helps them learn the course content more effectively, and ultimately contributes to their being more successful in school.

Dissemination

This research will be published in ScholarWorks on the California State University, San Bernardino library website. It will also be posted on the researcher's personal academic website. In addition, it is the researcher's goal to share these findings at academic conferences and in peer-reviewed journals for the education and communication disciplines.

Confidentiality of the Data

The only personal information that was collected about possible participants is their name and email address. This information is labeled "directory information" by the schools from which they were collected. According to the Family Educational Rights and Privacy Act (FERPA) regulations, directory information is "an educational record of a student that would not generally be considered harmful or an invasion of privacy if disclosed" (Family Policy Compliance Office, 2009, p. 4). Since it is directory information, it is either available in a publicly accessible student directory or is available through a Freedom of Information Request (FOIA). No personal identifying information was collected from student participants who watched the video and completed the subsequent questionnaire.

Risks and Benefits

This research did not put any participants at risk. Neither watching the video of the lecture nor completing the subsequent questionnaire is likely to cause adverse effects. The potential benefits of this study include a better understanding of pedagogical techniques and will be shared with the academic community upon publication of this dissertation.

Summary

This study uses a quantitative experimental approach. Student participants were asked to go to an Internet website where they were randomly assigned to one of two groups. One group watched a video of a lecture that includes humor, while the other group watched a video of a lecture that does not. Each group was then asked to complete a questionnaire that measures their student engagement. The results are discussed in Chapter Four.

CHAPTER FOUR

RESULTS

Introduction

Data collection began on July 13, 2017, when the California State University, San Bernardino, Institutional Review Board gave approval. Data collection ended on December 5, 2017. A total of 448 students participated in the research. With the use of a randomization JavaScript code on the website, two-hundred twenty-four of them were randomly prompted to view the video containing instructor use of humor. Two-hundred twenty-four were randomly prompted to view the video with no humor. Of those who viewed the video with humor, 191 completed all of the engagement questions. Of those who viewed the video with no humor, 203 completed all of the engagement questions.

Results of the Study

There was no statistically significant difference between the responses from students who watched the video with humor and the students who watched the video without humor. This was true for overall engagement and for the emotional, cognitive, and behavioral subscales. For overall engagement there was not a significant difference in the scores for humor ($M = 70.9738$, $SD = 12.37546$) and no humor ($M = 1.9507$, $SD = 11.81196$) conditions; $t(392) = -.802$, $p = .423$. For emotional engagement there was not a significant difference in the scores for

humor (M = 22.4974, SD = 4.71824) and no humor (M = 22.7586, SD = 4.68892) conditions; $t(392) = -.551, p = .582$. For cognitive engagement there was not a significant difference in the scores for humor (M = 23.4084, SD = 4.70059) and no humor (M = 23.8621, SD = 4.19461) conditions; $t(392) = -1.012, p = .312$. And for behavioral engagement there was not a significant difference in the scores for humor (M = 25.0681, SD = 4.37584) and no humor (M = 25.3300, SD = 4.24549) conditions; $t(392) = -.603, p = .547$. The results are detailed in Tables 9 and 10. In addition, there were no statistically significant differences found within subgroup comparisons.

Table 9

Group Statistics

| | Group | N | Mean | Std. Deviation | Std. Error Mean |
|-------------------|--------------|----------|-------------|-----------------------|------------------------|
| Emotional | Humor | 191 | 22.4974 | 4.71824 | 0.34140 |
| | No Humor | 203 | 22.7586 | 4.68892 | 0.32910 |
| Cognitive | Humor | 191 | 23.4084 | 4.70059 | 0.34012 |
| | No Humor | 203 | 23.8621 | 4.19461 | 0.29440 |
| Behavioral | Humor | 191 | 25.0681 | 4.37584 | 0.31662 |
| | No Humor | 203 | 25.3300 | 4.24549 | 0.29798 |
| Overall | Humor | 191 | 70.9738 | 12.37546 | 0.89546 |
| | No Humor | 203 | 71.9507 | 11.81196 | 0.82904 |

