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TEACHER'S PERCEPTION OF HUMOR AS A FACILITATOR OF STUDENT ENGAGEMENT

By

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Dedication

This thesis is dedicated to my mother, Omaima Lacheen. My mother was always my advocate when nobody believed in me; she was my inspiration when I needed to look up to somebody, my hero when I needed encouragement, my teacher when I sought knowledge, my doctor when I was in pain, my support when I was weak, my guide when I go astray, and my love, as always.

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ABSTRACT

TEACHER'S PERCEPTION OF HUMOR AS A FACILITATOR OF STUDENT **ENGAGEMENT**

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Classroom engagement is an excellent indicator of students' learning, grades, achievement, test scores, retention, and graduation. However, classroom engagement is heavily dependent on teacher-student interactions. Teachers' role in engaging students in the lesson learned is critical. Using a free and convenient tool, such as teachers' humor, can ensure student engagement in the learning process (Nienaber et al., 2019). The purpose of this study is to determine how schoolteachers perceive humor as a facilitator for student engagement at the classroom level. This study used a sequential mixed methods design to gain insights regarding the teachers' perceptions of the role of humor as a catalyst for student engagement. Survey and interview data were collected from a purposeful sample of K-12 grade teachers in seven private schools in Greater Houston, Texas. The study used an electronic questionnaire from 102 teachers working in grades K-12 and 14 follow-up semi-structured interviews to gather data on teachers' perceptions

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of positive humor as a facilitator for student engagement. The quantitative data was analyzed using descriptive statistics, Pearson's product-moment correlations, one-way ANOVA test, and independent samples t-test. The qualitative data was analyzed using thematic inductive coding. Results from the quantitative analysis showed no significance. In contrast, the results of the qualitative analysis strongly supported the use of positive humor as a powerful tool for student engagement if utilized appropriately.

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CHAPTER I:

INTRODUCTION

As enthusiasm and support for student engagement in learning have grown, so has an appreciation for the complexity of the construct (Fredricks et al., 2004). Student engagement is the dynamic process through which lessons are transferred into learning (Fredricks et al., 2004). Studies indicate that engagement is an excellent indicator of students' learning, grades, achievement, test scores, retention, and graduation (Finn, 1989; Fredricks et al., 2004; Newmann et al., 1992; Tight, 2020). While it is essential to consider the potential outcomes of student engagement, it is arguable that understanding the facilitators of student engagement is also critical. Helping students become lifelong learners is an achievable goal only if educators are empowered with the knowledge of the facilitators of engagement. Facilitators, like the use of humor, ensure student engagement in the learning process (Nienaber et al., 2019).

Research Problem

Since the 1980s, the broad research literature has explored improving student success, focusing on student outcomes such as retention, completion, and employability (Zepke & Leach, 2010). A parallel research program has focused on how students engage with their studies and what institutions and educators can do to enhance their engagement and facilitate learning and academic achievement success (Zepke & Leach, 2010). Engagement drives learning and predicts school success (Reschly & Christenson, 2012). Student engagement is an international issue, with research findings indicating that students who are positively engaged in their learning can be up to seven months ahead of their peers (Centre for Education Statistics and Evaluation [CESE], 2017). Researchers have identified student engagement as a discrete learning process as an essential classroom measure predicting immediate and future student outcomes globally (CESE,

2015). Carini et al. (2006) discovered that student engagement is linked positively to desirable learning outcomes such as critical thinking and grades. Schlechty (2011) stated that genuine student engagement created through teachers' well-crafted activities enhances students' ability to problem solve and boost their creativity. A significant amount of research has been conducted documenting positive correlations between increases in student engagement and student achievement (Dotterer & Lowe, 2011; Martinez et al., 2009; Reyes et al., 2012; Weiss et al., 2010). There is a continuum of what is meant by "student engagement" and a concomitant range of benefits, from grabbing attention to facilitating deep learning (Strean, 2011, p.32). Researchers, educators, and policymakers are increasingly focused on student engagement as the key to addressing problems of low achievement, student boredom and alienation, and high dropout rates (Fredricks et al., 2004; Tight, 2020). Getting students authentically engaged in their education is vital to increasing student success (Schlechty, 2005). The conceptualization of student engagement as a state instead of a trait is fundamental because it makes intervention possible and legitimate. If student engagement is a nonmalleable trait, there is no point in doing any intervention. By contrast, if student engagement is influenced highly by contextual factors, intervention with these factors will change student engagement (Lam et al., 2012).

Literature reveals a solid understanding of how teachers influence student engagement, highlighting the teacher's role as paramount to ensuring students can experience meaningful engagement in their learning activities (Pedler et al., 2020). Shernoff et al. (2016) stated that the teacher's ability to shape students' immediate learning environment is the principal means to influence student engagement. Teaching and teachers are central to engagement and deserve to be valued and acknowledged within institutions for their contributions (Zepke & Leach, 2010). It is the teacher who

fashions conditions within the classroom (Van Uden et al., 2013), who has the most significant opportunity to engage students by shaping their learning and motivation (Collie et al., 2016), and who can generate a caring and stimulating educational environment (Shernoff et al., 2016). Lam et al. (2012) analyzed five contextual variables (teacher support, parent support, peer support, aggression from peers, and aggression towards peers) that affect student engagement. The study revealed that teacher support had the highest predictive power of student engagement and that students were engaged in school when they felt that their teachers adopted motivating instructional practices. They had social-emotional support from their teachers (Lam et al., 2012). A strong student-teacher relationship increases student engagement (Bundick et al., 2014). In classrooms where students are engaged, teachers can identify what their students understand and which concepts and topics need more explanation and deeper discussion (Havik & Westergård, 2020). Teachers must ensure their students are engaged in learning to optimize their learning and development and prevent gradual disengagement, school failure, or dropout (Havik & Westergård, 2020). Student engagement, as suggested by the word, is more the product of student attributes (Schlechty, 2011). The teachers' role in this critical learning strategy is to create a learning experience and classroom climate that enhances such engagement. Research has found that teachers tend to hold disparate conceptualizations of student engagement. That is why they employ engagement strategies often contrary to these conceptualizations (Pedler et al., 2020).

In progressively failing to change with the learners' needs, educators risk stagnating student growth because of the decline in student engagement (Unruh, 2015). Classrooms that establish a supportive environment through the development of teacher-to-student and student-to-student relationships create more profound levels of engagement and allow students to be successful as academic standards increase (Buhs et

al., 2006; Gest et al., 2008; Martin & Dowson, 2009; Wentzel, 2009). Taylor and Parsons (2011) pointed out that the teacher's activities, resources, language, and pedagogy should prioritize engagement and learning over achievement. With growing concerns about student engagement and creative teaching and learning is an excellent catalyst to consider methods that enhance students' classroom experiences (Strean, 2011). Schlechty (2011) advocates for teachers' role as designers, leaders, and guides to instruction that, if taken seriously, will ensure students' engagement. As we investigate and explore various methods to connect with and engage our students, humor is a valuable facilitator for student engagement.

In virtually any learning environment, students enter with some level of tension, anxiety, and resistance. If a stress response is activated, it can decrease the brain's capabilities to learn and remember (Kaufeldt, 2010). An atmosphere of respectful and inclusive humor helps dissipate negative emotions that impede learning (Strean, 2011). Humor is a social instrument that effectively reduces psychological distress, communicates a range of feelings and ideas, and enhances relationships. (Baldwin, 2007). Humor was found to activate students' senses and allows the brain to get ready to learn (Willis, 2010). Embalzado & Sajampun (2020) discovered that a humorous classroom brings physiological and emotional benefits to students as it relieves tension and stress, makes the classroom atmosphere more comfortable and less intimidating, and facilitates a better teacher-student relationship. Rainsberger (1994) concluded from his study that well over 50% of all subjects (teachers and students) reported that using humor reduces stress and tension and agreed with its effectiveness as an intervention. Baumgartner & Morris (2008) revealed that humor-based teaching is more engaging and exciting for the students. Humor results in students' proficiency in the subject being taught and consolidates relations between students and a lecturer (Krasnopolskyi et al., 2020). Pedler

et al. (2020) modeled the teacher's role in promoting positive emotional student engagement and suggested the incorporation of humor into teaching and learning as a successful teaching strategy. However, for humor to be effective in enhancing student engagement, it must be the appropriate type of humor (Fata et al., 2018). Affiliative humor increases student engagement, while an aggressive and sarcastic style of humor inhibits student engagement (Nienaber et al., 2019). The success or the failure of the teacher's use of humor as an instructional tool is highly dependent on the teacher's understanding of the different styles of humor and which to be employed and when (Vivona, 2018).

In a large meta-analysis, Banas et al. (2011) evaluated over 40 years of research on humor and education. They found out that humor is mainly used to create a learning environment. The use of positive, nonaggressive humor has been associated with a more exciting and relaxed learning environment, higher instructor evaluations, greater perceived motivation to learn, and enjoyment of the course. Contrarily, using negative or aggressive humor aimed at students has been associated with many opposite outcomes, including a more anxious and uncomfortable learning environment, lower evaluations of instructors, increased student distraction, and less class enjoyment.

A teacher's role in engaging students at the classroom level can significantly affect the students' overall performance. This study investigates humor as an essential student engagement facilitator at the classroom level. In addition, positive humor is believed to help teachers create suitable classroom environments that enhance student engagement and student learning. By examining these methods, the study is focused on contributing to the emerging body of literature on student engagement.

Significance of the Study

Despite the importance of student engagement and the amount of research in this field, only a few studies examine how teachers perceive humor as a classroom facilitator that influences student engagement (Lam et al., 2012). Further investigation into the details of teacher support as the most influencing contextual variable that affects student engagement will enhance the understanding of student engagement and its facilitators (Lam et al., 2012). This study aims to fulfill this gap in research. Skinner & Pitzer (2012) stated that only if students participate in both "hands-on" and "heads-on" academic activities will the time they spend in classrooms result in the acquisition of knowledge and skills (Skinner & Pitzer, 2012, p. 22). Research in a variety of areas has documented that characteristics of classroom environments have an impact on student motivation and engagement (Ryan & Patrick, 2001). A problematic yet familiar assumption among educational researchers is that students will automatically be engaged when teachers provide authentic, problem-based experiences. However, evidence indicates this is often not the case (Belland et al., 2013). Knowing that engagement is responsive to teachers' and schools' practices improves achievement and attainment for students experiencing difficulties along the way (Finn & Zimmer, 2012). This study is uncovering the teachers' perception of humor as facilitators that empower educators with what is needed to promote motivation and engagement in academic learning tasks at the classroom level.

Research Purpose, Questions, and Hypotheses

This study examines the teachers' perception of humor as an effective facilitator that enhances student engagement. The following questions guided the study:

1- Is there a relationship between the teacher's level of affiliative humor or selfenhancing humor and their student engagement efficacy?

- H0: There is no relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy.
- H1: There is a relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy
- 2- Does the grade level assigned to influence the teachers' level of affiliative or self-enhancing humor?
 - H0: The grade level assigned does not influence the teachers' level of affiliative or self-enhancing humor.
 - H1: The grade level assigned does influence the teachers' level of affiliative or self-enhancing humor.
- 3- Does the teacher's certification status influence the teacher's level of affiliative or self-enhancing humor?
 - H0: The teacher's certification status is not influenced by the teacher's affiliative or self-enhancing humor level.
 - H1: The teacher's certification status is influenced by the teacher's level of affiliative or self-enhancing humor.
- 4- What are teachers' perceptions of the style of humor as a facilitator of student engagement in classes?
- 5- What do teachers perceive as the most appropriate style of humor for elementary, middle, and high school students?

Theoretical Framework

The Self Determination Theory (SDT), introduced by Ryan & Deci (2000), is the theoretical framework used in this study. SDT is one of the most empirically supported motivation theories widely adopted in many areas (Sun et al., 2019). SDT provides an understanding of why people initiate and persist in behaviors. It is a macro theory of

human motivation, emotion, and personality processes in social contexts (Van den Berghe et al., 2014).

Definitions of Key Terms

Teacher's efficacy in student engagement: a judgment of the teacher's capabilities to bring about desired outcomes of student engagement and learning, even among students who may be difficult or unmotivated (Armor et al.,1976; Bandura, 1977).

Affiliative humor is the tendency to share humor with others, tell jokes and funny stories, amuse others, make others laugh, and enjoy laughing with others (Martin et al., 2003).

Self-enhancing humor is the tendency to maintain a humorous outlook on life even when not with others, use humor to cope with stress, and cheer oneself up with humor (Martin et al., 2003).

Conclusion

This chapter discussed the importance of student engagement in learning and how teacher humor can act as a facilitator, increasing student engagement at the classroom level. Next, an overview of the research problem was presented, along with the significance of the study, research purpose, questions, hypotheses, and definitions of terms related to the study. The next chapter presents a review of the literature related to the study.

CHAPTER II:

LITERATURE REVIEW

This chapter reviews current relevant literature addressing humor as a critical facilitator of student engagement. The purpose of this study is to determine how schoolteachers perceive humor as a facilitator for student engagement at the classroom level. To address this construct, the literature review examines Self-determination Theory (SDT) as the theoretical framework for the study, student engagement, the teacher's efficacy in student engagement, the role of a teacher's humor as a student engagement facilitator, and the varying research identified different styles of teachers' humor.

Theoretical Framework

The theoretical framework that provides a structure for this research is based on the Self Determination Theory (SDT). SDT explains the reasons behind the initiation and the persistence of human behavior. Central to this theory are intrinsic and extrinsic motivations. Intrinsic motivation refers to "the doing of an activity for its inherent satisfactions rather than for some separable consequence" (Ryan & Deci, 2000, p. 56). In contrast, extrinsic motivation is "a construct that pertains whenever an activity is done to attain some separable outcome" (Ryan & Deci, 2000, p. 60). Intrinsic motivation is the prototype of fully autonomous or self-determined behavior and therefore represents the most optimal type of motivation. It refers to engaging in an activity for enjoyment or inherent satisfaction and reflects "the inherent tendency to seek out novelty and challenges" (Ryan & Deci, 2000, p. 70). SDT identifies three primary psychological needs that ignite the intrinsic motive. These are the needs for relatedness, competence, and autonomy. Relatedness refers to the need to experience oneself as connected to other people, as belonging. (Skinner, & Pitzer, 2012) Competence refers to the need to experience oneself effectively in one's interactions with the social and physical

environments (Elliot & Dweck, 2005). Autonomy refers to the need to express one's authentic self and experience oneself as the source of action (Ryan & Deci, 2000). The sense of autonomy motivates students' desire to become more engaged (Azzam, 2014)

Cerasoli et al. (2014) performed a meta-analysis over more than four decades of research. They found out through meta-analytic regression that intrinsic motivation predicted unique variance in the quality of performance, whereas extrinsic motivation, being driven by incentives, was a better predictor of the quantity of performance. The use of humor is believed to improve students' intrinsic motivation as it helps build a rapport between the teacher and the students (Al-Nofaie, 2017), which will, in turn, ignite their internal motivation to learn. Not only that, incorporating humor in the material being taught was found to have a significant effect on learning and motivation. Syafiq and Saleh (2012) conducted a quasi-experimental research study. They found that humor as teaching material has a significant effect on the students' speaking skills compared to those with high and low learning motivation. In addition, the students expressed that humor in the classroom affected their learning positively—especially students with high or low motivation.

SDT is a valuable theoretical lens for framing this research for three primary reasons. Firstly, in a variety of educational settings, SDT's explanatory power has robust empirical support (Deci & Ryan, 2002); SDT appears to be a particularly salient lens for understanding the instructional process (Nicholas, 2019) and seems well-suited to explain the motivation and agency needed for engagement (Zepke & Leach, 2010). Secondly, SDT emphasizes the role of social relatedness and connectedness as essential needs for students (Ryan & Powelson,1991), concepts central to discovering the facilitators that the teacher could use to motivate the students and increase their engagement on a classroom level. Thirdly, SDT works to explain the psychological processes that lead to motivation

(Ryan & Deci, 2017) as a key to student engagement. Humans are wired to develop by internalizing, expanding, refining, and integrating aspects of their personality and motivation to self-improve.

SDT specifies three characteristics of need-supportive environments: such environments are autonomy-supportive instead of controlling, well-structured and competence-facilitating instead of chaotic and critical, and emotionally involved instead of withdrawn (Skinner & Belmont,1993). The teacher's use of humor reduces stress and allows students to be emotionally involved with the instructor since they have an ongoing relationship built using the appropriate type of humor. SDT works to explain the contexts and conditions that hinder or foster these processes (Nicholas, 2019). When contextualizing SDT to instruction, students' psychological needs for autonomy, competence, and relatedness function as "requisite nutriment for students' active engagement and positive school functioning" (Jang et al., 2009, p. 649). The following section will shed light on studies that tested the effects of humor as a facilitator on student engagement by fulfilling students' three needs as defined by the SDT.

Self-Determination Theory and Humor

In 2015, Bolkan & Goodboy discovered that the positive effects generated by humor impact student learning and cognitive engagement by fulfilling students' needs for competence, relatedness, and autonomy that promote student self-determination as defined by the SDT. West & Martin (2019) found that students' perceptions of (a) instructor humorousness, (b) appropriateness, and (c) humor homophily (the general extent to which a source and receiver appreciate similar forms of humor in a wide variety of situations) was positively related to the fulfillment of their psychological needs for (a) autonomy, (b) competence, and (c) relatedness with their instructor. Humor homophily was positively related to the instructor's humorousness, students' effects on their

instructor, and their likelihood of enrolling in another class with their instructor. They also found that the intensity of the instructor's humorous relationship with the student effect decreased when students perceived their instructor as inappropriate. However, the more students found their instructors humorous and reported humor homophily, the more appropriate students rated their instructors' communication.

Using self-determination theory as a framework provides teachers with ideas on how to adjust their lesson plans, instructional strategies, and classroom environment to support learners' autonomy, competence, and relatedness, which ensures that fostering student engagement is the aim of this study.

Student Engagement

Thirty-five years ago, researchers started to actively study student engagement, beginning with an article written in 1985 by Mosher and McGowan. Motivated by the urge to reduce student dropouts, Finn (1989) proposed his Participation—Identification Model, which conceptualizes completion n and dropouts, respectively, as ongoing processes of participation that lead to successful school performance (completion) or processes of non-participation that lead to poorer school performance as well as emotional decline (dropout). In other words, dropout and completion are not events but long-term processes of disengagement or engagement with school (Finn, 1989). Student engagement was seen as one-dimensional, but as research continued, it became arguable that it was multidimensional with clear anticipants and outcomes. Fredricks et al. (2004) viewed engagement as a "meta-construct" involving behavioral elements (e.g., positive conduct, active participation, academic learning time), emotional elements (e.g., positive emotions, sense of belonging to the institution, low anxiety levels), and cognitive elements (e.g., learning strategies and self-regulation). This view provided a richer characterization of student engagement. However, researchers must continue to analyze

how these elements are dynamically interrelated within the student and are not isolated processes, thus illuminating a clear portrait of how children act, think and feel when learning (Fredricks et al., 2004; Wang & Henry, 2019).

Several studies tested engagement on three primary levels. The first is institutional engagement, a general level of student involvement in schools and their community centers as prosocial institutes. (Morrison et al., 2002). Such a level of engagement promotes and protects youth development. The second is program engagement, the student's involvement in school activities, including academics, sports, and student government. Such a level of engagement promotes student completion and graduation (Skinner & Pitzer, 2012). The third is classroom engagement, which is cognitive, behavioral, and emotional student involvement in the subject taught in the classroom. This level is crucial as it is a prerequisite for knowledge and skill acquisition, long-term achievement, and academic success (Newmann et al., 1992; Tight, 2020). It also shapes students' everyday experiences in school psychologically (a student's self-image) and socially (a student being accepted by teachers and peers). Nevertheless, it is an antidote for daily stressors, challenges, and setbacks in school that supports everyday student academic resilience (Skinner & Pitzer, 2012).

Classroom-level engagement is the focus of this study, where the teacher, the student, the learning task, and the classroom environment are the main interacting factors. The teacher's knowledge of well-known approaches that enhance engagement and create an environment that supports student participation is the key to driving student motivation. Students engage in their studies when motivated, inspired, challenged, and satisfied with their education process (Reeve, 2012). Motivation refers to the underlying source of energy, purpose, and durability toward a subject, whereas engagement refers to its visible manifestation (Skinner & Pitzer, 2012). Engagement is characterized as a

context-dependent, malleable state highly responsive to a variation in personal and sociocultural factors (Wang & Henry, 2019). Skinner and Pitzer (2012) studied the three levels of engagement. They proposed a model of motivational dynamics that illustrates a multilevel perspective on engagement with the school, class, and teachers, highlighting student engagement with learning activities as central to an understanding of the development of motivational dynamics. They identified a critical drawback in engagement research: the need for clarity between indicators and facilitators of engagement. Most research uses these diverse terms interchangeably (Sinclair et al., 2003). However, engagement *indicators* are markers or descriptive parts *inside* the engaged student. In contrast, facilitators of engagement are explanatory causal factors outside the engaged student that have the potential to influence them. As the understanding of engagement has grown, scholars have underscored the need for a synthetic, coherent framework that simultaneously integrates extant literature, clarifies the conceptualization of engagement, identifies its facilitators and consequences, and proffers a theoretical model that elaborates on how engagement functions (Eccles & Wang, 2012; Skinner et al., 2016).

A teacher's sense of humor is believed to be a vital facilitator of engagement as it targets the three dimensions of engagement as proposed by Fredricks et al. (2004). Fredricks et al. (2004) define student engagement as a multi-construct composed of three major dimensions: behavioral, emotional, and cognitive. Students who are behaviorally engaged attend and participate in classes. Emotionally engaged students experience interest and enjoyment during learning. Finally, students who are cognitively engaged are invested in understanding course content and use self-regulated learning strategies, including goal setting, to optimize their learning. Researchers have suggested that

teacher-student interactions predict students' mean levels and trajectories of engagement during their educational careers (Hughes & Cao, 2018; Wang & Eccles, 2012).

Vathsala & Senthu (2012) analyzed one hundred and forty undergraduate psychology students to examine the relationship between lecturer-student interaction, emotional engagement, and academic outcomes. First, participants were randomly assigned to either good or bad lecturer-student interaction experimental conditions. Then they were asked to complete the Lecturer- Student Interaction (LSI) questionnaire, Class-related Emotions Questionnaire (CEQ), Perception of Learning (POL) Questionnaire, and two measures of academic achievement. Results showed that students who shared a good interaction with their lecturer reported higher levels of emotional engagement than those who shared poor interactions with their lecturers. Also, emotional engagement partially mediates the pathway between lecturer-student interaction and academic achievement, highlighting the significance of emotional engagement in enhancing learning outcomes in students.

Teacher Efficacy and Student Engagement

Teachers' efficacy beliefs influence teachers' ability to engage students.

(Chandler, 2014). Shaukat & Iqbal (2012) conducted a study to evaluate the teachers' self-efficacy on three subscales: student engagement, instructional strategies, and classroom management. The primary purpose of the study was to determine the teachers' self-efficacy on these subscales in relation to gender, age, professional qualification, school status, and nature of the job. The researchers administered a questionnaire using the Teachers' Sense of Efficacy Beliefs scale (Tschannen-Moran & Woolfolk Hoy, 2001) on a convenience sample of 108 male and 90 female teachers selected from four public schools in Lahore, Pakistan. Findings show no significant difference between male and female teachers in student engagement and instructional strategies. However, male

teachers were likely to perform better classroom management than female teachers. Also, more qualified teachers managed their classrooms better than less qualified teachers; however, no significant differences were detected across student engagement and instructional strategies as a function of teacher qualification.

In contrast, temporary teachers were more likely to engage students and manage their classrooms. They were also better based on their self-efficacy than permanent teachers. Lastly, elementary teachers expressed significantly better classroom management than secondary teachers, showing no differences when student engagement and instructional strategies were considered.

In an eight-month study of three South Carolina schools, Persinski (2015) analyzed the impact of teacher self-efficacy and student engagement on eleventh-grade South Carolina U.S. History and Constitution end-of-course state exam scores. The researcher studied the relationships between three variables: teacher efficacy, student engagement, and student achievement as measured by the Teachers' Sense of Efficacy Scale, Van Amburgh Active Learning Inventory Tool, South Carolina U.S. History, the Constitution end-of-course exam scores, and U.S. History teacher interviews. The researcher utilized a four-stage mixed-methods research design. The first stage consisted of measuring teacher self-efficacy using a teacher survey completed by Social Studies teachers, followed by one-on-one interviews. The second stage included observational data on student engagement. The third stage aggregated student achievement scores on the state EOC exam as reported by the district and state. The fourth stage consisted of follow-up interviews following the release of student achievement scores. This study found a positive correlation between student engagement and student achievement. However, the

relationship between teacher self-efficacy and student engagement as measured by the Teachers' Sense of Efficacy Scale needed to be established.

To explore the effect of individual and collective efficacy on teachers' ability to influence student engagement and student learning, Chandler (2014) studied the survey results from the Teacher Working Conditions Survey (TWCS) of 260 educators. The finding of the multiple regression indicated that social persuasion variables of schools (Perception of the use performance feedback [PPF], professional development opportunities [PPDO], and school leadership [PSL]) are positively correlated with collective efficacy in student engagement.

Van Uden et al. (2013) administered questionnaires to 200 teachers to measure the independent variables of teachers' motives, attitudes toward teacher knowledge domains, self-efficacy, and perceived interpersonal teacher behavior. A parallel questionnaire to their 2288 students to measure the dependent variables of the three types of student engagement (behavioral, emotional, and cognitive) to identify the relations between these independent and dependent variables. They found the most robust relations between the two dimensions of interpersonal teacher behavior and the three components of student engagement. Remarkably, they found that being the student's mentor, valuing subject-matter knowledge, and teacher self-efficacy beliefs matter in fostering engagement directed at the teacher. Furthermore, teacher self-efficacy and extrinsic motives for being a teacher also explain variance in students' cognitive engagement. Finally, they concluded that if teachers are convinced that they can foster student engagement, the chances increase that they will try to improve their students' engagement.