Table 10

Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|------------|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|---------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Emotional | Equal variances assumed | .500 | .480 | -.551 | 392 | .582 | -.26124 | .47410 | -1.19334 | .67086 |
| | Equal variances not assumed | | | -.551 | 390.231 | .582 | -.26124 | .47419 | -1.19353 | .67106 |
| Cognitive | Equal variances assumed | 3.201 | .074 | -1.012 | 392 | .312 | -.45369 | .44829 | -1.33504 | .42765 |
| | Equal variances not assumed | | | -1.009 | 380.474 | .314 | -.45369 | .44984 | -1.33818 | .43079 |
| Behavioral | Equal variances assumed | .301 | .583 | -.603 | 392 | .547 | -.26199 | .43439 | -1.11601 | .59203 |
| | Equal variances not assumed | | | -.603 | 388.760 | .547 | -.26199 | .43479 | -1.11682 | .59284 |
| Overall | Equal variances assumed | .128 | .721 | -.802 | 392 | .423 | -.97692 | 1.21857 | -3.37267 | 1.41884 |
| | Equal variances not assumed | | | -.801 | 387.515 | .424 | -.97692 | 1.22031 | -3.37616 | 1.42233 |

Reliability

The 18-item student engagement scale, that the researcher adapted from Gunuc and Kuzu's (2015) scale, was highly reliable, with a Chronbach's alpha of .930 (Table 11). The emotional, cognitive, and behavioral sub-scales were also highly reliable. The six-item emotional sub-scale had a Chronbach's alpha of .855 (Table 12). The six-item cognitive sub-scale had a Chronbach's alpha of .839 (Table 13). The six-item behavioral sub-scale had a Chronbach's alpha of .848 (Table 14).

Table 11

Overall Chronbach's Alpha

Reliability Statistics Overall Measure

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .930 | .930 | 18 |

Table 12

Emotional Sub-Scale Chronbach's Alpha

Reliability Statistics Emotional Questions

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .855 | .857 | 6 |

Table 13

Cognitive Sub-Scale Chronbach's Alpha

Reliability Statistics Cognitive Questions

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .839 | .840 | 6 |

Table 14

Behavioral Sub-Scale Chronbach's Alpha

| Reliability Statistics Behavioral Questions | | |
|--|--|------------|
| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
| .848 | .853 | 6 |

Demographics

Of those who completed the questionnaire after watching the video with humor, 70 (37%) identified as male and 120 (63%) identified as female. Of those who completed the questionnaire after watching the video with no humor, 68 (35%) identified as male and 129 (65%) identified as female. Those who watched the video with humor had an average age of 28.3 years old, while those who watched the video with no humor had an average age of 26.3 years old.

Of the students who viewed the video with humor and answered the question asking them to identify their race, 91 (48%) students identified as "White," 28 (15%) identified as "African American," 46 (24%) identified as "Hispanic or Latino," 11 (6%) identified as "Asian," two (1%) identified as "American Indian or Alaskan Native," four (2%) identified as "Two or More Races - Non-Hispanic," and eight (4%) chose "Other / Decline to State."

Of the students who viewed the video with no humor and answered the question asking them to identify their race, 86 (46%) students identified as "White," 16 (8%) identified as "African American," 41 (22%) identified as

“Hispanic or Latino,” 20 (11%) identified as “Asian,” no one (0%) identified as “American Indian or Alaskan Native,” 49 (5%) identified as “Two or More Races - Non-Hispanic,” and 15 (8%) chose “Other / Decline to State.”

For those in the group who watched the video with humor and shared their class standing, 38 (20%) identified as graduate students, while 145 (76%) identified as undergraduates, and seven (4%) chose “Other.” This group was comprised of 146 (77%) students who attended a university, 38 (20%) students who attended a community or junior college, five (3%) students who attended a trade or technical school, and one (<1%) student who chose “Other / Decline to State.” Their average GPA was 3.52.