Bobis et al. (2016) utilized a qualitative multiple-case study approach to explore the teachers' beliefs about student engagement in mathematics. Students were in years

fifth and sixth. The case studies were for three teachers with five to six years of experience in teaching math. The researchers focused on the shifts that occurred during a ten-week intervention. Data obtained from teacher surveys, interviews, video-recorded workshop observations, and artifacts from teachers' classrooms reveal variations in their reactions to professional learning experiences. Teacher responses were mediated by personal and contextual elements, including teacher efficacy, teacher confidence in mathematics, and their conceptions of student engagement. From their findings, Bobis et al. (2016) recommend attention be given to understanding (1) teacher efficacy beliefs; (2) teacher confidence in mathematics content; and (3) teacher conceptions of engagement, including the degree to which they acknowledge responsibility for student engagement.

Papa (2015) studied the effect of academic and teaching self-efficacy on student engagement and academic outcomes on two hundred forty-four students from three introductory psychology courses. The researcher administered surveys to the students and their instructors at the semester's beginning and end of the semester. Results show that perceptions of the instructors teaching self-efficacy significantly impact student engagement in the course. Those students with a higher sense of academic self-efficacy and course engagement have excellent academic outcomes. Such results show that students that engage in the course have better outcomes. Students that increase their academic self-efficacy over the semesters are more engaged and have better academic outcomes. Instructors play their part by influencing student engagement in the classroom.

Humor and Student Engagement

The nature of teachers' interaction with their students can shape student engagement in the classroom in at least two ways, as stated by Skinner & Pitzer (2012). The first is by promoting students' intrinsic motivation by offering challenging and fun learning activities, allowing and encouraging students to discover and follow their

interests and goals, and providing explicit instruction and feedback about reaching them. The second is by creating classroom contexts that support the development of increasingly more self-determined reasons for accomplishing the parts of learning that are not intrinsically fun. The perceived teacher-student connection uniquely contributes to emotional engagement (Furrer & Skinner, 2003). As conceptualized by Skinner and Pitzer (2012) in the motivational conceptualization of engagement, emotional engagement includes enthusiasm, enjoyment, fun, and satisfaction, which is well served by a teacher's sense of humor. A teacher's use of humor was found to enhance teacher-student relationships and relatability and increase information retention (Hackathorn et al., 2011) and student engagement; however, these results were contingent on the proper application of humor (Fata et al., 2018).

In a study on urban high school teachers' beliefs concerning the characteristics of the teacher and the most successful teaching methods, two factors found in all six schools were the importance of student-teacher relationships and the teacher's sense of humor (Miranda, 2012). In 2019, Nienaber et al. examined whether the type of humor used by a hypothetical instructor and an instructor's gender affected the perceived likelihood of engaging with the instructor. One hundred and fifty-seven college students read a vignette describing the teaching and humor used by a hypothetical instructor.

Participants' likelihood of engaging and comfort level with the hypothetical professor were assessed through nine items based loosely on the original item pool for the Professor-Student Rapport Scale. The results suggested that students were more likely to engage and feel comfortable with an instructor who uses affiliative humor instead of hostile or no humor. Findings also indicated that students felt more comfortable engaging a professor who used no humor in the classroom than one who used aggressive humor.

Additionally, an instructor's gender did not affect students' likelihood of engaging with the instructor.

Neumann & Neumann (2009) studied how to incorporate humor into the face-to-face teaching of statistics. A random sample of 38 students was evaluated via interviews to test the effectiveness of humor in an introductory university statistics course.

Responses indicated that humor aided teaching by providing amusement, breaking up content, bringing back attention, lightening the mood, increasing motivation, reducing monotony, and providing a mental break. Students with less anxiety and high motivation reported that the humorous material distracted them and impaired their concentration.

The purposeful use of humor is recommended in teaching statistics, particularly for students with negative attitudes toward the subject. Also, Ziyaeemehr et al. (2011) found that using humor has several benefits in a language learning environment.

Psychologically, it motivates, relaxes, and cheers the learners. Socially, it attracts attention and affiliates and enhances students' participation in classroom activities.

Instructionally, it is likely to promote understanding and learning of a second language and enhance the retention of the material (Ziyaeemehr et al., 2011).

In a study performed by Hackathorn et al. (2011), the goal was to study how humor enhanced Bloom's taxonomy's three levels of knowledge, comprehension, and application. Six quizzes were distributed to 51 students in a social psychology class where humor was used. Throughout the semester, 40% of the concepts were taught using puns, riddles, anecdotes, comics, jokes, and humorous multimedia. The study results showed a significant increase in the scores for concepts taught with humor on all three levels of Bloom's taxonomy. The study found that the teachers' use of humor enhanced learning and remembering. The conclusion was that humor is effective in educational pedagogy.

A case study by Al-Nofaie (2017) investigated the effects of teachers' humor as a rapport-building strategy to engage students actively in classroom discussions. The researchers tested the rapport-building practices of three EFL (English as a foreign language) teachers of different nationalities (Saudi, Pakistani, and British), all of whom were teaching at the same Saudi college. The data were collected from the English as a foreign language classroom, and the audio-recorded lessons were analyzed according to the principles of Conversation Analysis (CA) methodology. The finding supports that humor can facilitate the creation of a friendly atmosphere in the classroom, motivate students and encourage them to initiate and extend their contributions and increase their engagement with the material being taught.

Embalzado & Sajampun (2020) explored the perceptions of three hundred and fifty-eight students in Thailand on the use of humor in business classrooms. A two-page questionnaire was distributed among the target participants. The results showed that a humorous classroom brings physiological and emotional benefits to students as it relieves tension and stress, makes the classroom atmosphere more comfortable and less intimidating, and facilitates better teacher-student relationships. In addition, most students prefer a certain degree of humor in the classroom instead of the general contention that Thai classrooms should command decorum and order.

The use of humor in the classroom is widely researched. The teacher's usage of humor reduced tensions, made the students more comfortable in the teaching-learning process, created good interactions, led to a more enthusiastic teaching-learning process, encouraged students' attendance, and reduced the number of students who felt sleepy in the class (Tunisia et al., 2019). Humor was found to increase students' intrinsic motivation (Salmee & Arif, 2019), broaden their mental outlook and knowledge of a foreign culture (Krasnopolskyi et al., 2020), and create a positive classroom environment.

Humorous classrooms were found to be exciting and fun, which helped students feel relieved from tensions and stresses (Embalzado & Sajampun, 2020). Victoria's study (2019) reported that humor built a rapport between students and teachers. The likelihood that students would engage with the instructor was highest when the instructor's humor style was good-natured (affiliative) and lowest when it was hostile and sarcastic (aggressive) (Nienaber et al., 2019).

Ellington (2018) was interested in determining if an instructor's humor orientation predicts student intellectual stimulation, engagement, and interest within the college classroom setting. Therefore, the researcher administered a questionnaire to 337 college students. They found out that the instructors' use of humor orientation not only has a statistically significant positive relationship with the instructors' ability to intellectually stimulate, engage, and interest students within the course but also is a predictor of students' engagement and interest in the course content.

Humor is an effective teaching tool that reduces stress and anxiety, increases participation and interest in learning, enhances motivation and the teacher-student relationship, and helps students remember things (Yang, 2021). Manthoot (2010) empirically tested whether humor as an instructional tool in the college classroom could increase the level of student engagement and thereby increase the level of material retention. A convenience sample of 76 college of education students was utilized. Humorous and non-humorous lectures were embedded in the curriculum, and pretests and post-tests were gathered using interest surveys, domain knowledge tests, and post-lecture feedback surveys. Results showed that students were more engaged in the humorous presentations than the non-humorous ones and that the specific topic did not play a statistically significant role in the results. However, regarding material retention, humorous lectures did not significantly affect the post-test domain knowledge test scores.

The rate of gain from pretest to posttest scores was almost identical for the humorous and non-humorous.

Steele (2017) explored the effect of humor on rapport, engagement, and motivation in online learning environments. The researcher used a mixed-method approach to collect his data from college students enrolled in specific online courses. Quantitative data from a Likert-style survey instrument, qualitative data from semi-structured interviews, and direct observation of online course meetings and online discussion forums were used as data sources. Results show that when purposeful and appropriate humor is used, it creates a positive online environment for learning, making it a valuable tool for promoting rapport and engagement amongst course members through community-building and enhanced interpersonal connections. Humor, while potentially not directly responsible for enhanced learning, can create an environment where students communicate and interact more freely and be supportive in finding greater meaning in course content through personal ownership of learning.

Meanwhile, Forker (2020) examined the online teachers' perceptions of the teacher-student relationship and student engagement. He analyzed the accounts of eight online instructors at a suburban, open-access community college to examine the online instructor's understanding of student engagement and the student/instructor relationship as they occur online. Also, the researcher tested the online instructors' perception of the instructors' ability to impact student engagement and the student/instructor relationship. The results showed that online instructors realized the importance of engagement and teacher-student relations to student success. They are willing to find opportunities to ignite engagement and build such relationships. However, they felt the online platform needs more access to such opportunities, leaving engagement a student responsibility. Deiter (2000) stated five reasons behind using humor as a teaching tool. The first is

breaking the communication barrier between the teacher and the student. Second, humor helps concept retention if humorous content is relevant to the taught concept. The third is increasing students' motivation to attend class. The fourth increases information retention by reducing stress associated with learning. The last, increase instructors' satisfaction while performing their teaching tasks.

At the high school level, students were found to be more engaged in classes where the teacher's use of humor consisted of teacher-produced jokes and silly content-related comments (Anderman et al., 2011). Celik & Gundogdu (2016) investigate the effect of using humor and concept cartoons in 9th-grade lessons on students' academic achievement, attitude toward the lesson, anxiety about the lesson, and retention of knowledge. A pretest, post-test quasi-experimental design was employed. Sixty public high school students were equally divided into experimental and control groups. The instructional process within the 'Basic Concepts of Information Technology unit lasted for seven weeks for experimental and control groups. At the same time, the control group received the lessons according to the formal curriculum, while concept cartoons and sets of humor always supported the experimental group's lessons. Both groups received academic achievement tests and attitude and anxiety scales toward the lesson at the instruction's beginning and end. The results showed that implementing humor and concept cartoons in 9th-grade lessons increased students' success and their attitude toward the lesson, decreased the students' anxiety level, and also positively affected the retention of knowledge in favor of the experimental group.

In addition, Makewa et al. (2011) investigated the extent to which teachers use humor in teaching and the student's ratings of their teaching effectiveness. A purposive and random sample of 311 high school students and 35 teachers working in the same district was selected to respond to two questionnaires. The results indicate a significant,

moderate relationship between the use of humor and students' rating of teachers' effectiveness. The results also indicate that the most used styles of humor in class are affiliative and self-enhancing (positive). Also, results showed that teachers who use humor in teaching are generally rated effective in motivation, creation of engaging lessons, anxiety reduction in students, stimulation of thought and interest in students, and fostering a positive teacher-student relationship.

Similarly, at the middle school level, classrooms, where students were found to be engaged, had teachers who displayed their sense of humor or used activities that were categorized as fun, playful, and humorous (Conklin, 2014). Lew & Park (2016) investigated the effect of humor as a coping mechanism (coping humor), sense of humor, and humor style on the creative personalities of 233 middle and high school students. Structural equation modeling analysis was used on the students 'data. The results show significant correlations among coping humor, sense of humor, humor style, and creative personality. Also, positive humor styles (affiliative and self-enhancing) had a direct positive association with a creative personality.

Klein & Kuiper (2006) explained that the expression of different humor styles during middle childhood plays a role in developing and maintaining various peer relationships, including acceptance or bullying. The two adaptive styles of humor (affiliative and self-enhancing) significantly reduce interpersonal tensions and facilitate relationships with others. Students who use affiliative humor maintain group cohesiveness and gain the support of a peer group. While the students use self-enhancing humor to help maintain or enhance their self-esteem. In contrast, the two maladaptive styles (aggressive and self-defeating) are detrimental and potentially injurious to the self or others. All of which influence middle school students' peer relationships. Acceptance

by peers is highly associated with adaptive humor; in contrast, peer victimization or bullying is highly associated with the maladaptive humor style.

Also, at the elementary level, teachers who use humor were perceived as honest from the student's perspective. Humor was found to maximize creativity and communication skills and increase the brain's capacity for learning, student achievement, or engagement (Fernandez, 2011).

Humor, if appropriately used, can facilitate student engagement by building a good relationship with the teacher and offering a relaxed learning environment and memorable class experiences. Humor can have some positive social functions, such as relationship building. (Seaman, 2017) However, one limitation becomes apparent; the research that examines the use of humor was primarily conducted in language classes, and most, if not all, were conducted in higher education classrooms.