For those in the group who watched the video with no humor and shared their class standing, 36 (18%) identified as graduate students, while 152 (77%) identified as undergraduates, and 10 (5%) chose “Other.” This group was comprised of 148 (75%) students who attended a university, 38 (19%) students who attended a community or junior college, five (4%) students who attended a trade or technical school, and four (2%) students chose “Other / Decline to State.” Their average GPA was 3.64.

In the group that watched the video with humor, 25 (13%) students identified as being international students, while 165 (87%) students were not. Also, 143 (75%) students shared that English was their first language, while 47 (25%) said that it was not.

In the group that watched the video with humor, 25 (13%) students identified as being international students, while 163 (87%) students were not. Also, 134 (71%) students shared that English was their first language, while 54 (29%) said that it was not.

Table 15

Humor Group Participant Demographics

| Characteristic | Frequency | Percent |
|-----------------------------------|-----------|---------|
| <i>Gender</i> | | |
| Male | 70 | 37% |
| Female | 120 | 63% |
| <i>Race/Ethnicity</i> | | |
| White | 91 | 48% |
| African American | 28 | 15% |
| Hispanic or Latino | 46 | 24% |
| Asian | 11 | 6% |
| American Indian or Alaskan Native | 2 | 1% |
| Two or More Races – Non-Hispanic | 4 | 2% |
| Other / Decline to State | 8 | 4% |
| <i>Class Standing</i> | | |
| Undergraduate | 145 | 77% |
| Freshman | 32 | 17% |
| Sophomore | 44 | 23% |
| Junior | 42 | 22% |
| Senior | 27 | 14% |

| | | |
|--|-----|-----|
| Graduate | 38 | 20% |
| Other | 7 | 4% |
| <i>Type of Educational Institution</i> | | |
| University | 146 | 77% |
| Community or Junior College | 38 | 20% |
| Trade or Technical School | 5 | 3% |
| Other / Decline to State | 1 | <1% |
| <i>International Student</i> | | |
| Yes | 25 | 13% |
| No | 165 | 87% |
| <i>English is first language</i> | | |
| Yes | 143 | 75% |
| No | 47 | 25% |

Table 16

No Humor Group Participant Demographics

| Characteristic | Frequency | Percent |
|-----------------------------------|-----------|---------|
| <i>Gender</i> | | |
| Male | 68 | 35% |
| Female | 129 | 65% |
| <i>Race/Ethnicity</i> | | |
| White | 85 | 46% |
| African American | 16 | 8% |
| Hispanic or Latino | 41 | 22% |
| Asian | 20 | 11% |
| American Indian or Alaskan Native | 0 | 0% |
| Two or More Races – Non-Hispanic | 49 | 5% |
| Other / Decline to State | 15 | 8% |
| <i>Class Standing</i> | | |
| Undergraduate | 152 | 77% |
| Freshman | 26 | 13% |
| Sophomore | 39 | 20% |
| Junior | 46 | 23% |

| | | |
|--|-----|-----|
| Senior | 41 | 21% |
| Graduate | 36 | 18% |
| Other | 10 | 5% |
| <i>Type of Educational Institution</i> | | |
| University | 148 | 75% |
| Community or Junior College | 38 | 19% |
| Trade or Technical School | 7 | 4% |
| Other / Decline to State | 4 | 2% |
| <i>International Student</i> | | |
| Yes | 25 | 13% |
| No | 163 | 87% |
| <i>English is first language</i> | | |
| Yes | 134 | 71% |
| No | 54 | 29% |

CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSIONS

Overview

As was detailed in Chapter Two, there is an extensive body of research that indicates that instructor use of humor is an effective teaching tool (Bryant, Comisky, & Zillmann, 1979; Goodboy, Booth-Butterfield, Bolkan, & Griffin, 2015; Gorham & Christophel, 1990; Scott, 1976; M. B. Wanzer & Frymier, 1999; Welker, 1977). Bolken and Goodboy (2015) even found a positive correlation between instructor use of humor and cognitive engagement. The lack of statistically significant results in this study, therefore, either stands in opposition to the plethora of research supporting the benefits of instructor use of humor or it suffers from limitations that negatively impacted the collection of valid data. The researcher believes the latter is the case.