Different Styles of Humor

To categorize different types of humor, Martin et al. (2003) used clinical and theoretical research on humor. Their classification was based on the humor's beneficial or harmful effects on oneself or one's relationship with others. So, humor was divided into four styles based on two dimensions, positive versus negative and other-directed versus self-directed (Martin et al., 2003). Affiliative humor (positive and other-directed) was found to facilitate interpersonal relationships. Self-enhancing humor (positive and self-directed) helps in regulating emotions. Aggressive humor (negative and other-directed) harms interpersonal relationships through insults. Self-defeating humor (negative and self-directed) puts oneself down excessively to make others laugh (Martin et al., 2003). Sahin (2021) investigated the teachers' use of humor in school settings. Eleven lower secondary school teachers were interviewed. Results show that the affiliative humor style was the most preferred by teachers, even though some participants used self-enhancing

and aggressive humor styles. In self-enhancing humor, the individual tries to resist the destructive emotions caused by negative situations by taking a humorous attitude. It is positively associated with positive emotions such as optimism, self-esteem, cheerfulness, well-being, and self-confidence and negatively associated with negative emotions such as depression, anxiety, stress, and lousy mood (Maritn & Ford, 2018)

In the educational setting, effective teachers need to know their students (Willingham, 2009), the strategies that will engage them (Kinney, 2009), and the appropriate style of humor that best increase their motivation and attract their attention (Nienaber et al., 2019). Engagement and re-engagement heavily depend on using strategies that have a positive motivational effect (Kinney, 2014). Through observational studies, Brackett and Simmons (2015) determined that classrooms rated high on the implementation of emotional intelligence and social-emotional skills had more engaged students. An essential element of teaching social-emotional skills to students is modeling the proper use of humor. Such modeling helps students fully understand and appreciate affiliative and self-enhancing humor instead of aggressive and self-defeating humor (Ogurlu, 2015). Kirsh and Kuiper (2003) had a total of 181 high school students (mean age of 16.5) report on their use of each of the four humor styles for each of five different types of relationships (with close friends, family members, romantic partners, casual acquaintances, and teachers). Affiliative humor was used the most frequently in all types of relationships, followed by self-enhancing and aggressive and self-defeating humor.

Altınkurt, Y., & Yılmaz, K. (2011) investigated the type of humor used by elementary teachers. Two hundred and seventy-nine elementary teachers took the Humor Style Questionnaire to determine their style of humor. Results of the study showed that elementary school teachers had an affiliative humor style. Also, Asilioglu (2021) studied the styles of humor of the teacher candidate for 3rd and 4th grade. He found out that

teacher candidates with the affiliative humor style had the highest average, followed by the teachers who were self-enhancing and then self-defeating, with the lowest average for those with the aggressive humor style.

Menéndez-Aller et al. (2020) explored the role of humor styles on students' mental health (optimism, anxiety, and depression) and the influence of sociodemographic variables such as sex, geographic location, age, and educational level on different uses of humor. A sample of 804 students was surveyed. Results showed that positive uses of humor (affiliative and self-enhancing) are positively correlated with optimism and negatively correlated with anxiety and depression, demonstrating a protective role. Also, men and women differ in using a more aggressive humor style, and affiliative humor styles decrease with age. They concluded that humor is a tool of everyday life and can act for or against an individual's mental health.

Selecting the correct type of humor was also beneficial for teachers' health.

Kruczek (2019) investigated the role of humor style in coping with work stress associated with teaching, leading to chronic fatigue in teachers. He surveyed 166 teachers aged 27-67 years to measure their sense of stress at work, coping humor, and chronic fatigue.

Results indicated that teachers were characterized by a medium stress level at work, coping humor, and chronic fatigue. The more often teachers used the affiliative and self-enhancing styles, the less likely they were to experience chronic fatigue. In contrast, aggressive and self-deprecating humor styles were not associated with chronic fatigue. He concluded that positive humor protects against chronic fatigue.

Learning to manage emotions and relationships and students' social-emotional competence contributes to students' ability to focus on and persist in learning (Coggshall et al., 2013). Failure to meet students' psychological and social-emotional needs may lead to a decline in academic motivation and student engagement (Wang & Eccles,

2013). Hamilton (2013) concluded that student engagement and academic development depend upon integrating social-emotional skills into the academic program. Students who demonstrate social-emotional competence tend to be more inquisitive and eager to learn (Garner et al., 2014). The attribute of having a sense of humor and exhibiting that emotion through laughter in a socially appropriate manner was identified as a socialemotional competency, which is a subset of emotional intelligence (Nicoll, 2011). Yip and Martin (2006) examined the associations among a sense of humor, emotional intelligence (EI), and social competence. They surveyed 111 undergraduate students using measures of humor styles, trait cheerfulness, social competence, and an ability test of emotional intelligence. Results showed that emotional management ability was positively correlated with self-enhancing humor and trait cheerfulness and negatively correlated with the trait of lousy mood. Ability to accurately perceive emotions was negatively related to aggressive and self-defeating humor. Positive humor styles and traits of cheerfulness were positively correlated with various domains of social competence. In contrast, negative humor styles and traits of bad mood were negatively correlated with social competence.

Humor is a means of dealing with stress, creating positive relationships, and managing one's emotions (McGhee, 2011). Degrading or offensive humor and humor unrelated to course material were ineffective in learning (Lei et al., 2010). Ogurlu (2015) found that high emotional intelligence had a negative correlation with the use of aggressive style humor. Conversely, the appropriate use of nonsense and empathetic humor positively affected learning (Jonas, 2010).

This study will focus on the two appropriate types of teacher humor (affiliative and self-enhancing humor) as they are proven to enhance engagement and help build teacher-student relationships. When humor generated a positive effect, it enhanced the

ability to process learning (Wanzer et al., 2010; Wanzer et al., 2006). Bergen and Fromberg (2009) suggested that the emotions associated with the type of humor evident in play activities of most children ages eight to twelve may help meet students' psychological and social-emotional needs while contributing to an increase in engagement.

Summary of Findings

In summary, knowing the importance of student engagement, analyzing its three main dimensions (behavioral, emotional, and cognitive), catering approaches to ensure the presence of these three dimensions in the classroom settings, and using humor as a facilitator to support students' engagement, will motivate students to be involved in the lesson being taught, and to take ownership of their education that leads to long term academic success and graduation (Salmee & Arif, 2019; Terrenghi et al., 2019; Ziyaeemehr et al., 2011). As designers of classwork, teachers can incorporate humor to help students engage (Schlechty, 2011). Using humor as a student engagement facilitator will ensure the presence of positive teacher-student relationships that have been positively associated with cognitive, emotional, and behavioral student engagement at the classroom level (Fredricks et al., 2004). Teachers' ability to engage students is influenced by teachers' efficacy beliefs (Chandler, 2014). Appropriate humor is among the many classroom techniques that have been researched, and the literature suggests that it positively enhances student engagement (Mantouth, 2010).

Conclusion

This chapter presented a review of relevant literature relating to the purpose of this study, which is to examine the use of humor in facilitating elementary student engagement within the classroom. In Chapter III, the methodological aspects of this study are detailed to include the operationalization of theoretical constructs, research design,

population and sampling selection, data collection procedures, data analysis techniques, privacy and ethical considerations, and the research design limitations for this study.

CHAPTER III:

METHODOLOGY

The purpose of this study is to examine the teacher's perception of the effectiveness of humor as a facilitator for student engagement at the classroom level. This study used a sequential mixed methods design to gain insights regarding the teacher's perception of using positive humor as a facilitator of student engagement at the classroom level. The quantitative data were gathered through the use of an electronic survey. Survey data were collected from a purposeful sample of K-12 teachers working in private schools in the Greater Houston area. The qualitative data were collected from the follow-up semi-structured interviews. The quantitative data were analyzed using descriptive statistics, Pearson's product-moment correlations, one-way ANOVA test, and independent samples t-test. The qualitative data were analyzed using thematic inductive coding. This chapter presents an overview of the research problem, operational definitions of how the data were collected and analyzed, ethical considerations, and the study's limitations.

Overview of the Research Problem

Student engagement is driven by the desire to prevent dropouts and enhance student learning and outcomes across academic, social, behavioral, and emotional domains (Reschly & Christenson, 2012). Finn and Zimmer (2012) explained how the process of engagement and disengagement in the classroom is one of the main factors that pull or push a student out or at the risk of low achievement and dropping out of the zone. The teacher's ability to shape students' immediate learning environment is the primary way to influence student engagement (Shernoff et al., 2016). Teachers can, by force of their personality, charm, and wit, inspire students to perform their best even with challenging, uninteresting subjects (Schlechty, 2011). Indeed, it is the teacher who

fashions conditions within the classroom (Van Uden et al., 2013, 2014), who has the most significant opportunity to engage students by shaping their learning and motivation (Collie et al., 2016), and who can generate a caring and stimulating educational environment (Shernoff et al., 2016). Students feel more comfortable participating in class discussions and activities when the class atmosphere possesses a certain degree of humor, as it creates a positive classroom environment (Embalzado & Sajampun, 2020). Research has found that teachers tend to hold quite disparate conceptualizations of student engagement and employ engagement strategies that are often contrary to these conceptualizations (Pedler et al., 2020).

Operationalization of Theoretical Constructs

This study consists of three constructs: (a) Teacher's efficacy in student engagement, (b) Affiliative humor, and (c) Self-enhancing humor. Teachers' efficacy in student engagement is a judgment of their capabilities to bring about desired outcomes of student engagement and learning, even among students who may be difficult or unmotivated (Armor et al., 1976; Bandura, 1977). The Teacher Efficacy in Student Engagement Sub-scale from the Teacher Efficacy Student Engagement Scale developed by Tschannen-Moran and Woolfolk Hoy (2001) was used to measure the teacher efficacy construct. Affiliative humor is the tendency to share humor with others, tell jokes and funny stories, amuse others, make others laugh, and enjoy laughing with others (Martin et al., 2003). Self-enhancing humor is the tendency to maintain a humorous outlook on life even when not with others, use humor to cope with stress, and cheer oneself up with humor (Martin et al., 2003). The two styles of humor (affiliative and self-enhancing humor) were measured using the Humor Styles scale designed by Martin et al. (2003).

Research Purpose, Questions, and Hypotheses

The purpose of this study is to examine the teacher's perception of the effectiveness of humor as a facilitator for student engagement at the classroom level. The following questions guided the study:

- 1- Is there a relationship between the teacher's level of affiliative humor or selfenhancing humor and their student engagement efficacy?
 - H0: There is no relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy.
 - H1: There is a relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy
 - 2- Does the grade level assigned influence the teachers' level of affiliative or selfenhancing humor?
 - H0: The grade level assigned does not influence the teachers' level of affiliative or self-enhancing humor.
 - H1: The grade level assigned does influence the teachers' level of affiliative or self-enhancing humor.
 - 3- Does the teacher's certification status influence the teacher's level of affiliative or self-enhancing humor?
 - H0: The teacher's certification status is not influenced by the teacher's affiliative or self-enhancing humor level.
 - H1: The teacher's certification status is influenced by the teacher's level of affiliative or self-enhancing humor.
 - 4- What are teachers' perceptions of the style of humor as a facilitator of student engagement in classes?

5- What do teachers perceive as the most appropriate style of humor for elementary, middle, and high school students?

Research Design

The researcher used a sequential mixed-methods design (QUAN—qual) for this study. This design consisted of two phases: first, a quantitative phase, and second, a qualitative phase (see Appendix A). The advantage of implementing this design is that it allows for a more thorough exploration of the quantitative results by following up with a qualitative phase. A purposeful sample of K-12 teachers from seven private schools was solicited to complete the humor and student engagement survey, which assesses the perceived teacher's style of humor and the teacher's self-efficacy in student engagement. In addition, interview sessions were conducted with participants to provide a deeper analysis of how teachers perceive the role of humor as a facilitator of student engagement. Quantitative data were analyzed using descriptive statistics, Pearson's product-moment correlations, one-way ANOVA test, and independent sample t-test, while qualitative data were analyzed using an inductive coding process.

Population and Sample

The study population consists of K-12 teachers working in seven private schools in the Greater Houston area of Texas. The participating schools serve over 2,000 students from kindergarten through twelfth grade. Table 3.1 provides a comprehensive view of the student enrollment breakdown in these private schools. Most students are elementary students (n = 1,512, 68.1%), followed by middle school students (n = 478, 21.5%).

Table 3.1

Student Enrollment Demographics

	First	Second	Third	Fourth	Fifth	Six	Seventh	Freq(n)	Per %
	Sch.	Sch.	Sch.	Sch.	Sch.	Sch.	Sch.		
Elementary	331	206	177	249	168	258	123	1,512	68.1 %
Middle	46	98	55	138	60	55	26	478	21.5 %
High	0	42	24	109	13	44	0	232	10.4%
Total	377	346	256	496	241	357	149	2,222	100.0%

Table 3.2 provides a comprehensive view of the K-12 teachers' gender and racial /ethnicity breakdown. A majority of teachers were females (n = 211, 92.5%) to males (n = 17, 7.5%) and reported as Middle Eastern (n = 147, 64.5%), followed by Asian (n = 67, 29.4%). Table 3.2 below gives the ethnic breakdown of the teachers by school. Female teachers have the largest number of teachers (92.5%), and the Middle Eastern ethnicity was the largest (64.5%). The leadership of each campus consists of one principal and one assistant principal. A purposeful sample of the K 12 teachers working on each campus were solicited to participate in the study.

Table 3.2Gender and Racial/Ethnic Demographics

Gender	First	Second	Third	Fourth	Fifth	Six	Seventh	Freq(n)	Per %
	Sch.	Sch.	Sch.	Sch.	Sch.	Sch.	Sch.		
Male	4	2	5	0	1	4	1	17	7.5%
Female	41	36	39	24	16	27	28	211	92.5%
Race/ Ethnicity									
White	0	0	0	0	0	0	0	0	0.0%
Hispanic	0	0	0	0	0	0	0	0	0.0%
African American	1	0	0	0	2	1	1	5	2.2%
Middle Eastern	24	17	34	24	13	20	15	147	64.5%
Asian	16	21	10	0	2	5	13	67	29.4%
Two-race or more	4	0	0	0	0	5	0	9	3.9%
Total	45	38	44	24	17	31	29	228	100.0%

Participant Selection

K-12 teachers who work in the seven private schools were emailed a cover letter soliciting their participation in the study. The teachers were asked to fill in the teacher's online survey and were given a choice to participate voluntarily in a follow-up interview. A representative sample of teachers who agreed to participate in the follow-up interview was interviewed. An effort was made to gather a demographically representative sample of the entire population.

Instrumentation

Humor Styles Questionnaire (HAQ)

The Humor Styles Questionnaire is a 32-item humor assessment style scale developed by Martin et al. (2003). It is a self-report measure to assess how individuals use humor specifically. The HSQ was developed using a sample of 485 participants (284 female and 201 male) ranging in age from 14 to 87 years. It is composed of four 8-item scales that measure the Affiliative, Self-enhancing, Aggressive, and Self-defeating humor scales. Humor styles have to do with how humor is socially expressed as positive humor or negative humor (Yip & Martin, 2006). Martin et al. (2003) distinguished the four humor styles, two of which are thought to be potentially beneficial to relationships and emotional well-being (affiliative and self-enhancing humor), and two that are considered potentially detrimental (aggressive and self-defeating humor). The Humor Styles Questionnaire (HAQ) is a 7-point Likert scale from "Totally Disagree" (1) to "Totally Agree" (7) (see Appendix B).

For the purpose of the study, the research adopted the scale by only selecting the 16 items that measure the two positive humor styles for the following reasons: First, they are the only types that are appropriate in the educational setting as recommended by previous studies (Nienaber et al., 2019; Sahin & Gök, 2020). Second, they are the only styles applicable. While piloting both the questionnaire and the interview questions, participating teachers stated explicitly that negative humor should be avoided in a classroom setting due to its damaging effect on the student-teacher relationship, the student-student relationship, and the classroom environment. Third, avoid survey fatigue. Survey fatigue was cited as one of the major causes of the rise of survey nonresponse (Porter et al., 2004). When piloting the survey using the four styles, teachers complained that it was very long and some were inapplicable. Such adoption helped the researcher to

focus the data collection process on the needed variables and avoided participants' fatigue from filling out long surveys.

The stem question, "Please indicate how much the following statements apply?" preceded all items. Example items are "I usually do not laugh or joke around much with other people," "I do not have to work very hard at making other people laugh- I seem to be a naturally humorous person ."Reliabilities and intercorrelations for the scales were measured. The reliability of the Affiliative, and Self-enhancing humor scales, respectively, were measured through Cronbach alphas representative of .85 and .81.

Ohio State Teacher Sense of Teaching Efficacy Scale (OSTES)

The OSTES scale was developed by Tschannen-Moran and Woolfolk Hoy (2001) to measure the teachers' sense of efficacy. It is a self-assessment designed to understand better three teacher efficacy subscales: instructional strategies, classroom management, and student engagement. The scale was examined in three separate studies. In the first study, the original 52 items were reduced to 32; in the second, the scale was further reduced to 18 items of three subscales. In the third study, 18 additional items were developed and tested. The resulting instrument had two forms, a long-form with 24 items and a short form with 12 items (Tschannen-Moran, & Hoy, 2001).

For the purpose of the study, teachers' self-efficacy in student engagement was measured using the eight items used to measure the construct (See Appendix C). Such a scale is a nine-point Likert scale, which ranges from "Not At All" to "A Great Deal ."The stem question of the scale, "Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position," precedes all items. Example items are "How much can you do to get through to the most difficult students?", "How much can you do to motivate students who show low interest in schoolwork?" and "How much can you do to

help your student value learning?". The scale was reliable in measuring teacher efficacy in student engagement ($\infty = .871$). Bandura (1977) pointed out that teachers' sense of efficacy is somewhat uniform across the many tasks teachers are asked to perform and across different subject matter. Student engagement has often been measured using self-report measures (Rebecca et al., 2020).

Data Collection Procedures

Quantitative

The researcher obtained permission to conduct the study from the University of Houston-Clear Lake (UHCL) Committee for the Protection of Human Subjects (CPHS) and the participating private schools before collecting data. After permission was gathered, the researcher solicited all private school teachers' names, email addresses, and phone numbers at the identified private schools. K-12 teachers working in the seven private schools received a survey cover letter via email with information regarding the purpose of the study and the process for collecting the surveys (see Appendix D). The researcher used an electronic teacher survey to collect quantitative data. The purpose of the study, voluntary participation, the timeframe for completing the survey, and ethical and confidentiality considerations were communicated to K-12 teachers through the cover letter.

Qualitative

The last question in the electronic survey solicited the voluntary participation of teachers in a follow-up interview. The researcher interviewed a representative group of teachers using an open-ended semi-structured interview. The questions were based on the work of Seaman (2017) who measured the perception of the middle school student's engagement in relation to their teacher's style of humor. The questions were reviewed by educational experts and piloted by interviewing teachers to ensure the questions' clarity,

accuracy, and precision. The purpose of the study, voluntary participation, the timeframe for completing the interview, and ethical and confidentiality considerations were communicated to K 12 teachers at the beginning of the interview. Quantitative and qualitative data were always secured in a password-protected folder on the researcher's computer and in the researcher's office within a locked file cabinet. At the culmination of the study, the data will be maintained by the researcher for five years, then the researcher will destroy the contents of the file once the deadline expires.

Data Analysis

Quantitative

Following data collection, the data were downloaded into the IBM SPSS statistics spreadsheet for further analysis. To answer research question one, the independent variables regarding the subscales of the teacher's style of humor is a continuous variable. The dependent variable, the teacher's efficacy in student engagement, is a continuous variable. The teachers' scores in each category of humor and their teacher efficacy in student engagement were analyzed using frequencies, percentages, and Pearson's Product-Moment correlations to assess the relationship between the teacher's humor style and teacher's efficacy in student engagement.

To answer research question two, the independent variable regarding the subscales of the teacher's style of humor is a continuous variable. The dependent variable, the grade level taught, is a categorical variable that is divided into six groups:

(a) teaching elementary, (b) teaching middle school, (c) teaching high school (d) teaching both elementary and middle school, (e) teaching both middle and high school, and (f) teaching all (elementary, middle and high school). The teachers' scores in each category of humor and their grade level were analyzed using frequencies, percentages, and a one-way ANOVA test.

To answer research question three, the independent variable regarding the subscales of the teacher's style of humor is a continuous variable. The dependent variable, teacher's certification, is a categorical variable divided into two categories: (a) Texas Certified, (b) Not certified. The teachers' scores in each humor category and their certification level were analyzed using frequencies, percentages, and independent-t tests.

Qualitative

Qualitative data from the open-ended semi-structured interview was reviewed with a constant comparison approach. More specifically, all responses were compared to look for patterns of responses or themes in the responses to determine if a consistent theme emerged. To bring focus to the important aspects of the interviews, the researcher began with interview condensation to reduce extraneous and unrelated information (Saldana & Omasta, 2017). Then the responses were hand coded to identify patterns and emergent themes. This process of coding assisted in organizing the responses into naturally occurring themes, as codes are the building blocks for themes, and themes provide a framework for organizing and reporting the researcher's analytic observations. (Clarke et al., 2015). After completing the coding process, all responses were reread for a final search for emergent themes. The literature was reviewed again to determine if any of the themes discovered overlapped with any information from the literature.

Privacy and Ethical Considerations

The researcher obtained permission to conduct the study from the UHCL's CPHS and the participating schools' IRB before collecting data. The name of the private schools in which the study was conducted was not mentioned in the study, nor were the teachers' participants' names. A survey cover letter was attached to the survey stating the purpose of the study and ensuring that participants were aware that their participation was voluntary and that their responses and identities would remain completely confidential.

Each teacher was given a participant number, and all data taken from each participant were reflected within their participant number and informed consent. The researcher used methods to protect confidentiality during the qualitative component of the study. Participants were notified that their participation was completely voluntary and that identities would remain confidential using pseudonyms during reporting. The data collected were stored on a computer hard drive and a flash drive. Both the hard drive and the flash drive were password protected. The computer was kept in a locked office. The flash drive was stored in a safe for five years, after which the data will be destroyed.

Limitations of the Study

Creswell (2002) points out that "limitations are potential weaknesses or problems within the study that are identified by the researcher" (p. 253). This research design has several limitations. The first limitation is related to the population and sample selection that limited the generalization of the findings. The participants were not randomly chosen. They were purposefully solicited from the participating private schools, whose sample size was relatively small, and the private schools were unique. Therefore, extrapolation to a broader population should be viewed with caution. The second limitation is related to data collection, which limits the accuracy and validity of the findings. A self-reported survey instrument was used for the study. Therefore, the data was as accurate as the honesty of the teachers.

The third limitation is measuring student engagement from a teacher's lens instead of a student's. Such a lens might lead to an overestimation or underestimation of the level of student engagement. Also, student engagement is divided into three manifestations. First is cognitive engagement, students' sustained and devoted attention to learning activities. Second, emotional engagement refers to students' sense of comfort, interest, support, belonging, and autonomy. Lastly, behavioral engagement is the collection of

observable behaviors that indicate student interaction with learning content. Each form of engagement is captured differently. Behavioral engagement is subject to reports from independent observers, like teachers, while cognitive and emotional engagements are only accessible through student self-reports (Forker, 2020). At the same time, Schlechty stated that "the best judge of student engagement are teachers" (Schlechty, 2011, p. 28).

Conclusion

The purpose of this study is to examine the use of humor as a facilitator for student engagement at the classroom level. This chapter is intended to describe the methodology of this nonexperimental sequential mixed-method study in detail. A purposeful sample of teachers in two private schools in the Greater Houston area was asked to fill out an electronic survey. The quantitative and qualitative data collected from the survey and the interview were analyzed. The findings from this methodology were reported in chapter four of this study.

CHAPTER IV:

RESULTS

The purpose of this study is to examine the teacher's perception of the effectiveness of humor as a facilitator for student engagement at the classroom level. This chapter presents the findings of the study's quantitative and qualitative data analysis. First, an explanation of the participants' demographics in the study is presented, followed by the results of the data analysis. This chapter presents the data analysis for each of the five research questions.

Participant Demographics

One hundred and twenty K-12 teachers working in private schools consented to participate in the electronic survey: 102 teachers completed the survey (85.0 % response rate). Sixty-four were selected to complete the survey in the English language, while 38 were selected to complete the survey in English with Arabic translation. Table 4.1 provides the demographics of the teachers who participated in the study. Of the 102 teachers, 97 teachers indicated they were female (95.1%), while five indicated male. Eighteen indicated they were white (17.7%), eight (7.8%) were African American, one (0.9%) was Hispanic, 24 (23.5%) were Asian, 49 (48.2%) were Middle Eastern, while two (1.9%) were more than one race.

Table 4.1Teacher Participant Demographics

	Number (n)	Percentage (%)
Total Teachers	102	100.0%
Female	97	95.1%
Male	5	4.9%
White	18	17.7%
African American	8	7.8%
Hispanic	1	0.9%
Asian	24	23.5%
Middle Eastern	49	48.2%
More than one race	2	1.9%

Table 4.2 provides specific participants' work status and grade level served. Fifty-four teachers indicated that they work full-time in private schools (52.9%), while 18 (17.7%) stated that they work part-time in private schools, six (5.9%) indicated that they work as full-time teachers in weekend school, while nine (8.9%) stated that they work as part-time teachers in a weekend school. Regarding grade level served, 46 teachers stated that they are elementary teachers (45.0%), 15 (14.7%) indicated that they are middle school teachers, seven (6.9%) stated that they are high school teachers, eight (7.9%) indicated that they are serving both elementary and middle schools, 12 (11.8%) stated that they are serving both middle and high schools, while 14 (13.7%) indicated that they are serving elementary, middle, and high schools.