Limitations of Study

There are several limitations to this research. The students only watched a short video and did not actually sit in the class. There is no way of determining whether or not students would tire of the use of humor over time or if multiple instructional strategies would be necessary to keep students engaged. Also, engagement was measured via a questionnaire immediately after the students watched the video. Because of this, the research was actually measuring the students' impression of whether or not they would actually be engaged if they

were enrolled in the hypothetical class viewed on video. It is entirely possible that students' assertion of their own engagement might not line up with actual engagement were they to sit in the actual class. This study measured projected, rather than actual, engagement. In addition, the student engagement assessment scale from Gunuc and Kuzu (2015) was not specifically created for, or validated for, assessing student engagement who watch a video of a class, rather than attend the class in person.

In addition, the videos the students watched covered logical fallacies. There is no way to know if the results would generalize to other content areas.

Also, Gabe Abelson, the humor expert, confirmed that one video was indeed more humorous than the other. This does not, however, provide a metric for determining how much more humorous it is or whether the students would find it funny. It is entirely possible that one was slightly more humorous than the other, but neither one was objectively funny. It is also possible that Abelson's assessment of what is humorous, even though he is a professional comedian, is not consistent with the average college student.

Recommendations for Future Research

In future research, it would be a good idea to determine how humor-oriented students find the instructor, as represented in the respective videos. This could be accomplished by including questions asking students the degree to which they thought the instructor was humorous as well as whether or not they appreciated the humor. This would allow future researchers to better determine a

possible correlation between the instructor use of humor and student engagement.

It would also be of interest in future research to measure student engagement over a longer period of time. It would also be helpful to assess engagement with other tools, such as classroom observations, student reports, or teacher reports.

Conclusion

Even though this research did not produce statistically significant results, the researcher found the process useful. It gave him a broader understanding of the literature on both instructor use of humor and student engagement. This knowledge will be invaluable in his future as an educational leader.

APPENDIX A
INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

July 13, 2017

CSUSB INSTITUTIONAL REVIEW BOARD
Expedited Review
IRB# FY2017-165
Status: Approved

Mr. Carl Christman and Prof. Donna Schnorr
College of Education Doctoral Studies Program
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Mr. Christman and Prof. Schnorr:

Your application to use human subjects, titled "Instructor Humor as a Tool to Increase Student Engagement" has been reviewed and approved by the Institutional Review Board (IRB). The informed consent document you submitted is the official version for your study and cannot be changed without prior IRB approval. A change in your informed consent (no matter how minor the change) requires resubmission of your protocol as amended using the IRB Cayuse system protocol change form. Your application is approved for one year from July 13, 2017 through July 12, 2018. Please note the Cayuse IRB system will notify you when your protocol is up for renewal and ensure you file it before your protocol study end date.

Your responsibilities as the researcher/investigator reporting to the IRB Committee include the following 4 requirements as mandated by the Code of Federal Regulations 45 CFR 46 listed below. Please note that the protocol change form and renewal form are located on the IRB website under the forms menu. Failure to notify the IRB of the above may result in disciplinary action. You are required to keep copies of the informed consent forms and data for at least three years. Please notify the IRB Research Compliance Officer for any of the following:

- 1) Submit a protocol change form if any changes (no matter how minor) are proposed in your research protocol for review and approval of the IRB before implemented in your research,
- 2) If any unanticipated/adverse events are experienced by subjects during your research,
- 3) To apply for renewal and continuing review of your protocol one month prior to the protocols end date,
- 4) When your project has ended by emailing the IRB Research Compliance Officer.

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required. If you have any questions regarding the IRB decision, please contact Michael Gillespie, the IRB Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.

Best of luck with your research.

Sincerely,

Caroline Vickers

Caroline Vickers, Ph.D., IRB Chair
CSUSB Institutional Review Board

CV/MG

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