Table 4.2Teachers' Working Status and Grade Level Served

	Number (n)	Percentage (%)
Total teachers	102	100.0%
Full-time Teacher in a Private School	54	52.9%
Part-time Teacher in a Private School	18	17.7%
Full-time teacher in a Weekend School	6	5.9%
Part-time Teacher in a Weekend School	9	8.9%
Other	15	14.6%
Serving in Elementary School	46	45.0%
Serving in Middle School	15	14.7%
Serving in High School	7	6.9%
Serving in Elementary and Middle School	8	7.9%
Serving in Middle and High School	12	11.8%
Serving in Elementary, Middle, and High School	14	13.7%

Table 4.3 provides the details of participants' degree level, certification status, and years of experience. Eleven teachers indicated that they have an associate degree (10.8%), 58 (56.9%) stated that they have a bachelor's degree, 16 (15.7%) indicated to have a master's degree, while one (0.9%) state to have a doctoral degree. In contrast, sixteen (15.7%) stated other degrees. Regarding certification status, 42 (41.2%) stated that they are certified teachers, while 60 (58.8%) indicated that they are not certified teachers. For years of experience, 12 (11.8%) indicated that they have one to two years of experience, 26 (25.5%) stated that they have three to seven years of experience, 22

(20.6%) indicated that they have 8-10 years of experience, 21 (20.6%) stated to have 11-15 years of experience, 10 (9.8%) indicated to have 16-20 years of experience, while 11 (10.7%) stated to have 20 years or more of experience in the educational field.

 Table 4.3

 Teachers' Educational degrees, Certification Status, and Years of Experience

	Number (n)	Percentage (%)
Total Teachers	102	100.0%
Associate Degree	11	10.8%
Bachelor's Degree	58	56.9%
Master's Degree	16	15.7%
Doctoral Degree	1	0.9%
Other	16	15.7%
Certified	42	41.2%
Not Certified	60	58.8%
1-2 Years of Experience	12	11.8%
3-7 Years of Experience	26	25.5%
8-10 Years of Experience	22	21.6%
11-15 Years of Experience	21	20.6%
16-20 Years of Experience	10	9.8%
More than 20 Years of Experience	11	10.7%

Fourteen of the K 12 teachers who completed the survey voluntarily participated in a 15-minute semi-structured interview to discuss their perception of humor as a facilitator for student engagement at the classroom level. Table 4.4 provides the demographics of the teachers who participated in the interviews.

Table 4.4

Interview: Grade Level Served, Certification Status, Work Duty, and Race

	Number (n)	Percentage (%)
Total Teachers	14	100%
Serving in Elementary School	5	35.7%
Serving in Middle School	2	14.3%
Serving in High School	1	7.2%
Serving in Elementary and Middle School	2	14.3%
Serving in Middle and High School	3	21.3%
Serving in Elementary, Middle, and High School	1	7.2%
Certified	8	57.1%
Not Certified	6	42.9%
Part-time	7	50.0%
Full-time	7	50.0%
White	1	7.2%
African American	3	21.4%
Hispanic	0	0.0%
Asian	3	21.4%
Middle Eastern	7	50.0%

Research Question One

Research question one, Is there a relationship between the teacher's level of affiliative or self-enhancing humor and their student engagement efficacy?, was measured using frequencies, percentages, and Pearson's product-moment correlations (r). Results indicated there was not a statistically significant relationship between teachers' affiliative humor and efficacy in student engagement, r = 0.148, p = 0.137. Results also indicated there was not a statistically significant relationship between teachers' self-enhancing humor and efficacy in student engagement, r = 0.093, p = 0.352. Teachers' responses to affiliative, self-enhancing humor, and teacher efficacy in student engagement are recorded in Table 4.5 (Affiliative Humor), 4.6 (Self-Enhancing Humor), and 4.6 (Teacher Efficacy in Student Engagement) as follows.

Regarding affiliative humor, the majority of teachers (72.0%, n = 74) "disagree" with the statement "I do not laugh around others much, rarely make others laugh" (55.9%, n = 57), "I usually do not like to tell jokes or amuse people" (62.8%, n = 64), "I do not often joke around with my friends." (72.5%, n = 74), and "I usually cannot think of witty things to say when I am with other people." (52.9%, n = 54). On the other hand, a large percentage of the teachers "agree" they are naturally humorous (61.8%, n = 63), laugh and joke a lot with their friends (81.5%, n = 83), and enjoy making people laugh (83.4%, n = 85).

In terms of self-enhancing humor, 68.6% (n = 70) of the teachers *agreed* that when depressed, they used humor to cheer up, 50.0% (n = 51), when upset, think of something funny to feel better, 53.9% (n = 55) have a humorous outlook on life that keeps them from getting overly upset or depressed, 57.8% (n = 59) use a very effective way of coping with problems by thinking about an amusing aspect of the situation, and

54.9% (n = 56) do not feel the need to be around people to feel amused. However, 53.9% (n = 55) of the teachers said they lose their sense of humor when feeling sad or upset.

Table 4.5

Responses to Affiliative Humor (%)

Survey item	Totally	More or Less	Agree/Totally
	Disagree/Disagree	Disagree/Agree	Agree
1- I usually do not laugh or joke	72.5	16.7	10.8
around much with other people	(n = 74)	(n = 17)	(n = 11)
2- I do not have to work very hard	11.7	26.5	61.8
at making other people laugh - I	(n = 12)	(n = 27)	(n = 63)
seem to be a naturally humorous			
person			
3- I rarely make other people	55.9	23.6	20.5
laugh by telling funny stories	(n = 57)	(n = 24)	(n = 21)
about myself.			
4- I laugh and joke a lot with my	4.9	13.7	81.4
friends.	(n=5)	(n = 14)	(n = 83)
5- I usually do not like to tell	62.8	23.5	13.7
jokes or amuse people.	(n = 64)	(n = 24)	(n = 14)
6- I enjoy making people laugh.	4.9	11.7	83.4
	(n=5)	(n = 12)	(n = 85)

7- I do not often joke around with	72.5	12.8	14.7
my friends.	(n = 74)	(n = 13)	(n = 15)
8- I usually cannot think of witty	52.9	23.5	23.6
things to say when I am with	(n = 54)	(n = 24)	(n = 24)
other people.			

Table 4.6

Responses to Self-Enhancing Humor (%)

Survey item	Totally	More or Less	Agree/Totally
	Disagree/Disagree	Disagree/Agree	Agree
1- If I am feeling depressed, I	10.8	20.6	68.6
can usually cheer myself up	(n = 11)	(n = 21)	(n = 70)
with humor.			
2- Even when I am by myself, I	28.4	26.4	45.2
am often amused by the	(n = 29)	(n = 27)	(n = 46)
absurdities of life.			
3- If I am feeling upset or	19.6	30.4	50.0
unhappy, I usually try to think	(n = 20)	(n = 31)	(n = 51)
of something funny about the			
situation to make myself feel			
better.			
	16.7	29.4	53.9

4- My humorous outlook on life	(n = 17)	(n = 30)	(n = 55)
keeps me from getting overly			
upset or depressed about things.			
5- If I am by myself and I am	28.5	29.4	42.2
feeling unhappy, I make an	(n = 29)	(n = 30)	(n = 43)
effort to think of something			
funny to cheer myself up.			
6- If I am feeling sad or upset, I	21.5	24.6	53.9
usually lose my sense of humor.	(n = 22)	(n = 25)	(n = 55)
7 It is my experience that	6.8	35.4	57.8
thinking about some amusing	(n = 7)	(n = 36)	(n = 59)
aspect of a situation is often a			
very effective way of coping			
with problems.			
8- I do not need to be with other	14.7	30.4	54.9
people to feel amused - I can	(n = 15)	(n = 31)	(n = 56)
usually find things to laugh			
about even when I am by			
myself.			

In terms of teacher self-efficacy in student engagement, the majority of the teachers (66.7%, n = 68) reported exerting quite a bit/great deal of effort to get through to the most challenging students, helping students think critically (56.8%, n = 58), motivating students who show low interest in schoolwork (70.5%, n = 76), getting students to believe they can do well in schoolwork (79.5%, n = 81), helping students value learning (76.5%, n = 77), fostering student creativity (73.6%, n = 75), improving the understanding of a student who is failing (74.5%, n = 76), and assisting families in helping their children do well in school (68.5%, n = 70) (see Table 4.7).

 Table 4.7

 Responses to Teacher Self-Efficacy in Student Engagement (%)

Survey Item	Nothing to Very	Little to a	Quite a bit to a
	Little	bit	great deal
1- How much can you do to get	5.9	27.4	66.7
through to the most difficult students?	(n = 6)	(n = 28)	(n = 68)
2- How much can you do to help	10.8	32.5	56.8
students think critically?	(n = 11)	(n = 33)	(n = 58)
3- How much can you do to motivate	5	24.5	70.5
students who show low interest in	(n=5)	(n = 25)	(n = 72)
schoolwork?			
4- How much can you do to get	6.9	13.6	79.5
students to believe they can do well in	(n = 7)	(n = 14)	(n = 81)
schoolwork?			
5- How much can you do to help your	2.9	20.6	76.5
student value learning?	(n=3)	(n = 22)	(n = 77)
6- How much can you do to foster	6.9	19.5	73.6
student creativity?	(n=7)	(n = 20)	(n = 75)
7- How much can you do to improve	1.0	24.5	74.5
the understanding of a student who is	(n=1)	(n = 25)	(n = 76)
falling?			

8- How much can you assist families in	7.9	23.6	68.5
helping their children do well in	(n = 8)	(n = 24)	(n = 70)
school?			

Research Question Two

Research question two, *Does the grade level assigned influence the teachers' level of affiliative or self-enhancing humor?* was answered using one-way ANOVA. For affiliative humor, results of the one-way ANOVA indicated that grade level does not influence the level of affiliative humor, F(5, 96) = 0.334, p = 0.891. For self-enhancing humor, results of the one-way ANOVA also indicated that grade level does not influence the level of self-enhancing humor, F(5, 96) = 1.707, p = 0.140. Tables 4.8 and 4.9 shows the results of the one-way ANOVA test.

Table 4.8

One-Way ANOVA Results for Grade-Level Assigned and Affiliative Humor

	N	M	SD	F-value	df	p-value
Elementary School	46	42.5	8.5	0.334	(5, 96)	0.891
Middle School	15	43.9	7.2			
High School	7	41.5	5.4			
Elementary & Middle School	8	40.6	5.6			
Middle & High School	12	42.8	8.2			

Elementary, Middle & High 14 44.5 10.8 School

Table 4.9

One-Way ANOVA Results for Grade-Level Assigned and Self-Enhancing Humor

	N	M	SD	F-value	df	p-value
Elementary School	46	37.1	8.7	1.707	(5, 96)	0.140
Middle School	15	38.5	9.7			
High School	7	32.7	7.7			
Elementary & Middle School	8	36.6	8.2			
Middle & High School	12	35.1	8			
Elementary, Middle & High	14	42.7	8.2			
School						

Research Question Three

Research question three, *Does the teacher's certification status influence the teacher's level of affiliative or self-enhancing humor?* was measured using independent t-tests. For the affiliative humor, results of the independent t-test indicated there was not a statistically significant mean difference in the level of affiliative humor based on certification status, t(100) = .103, p = 0.918 (see Table 4.10). Certified teachers (M = 42.9) reported similar affiliative humor as uncertified teachers (M = 42.7). For self-enhancing humor, results of the independent t-test indicated there was not a statistically

significant mean difference in the level of self-enhancing humor based on certification status, t(100) = -1.02, p = 0.81 (see Table 4.11). Certified teachers (M = 36.2) reported similar levels of self-enhancing humor as uncertified teachers (M = 38.4).

 Table 4.10

 Independent t-test: Level of Affiliative Humor used by Certified vs. Uncertified Teachers

	N	M	SD	t	df	p-value
Certified Teachers	42	42.9	8.2	0.103	100	0.918
Uncertified Teachers	60	42.7	8.3			

^{*}Statistically significant (p < .05)

Table 4.11Independent t-test: Level of Self-enhancing Humor used by Certified vs. Uncertified Teachers

	N	M	SD	t	df	p-value
Certified Teachers	42	36.2	8.1	-1.02	100	0.81
Uncertified Teachers	60	38.3	9.2			

^{*}Statistically significant (p < .05)

Research Question Four

Research question four, What are teachers' perceptions of the style of humor as a facilitator of student engagement in classes? was answered by utilizing an inductive coding process to address the interview protocol questions collected during the semi-structured interviews. There were 14 participants in the interviews. (see Table 4.4 for participating teachers' demographics). Six teachers mentioned using only Affiliative

humor, five teachers reported using both types of positive humor (Affiliative and Self-enhancing), while three stated using only self-enhancing humor as their style of humor. (See Table 4.12). All 14 participants were assigned pseudonyms to preserve the confidentiality of their responses.

Table 4.12Frequencies and Percentages of Teacher's Humor Style

Humor Style	Number (n)	Percentage (%)
Affiliative Humor	6	42.9%
Self-enhancing Humor	3	21.4%
Both	5	35.7%

Participant responses informed findings related to this research question to reflect on what the teachers think of the style of humor as an agent that facilitates student engagement in the classroom. Identifying emergent themes was used to organize the responses into meaningful information that could be utilized in this study. The findings from research question one reveal six primary themes (a) the use of humor satisfies students' psychological needs, (b) teachers' humor helps build a solid teacher-student relationship, (c) humor enhances the classroom environment, (d) humor creates subject relatability, (e) the use of humor enhances information retention, (f) the use of humor minimized the adverse effect associated with making mistakes in class (See Table 4.13).

Table 4.13Frequencies and Percentages of Each Theme

Themes	Number	Percentage
Meets students' psychological needs	14	100%
Teacher-Student Relationship	10	71.4%
Healthy classroom environment	-	,
Subject Relatability	10	71.4%
Information Retention	9	64.3%
	8	57.1%
Alleviate the Negative Effects of Making Mistakes	4	28.6%

Meets Students' Psychological Needs

There was a consensus among all participating teachers on the critical role that humor plays in fulfilling students' psychological needs. All fourteen interview participants' (100 %) responses were coded as the theme of "humor support students' psychological needs." This included responses related to reducing their tension and anxiety, decreasing boredom and burnout, enhancing students' attention spans, facilitating inclusivity, lifting students' spirits, and acting as stress-coping agents.

Humor reduces the tension that students have at the beginning of the year, as Lina, a middle school science teacher, stated:

When students first come to my class, they have a high anxiety level; humor helps bring such anxiety down. Also, it helps me to establish a healthy relationship with them as they are less scared of me and more comfortable in class.

Also, humor helps reduce stress when new concepts are introduced as Fatin, a middle and high school math teacher, explained:

Humor breaks the tension the students have whenever they are listening to something new or feel puzzled or not understood. Humor helps them relax as they smile at the joke or comment I made, and they start hearing and listening more to you.

Kathy, a kindergarten teacher, echoed the same idea: "I think when they see you are laughing and joking around, they are not as nervous or scared around you."

Nisma, an elementarily and high school math teacher, added:

When you make things too serious, students get anxious when they do not understand, and they feel more pressure, which may shut them down, but when you make it funny, they are more relaxed. Moreover, when you are more relaxed, you understand better, and it helps them understand better rather than me explain better.

Similarly, Olivia, an elementary, middle, and high school art teacher, said, "I always laugh with my students to help them distress; I want my students to feel comfortable and happy to do the artwork."

Also, humor reduces students' boredom with the subject being taught. As Henna, an upper elementary science teacher, stated, "I definitely agree that student engagement does increase because humor does not allow students to get bored; it gets them excited about the topics they are learning." Mona, an elementary and middle school science and health teacher, declared:

Humor tends to lift the students and increase their concentration. I read this study once that when stressed, your brain puts in a filter, and you only perceive information crucial to your survival. So, when a student is stressed, they tend to absorb only a little of the information you are teaching. When you put them at

ease and start including humor in your classroom, you humanize yourself and become less threatening as a role model and a person of authority.

Furthermore, as Kathy commented, humor empowers the teacher to redirect their student's attention by offering them brain breaks.

So, I used humor as a brain break to help them refocus. Research shows that students cannot stay focused for 40 straight minutes. It is tough for them to digest all the information or participate in the activities for the whole period, so humor helps me make them excited to come to the classroom and get engaged.

Teacher-Student Relationship

Of the fourteen interview participants, ten participants 71.4% had responses coded as the theme of "humor helps build a good teacher-student relationship." Appropriate humor facilitates building positive relationships between students and their teachers, showing students the human aspect of their teacher. As Sonia, an elementary and middle school English teacher, said:

Children, by nature, want to engage with the teacher at a more human level, not just in association with the textbooks. Moreover, this is when humor came handy and facilitates engagement with the teacher and the content.

Through humor, teachers show their students their self-confidence and approachability. Olivia stated:

No matter what subject you teach, students will accept the subject and the information that the teacher is teaching and exert effort in class only if they accept the teacher in the first place. Humor helps in building such relationships that allow teachers and students to bond.

Henna shared a similar opinion: "normally, at the beginning of the academic year, humor plays a part in breaking the ice between the teacher and the student."

Kathy agreed with the concept as she said

When you are very serious, the kids might feel distanced from you but when you say friendly jokes here and there, share funny stories, when you are laughing, and they are laughing, you create this friendly space where they feel welcomed and happy."

The teacher-student relationship needs a delicate balance where humor is utilized to reduce the buildup of tension in such relation. Rania, a middle and high school English teacher, explained:

The relationship is a 2-way street, and it feeds off your energy. So, if you admit that sort of negative energy or vibe, they, in turn, will feed into that with your students. Moreover, if a student is having a bad day and takes it out on you, have a negative interaction with the student. The next day, they will remember it, and you will remember it still. Humor is used purposefully and comes in handy to break the cycle of negativity and help rebuild the relationship.

Such a relationship feeds on how the student feels in the class, as Gihan, a lower elementary English teacher, clarified:

If you have some humor, the class will go smoothly. Also, you will get a better connection with your students because the students like to have fun. Sometimes you must be serious, but students want both. So, as a teacher, we should have both sides.

Healthy Classroom Environment

Of the fourteen interview participants, ten participants 71.4% had responses coded as the theme of "humor support a healthy classroom environment." Such an environment allows teachers and students to enjoy a relaxed, comfortable, and enjoyable class atmosphere. Gihan an elementary school teacher clarified "humor creates that positive

culture in the classroom where they feel confident." Kathy echoed the same idea: "Humor positively affects the classroom environment as students become more comfortable."

Humor brings in a welcoming feeling that helps both the students and the teacher as Tina, an elementary and middle school Arabic teacher, verified:

It makes students look forward to coming to class because they know it is a welcoming environment; they can voice their opinions, they can talk about personal stories, they will be heard, and that allows teachers to present challenging and dry materials in a more pleasant environment.

Nisma shared the same belief as she explained:

In general, you may not remember much of what was taught in class, but you will surely remember the feeling you had when you were learning. When humor is used to stimulate happiness while learning, you then remember that feeling, and you connect it to so it changes the student's perspective on how they connect to their teacher.

Such a relaxed environment enhances students' concertation as they feel less challenged and more eager to learn Jude, an elementary and high school science teacher, mentioned:

Humor enables me to deliver the concept that I am teaching desirably and lets the students feel comfortable with me and relaxed. Such an environment encourages them to concentrate, understand the concepts taught, and be receptive to more information and work in class.

Furthermore, it is also suitable for the teacher, as Mona claimed:

It would be best if you walked into a comfortable environment, an environment where you can laugh, an environment where you can smile, an environment where you can portray a small amount of yourself and see a small quantity of the person in front of you.

Students spend much time in school, and having fun allows them to learn the subject and enjoy what they are learning.

Zina, an elementary and middle school reading, writing, and social studies teacher, said: "the kids spend most of their day at school, so they need to enjoy learning and associate learning with being fun." And Mona echoed the same thought as she said:

Students spend 8 to 9 hours a day in school, then go home and spend only a couple of hours with their parents. Most of the time, they are here with us, with teachers. You are their role model by being an example and teaching them problem-solving skills. You are teaching them how to deal with their peers. You are teaching them the difference between right and wrong, morality, ethics, their relationship with the law, and how to serve the community. So, if you do not have a bond with your students, you will only be able to teach them all of that if they feel conformable in the class environment.

Subject Relatability

Of the fourteen interview participants, nine of the participants 64.3% had responses coded as the theme of "Subject relatability." Humor can bring a connection between the students and the subject being taught. Mona stated, "That is why when you integrate funny stories and personalize them in a way that allows the student to connect with that information through your personal experience." And Rania agreed with the same thought as she said:

I use humor to make the content more relatable to them, especially for topics they might not enjoy; I might insert some appropriate humor to make materials more relatable to the students. So, if the new concept is foreign to them or complicated, when you bring in humor as a bridge where it can help them start to relate to and understand the concept, once they laugh, they get engaged.

Sonia helps students visualize the event in social studies using humorous analogies as she described:

In Social studies, I remember using humor when we talked about King George when the colonists rebelled against him; they were making funny faces at him because he was taking away all of their rights and privileges, and they had no say and no taxation or that representation. So when our founding fathers showed him the letter saying No, you need to give us a voice in the Parliament, I would draw upon, like imagine he is like your father, and you are sticking your tongue out at him. They laugh about certain situations like this, and they understand it.

Nisma uses the power of humor bringing in critical thinking in the topic being taught as she described:

For example, in math, when I was explaining the importance of the standardization of the units of measure, I told them the story of a king that asked some craftsmen to make for him a table that's X number of feet long and X number feed wide. Then everybody would bring him tables that were different. Moreover, they laugh at this story and then think how important that foot be standardized, which starts the conversation, and then you teach the math lesson. Even though the story was humorous, it enlightened their critical thinking skills.

Information Retention

Of the fourteen interview participants, eight of the participants 57.1% had responses coded as the theme of "humor helps students retain information." When information is coated with a fun layer of humor, students consume it, digest it, and retain it easily. Mona said, "much research shows how humor allows students to understand it better and remember the information better." Using funny stories, silly songs, silly mnemonics, and funny pictures helps students retain information as Fatin mentioned,

"funny stories about math operations help them retain my instructions and remember what the steps are they must perform to do the math operation successfully," Kathy echoed the same thought as she said:

Singing silly songs help them retain the information that they learned. For example, the song of the days of the week, by the end of the year, when they are asked what day of the week, they tend to answer by singing the song.

Furthermore, Lina explained, "Sometimes I come up with silly mnemonics for them to remember some of the concept or some vocabulary word, and it definitely, helps." While Jude said:

I use visual images in my subjects to illustrate much information. We might laugh about what a picture of a cell looks like and what the functions of each component are, but such laughter helps us later to remember the scientific facts that we should know about each component.

Teachers use the power of humor to bypass challenges that they face with the students, and the subjects, as Henna commented:

After COVID-19, students come to fourth grade, but in terms of knowledge, they are like first graders in terms of scientific vocabulary. To help reduce the achievement gap, I have to be creative and use humor and funny stories for them to retain these types of dry information. They tend to remember the funny stories from last year but need to remember the slides I share. They do not remember the precise definition, but they do remember the funny stories. Funny story sticks to their mind, especially with the complex vocabulary the kids struggle with. It is the best for information retention.

And Tina stated:

Arabic grammar is a challenging subject, but my young students can grasp the concepts through humor. I tell them funny stories and present silly videos or a PowerPoint that will visualize these concepts in a simplified and funny way which helps them understand not only the concept but also remember it.

Alleviate the Negative Effects of Making Mistakes

Of the fourteen interview participants, four participants, 28.6% had responses coded as the theme of "humor alleviates negative effects of making mistakes." Humor allows students' self-discovery as it provides a safe environment. Students learn the most from their mistakes, yet they try to avoid them as much as possible because they bring in a lot of negative feelings. The use of humor minimized such adverse effects associated with making mistakes in class. Sonia, an elementary and middle school teacher, commented, "we are teaching them that mistakes might happen, and we should be okay with them." Naturalization of mistake-making allows students to be more engaged inclass discussions as they feel it is a safe environment to learn from their mistakes. Kathy agreed as she commented, "They need to know also that it is okay to make mistakes and to laugh at them."

When the concept is new, and students are anxious to give it a try, humor comes to provide a safe environment to do so, as Olivia explained:

I teach students to use mixed-method art, where they practice using different materials to do their art pieces. This process is sometimes challenging for the students; they can make a mess easily and must be calm while fixing their mistakes. Humor comes in handy at this time instead of stressing out about a mistake we laugh it off and fix it as much as we can. I often use humor intentionally with students who are afraid to try new art techniques because they feel they are not talented enough. I try to break their mental reluctance by having

a safe environment for students to make mistakes and learn to avoid them and deal with them creatively.

Kindergarten students tend to be encouraged to participate in class and take the risk of making mistakes when the teacher uses humor to lighten the mood of the classroom environment, as Kathy mentioned:

When teaching phonics and sounds of letters, I use a silly song, and it makes them feel more comfortable and willing to try and guess; they are not as nervous. If I am trying to teach them rhyming words, I have a silly song that I teach them, they laugh more, and then they are more willing to think and participate in class.

Research Question Five

Research question five, What do teachers perceive as the most appropriate style of humor for elementary, middle, and high school students? It was also answered using an inductive coding process that identified emerging themes from the response to the semi-structured interviews. As in research question four, the researcher looked for emergent themes to organize the participants' responses into meaningful information that could be used in this study.

For Elementary Students

Eleven of the fourteen teachers (78.6%) reported that affiliative humor is the appropriate style for this age group. The qualitative analysis identified three major themes as to why such a type of humor is selected for elementary students. (a) this age group easily understands affiliative humor. (b) affiliative humor helps build a relationship between the teacher and the student. (c) affiliative humor enhances the classroom environment.

Easily Understood

Ease of understanding was a key factor for selecting affiliative humor for this age group. Of the fourteen participants, 50% of the participants responded with this theme as the main reason for selecting affiliative humor. This theme was present in about half of the participants' responses. Teachers felt that young students have difficulty understanding self-enhancing humor due to their developmental stage. Lina stated, "I would say elementary students' level of understanding and mental capacity is not mature enough to understand the self-enhancing humor; such humor needs a more mature audience."

Tina echoed Lina's thoughts by saying, "Elementary students are young students who are in the early stage of their social and emotional development. They would not understand self-enhancing humor and might even get confused by its use."

Elementary students enjoy affiliative humor as they love to hear jokes and funny stories. However, they have not been exposed to many life stressors that need self-enhancing humor; Jude commented, "Elementary students are younger. They joke about many things and generally see the humor in everything around them." Also, Byna, a high school teacher, added, "elementary kids are a lot more simplistic, and the things that make them laugh are different from the one that makes adults laugh."

Enhances the Classroom Environment

The classroom is more welcoming and comfortable when affiliative humor is used. Of the fourteen participants, 21% reported enhancing the classroom environment as a reason for selecting affiliative humor. Kathy said:

The affiliative humor helps my kindergartener feels more comfortable in class. I utilize such humor, especially at the beginning of the year when students first

come to my kindergarten classroom. They tend to have a lot of anxiety and separation issues, and humor helps calm them and alleviates their stressors.

Sonia explained:

I think affiliative probably lends itself more to younger children because it engages with the child and makes any stressful situation more lighthearted. You are just putting a lighthearted note on everything in your surroundings for the children because when they are under much stress, and your engagement with them is strictly business, that is not conducive to learning or the classroom environment.

Build Teacher Student Relationship

Affiliative humor facilitates building positive relationships between students, their teachers, and their peers. Of the fourteen participants, 14.2% reported building a student-teacher relationship as the reason for selecting affiliative humor. Henna commented:

I use humor to break the ice, it lightens the mode, and I feel that you start building on those relationships with the kids, which is super essential because from day one if we do not create and work hard on building relationships with the students, it becomes harder to build them. So, it would help if you built that culture in the classroom where kids are comfortable asking your questions.

Kathy stated that:

Affiliative humor helps the teacher to build connections and bonds with her students. It allows the teacher to share personal experiences, tell them about funny things that happen, and let them tell her about anything that happened in their life; this way, it is building bridges.

Mona shared her thoughts by saying, "affiliative humor helps me to be built a relationship with my students that I need to have." Sonia described the importance of such humor by saying,

With affiliative humor, your connectedness is much more robust, and there is much stuff you can only teach to students if you have reached them; you have to have the connection before you can deliver that knowledge. Moreover, that type of humor builds a connection with the students and community in the classroom.

For Middle School Students

Results were mixed; six teachers (42.9%) stated that both types should be used, while four (28.6%) mentioned that self-enhancing is the appropriate style of humor. Another four (28.6%) reported that affiliative humor is appropriate. The central theme that emerged from the teachers who advocated using both types of positive humor is that modeling each type of humor is essential for the students as each style of humor has a function to fulfill. Of the six teachers (83.3%) responded to the importance of modeling the use of both types of humor. Jude said, "Middle school is the stage when students start growing a little bit and start becoming serious with life; this is when they need their teacher to model using both to diffuse unpleasant situations." Also, Zina explained, "they are old enough to understand and enjoy both." Sonia shared the same thought as she said:

Middle school students are in the pursuit of finding themselves and who they are; they are in that adamant position where they imagine that they are adults and they are not, and at the same time, they have this inner child that needs to be nurtured. So, in part, the teacher has to embrace a little bit of both. You shed some humorous aspects on situations and make fun of what happened to you. You say, Hey, we are on the same boat together. This happens to me, too. Ha, ha, ha! Laugh it off so you develop a different connection to that age group.

Rania explained that affiliative humor helps the students while self-enhancing helps the teachers as she described:

Affiliative humor is important because students are already going through many behavioral and emotional ups and downs, so sometimes, they take things very emotionally and seriously; humor helps diffuse the tension buildup. Also, it is an excellent tool for engagement. Self-enhancing becomes more critical for you to cope with many of the stressors that come with teaching older kids; both are important for this age.

Henna echoed the same opinion as she said:

Students at this age tend to experience bullying and social media stressors and compare themselves with others, trying to fit in and be the perfect picture in front of others. Add to that the academic stressors and the standardized tests. That is why affiliative humor comes in handy to reduce such buildup tension. While the self-enhancing humor helps me as a teacher to deal with the stressor and the pressure that the profession entails.

Bayan added:

Middle schoolers have a lot of self-esteem issues, many confidence issues, and many insecurities. That is why when the teacher employs a small amount of both, she shows them what it means to be lighthearted and humorous with love because they need to see you incorporate humor as a tool for handling stressors. You are teaching them to be humorous instead of sad about silly stuff."

Affiliative humor is excellent for relationship building and enhancement of the classroom environment. Tina said, "The affiliative humor facilitates the relationship between the student and the teacher and helps build a warm classroom environment." At the same time, self-enhancing humor is great as a stress reducer, tension diffuser, and coping

strategy. Jude explained, "Middle school students are old enough to understand selfenhancing humor and can communicate with me easily. So, you could send them messages through such humor, and they can engage with me easily."

For High School Students

Eight of the fourteen teachers (57.1%) reported that self-enhancing humor is the appropriate style for high schoolers. Of the eight teachers, seven (87.5%) responded that they selected self-enhancing humor because students are old enough to understand it, and they need to see it modeled to them as a stress-coping strategy. Gihan said affiliative humor is inappropriate for that age. They are too old and think they are grown-ups, so it might humiliate them and make them feel a little bit belittled."

Modeling the use of such type of humor is very helpful for these young adults so they can better cope with stress as it arises; Sonia stated:

These young adults need to see how another adult deals with their surroundings.

Teachers have their own experiences, maybe shedding light on them humorously. So, you are modeling the use of this type of humor in coping with stress.

Tina agreed with that opinion as she said, "As they mature, they would need the modeling of this type of humor to help them with the high level of stress that they face in high school. Henna echoed the same thought: "I definitely feel that when teacher model to them through self-enhancing humor how to deal with stress positively, they tend to imitate."

Conclusion

This chapter presented the analysis of qualitative and quantitative data collected from surveys and interviews, participant demographics, and processes of answering each research question. In the next chapter, findings will be presented to

compare what was found through this study with existing literature. Implications of this study in education and future research will be discussed.

CHAPTER V:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study is to examine the teacher's perception of the effectiveness of humor as a facilitator for student engagement at the classroom level. This study was completed using a sequential mixed methods design to gain insights regarding the teacher's perception of using positive humor as a facilitator of student engagement at the classroom level. A purposeful sample of 102 K-12 teachers working in private schools located in the Greater Houston area was solicited to complete the survey instruments, while fourteen of them volunteered to participate in a follow-up semi-structured interview. The quantitative data were analyzed using descriptive statistics, Pearson's Product-Moment correlations test, the one-way ANOVA test, and the independent sample T-test. The qualitative data were analyzed using thematic inductive coding. Within this chapter, the findings of this study are contextualized in the larger body of research literature. Also, implications and recommendations for future research are included.

Summary

Research question one asked whether there is a statistical relationship between the teacher's level of affiliative or self-enhancing humor and their student engagement efficacy. Quantitative analysis demonstrated that there was not a statistically significant relationship between teachers' level of affiliative and self-enhancing humor and efficacy in student engagement. This result is in contrast with Makewa, et al. (2011), who found out that the teachers who used affiliative and self-enhancing humor were rated very effective in engaging and motivating students.

While the quantitative data reflected no statistical relationship between the teacher's level of affiliative or self-enhancing humor and their student engagement

efficacy, qualitative data indicated that teachers perceived humor style as a facilitator of student engagement. All interviewed teachers agreed that positive humor facilitates engagement and has a function in the process ranging from satisfying students' psychological needs to enhance the classroom environment.

Research question two asked whether the grade level assigned influenced the teachers' level of affiliative or self-enhancing humor. Quantitative analysis demonstrated that grade level does not influence either the level of affiliative humor or the level of self-enhancing humor of the teachers. This result is contrary to Altınkurt & Yılmaz's (2011) study. They found out that the type of humor used by elementary teachers is mostly affiliative humor style from a sample of 279 elementary teachers. Also, the work of Asilioglu, B. (2021) found that the styles of humor of the teacher candidate for 3rd and 4th grades are mostly affiliative humor style. Such style had the highest average, followed by the teachers who are self-enhancing and then self-defeating, with the lowest average for those with the aggressive humor style.

At the high school level, Makewa et al. (2011) found out that the most used styles of humor in class are affiliative and self-enhancing (positive humor). Furthermore, results showed that teachers who use humor in teaching are generally rated effective in motivation, creation of engaging lessons, anxiety reduction in students, stimulation of thought and interest in students, and fostering a positive teacher-student relationship.

Also, these quantitative results contrast with this study's qualitative results. Question five qualitative results reveal that teacher-affiliative humor is best utilized for elementary students. In contrast, both teachers' affiliative and self-enhancing humor were best utilized with middle school students, and self-enhancing was recommended for students in high school.

Research question three asked whether the teacher's certification status influences the teacher's level of affiliative or self-enhancing humor. Quantitative analysis demonstrated there was not a statistically significant mean difference in the level of affiliative and self-enhancing humor based on certification status. Certified teachers are empowered with many tools that facilitate healthy interactions with their students, more confidence in daily teaching tasks, and better ways of dealing with different stakeholders. (Darling-Hammond, 2000). Such qualities give certified teachers a better chance of using positive humor while teaching, as they are less intimidated by the job requirement. However, to date, no research has examined the effect of certification on the teacher's use of humor in class.

Research question four asked participants to respond to an open-ended question to explore their perception of the teachers' style of humor as a facilitator of student engagement in the classroom. A total of fourteen K-12 teachers were interviewed. The qualitative analysis demonstrated that all participants believed in the power of humor as a great tool to boost student engagement. Through thematic coding, participants responses were classified into six primary themes (a) the use of humor satisfies students' psychological needs, (b) teachers' humor helps build a solid teacher-student relationship, (c) humor enhances the classroom environment, (d) humor creates subject relatability, (e) the use of humor enhances information retention, (f) the use of humor minimized the adverse effect associated with making mistakes in class.

In exploring the theme of the use of humor to satisfy students' psychological needs, participants reported that the use of humor reduces students' tension and anxiety, decreases boredom and burnout, enhances students' attention span, facilitates inclusivity, lifts students' spirit, and acting as a stress-coping agent. In Neumann & Neumann's (2009) study, students reported that humor made the class more entertaining and helped

their learning by breaking up the content, bringing back attention, reducing monotony, and providing a mental break. These results were consistent with research that identified humor as an effective teaching tool that relieves tension and stress, makes the classroom atmosphere more comfortable and less intimidating (Deiter, 2000; Embalzado & Sajampun, 2020; Yang, 2021), motivates, relaxes, and cheers the learners (Ziyaeemehr et al., 2011).

Teachers' humor helps build a solid teacher-student relationship theme is well supported by a vast body of research. Humor reveals the human aspect of the teacher to their students, which helps to build a bridge of healthy relations between the teacher and the students. As Olivia stated "Humor helps in building such relationships that allow teachers and students to bond." Such a theme is consistent with Seaman's 2017 results. His results showed that humor could have positive social functions such as relationship building. At the same time, Deiter (2000) states that a teacher's humor breaks the communication barrier between the teacher and the student. A teacher's use of humor enhanced teacher-student relationships (Hackathorn et al., 2011) and student engagement. Also, Embalzado & Sajampun (2020) and Victoria (2019) found that a humorous classroom facilitates teacher-student relationships. Such teacher-student connection uniquely contributes to the student's emotional engagement (Furrer & Skinner, 2003)

Humor is an agent that enhances the classroom environment theme is consistent with much research. Sprinkling a small amount of appropriate humor in class makes it fun and attractive to students and breaks the tensions that tend to build up with time. As Tina explained, "humor makes students look forward to coming to class because they know it is a welcoming environment." Such a theme is supported by Al-Nofaie (2017), who found out that a teacher's humor can facilitate the creation of a friendly atmosphere in the classroom, motivate students and encourage them to initiate and extend their

contributions and increase their engagement with the material being taught. At the same time, Embalzado & Sajampun's (2020) study showed that a humorous classroom brings about physiological and emotional benefits and makes the classroom atmosphere more comfortable and less intimidating. Tunnisa et al. (2019) found that a teacher's humor creates a positive, exciting, and fun classroom environment. Also, Steele's (2017) results show that when purposeful and appropriate humor is used, it creates a positive online environment for learning where students communicate and interact more freely.

Teachers' humor creates subject relatability. Rania explained, "humor help students to relate to new and foreign concepts that might be hard otherwise." Such a theme is vivid in the work of Steele (2017). Steele found that appropriate humor supports finding greater meaning in course content through personal ownership of learning. Also, Anderman et al. (2011) found that high school students are more engaged in classes where the teacher's use of humor consists of teacher-produced jokes and silly content-related comments. Humor was effective when it was relevant to the taught topic (Neumann & Neumann, 2009).

The use of humor enhances the information retention theme is logical as the use of humor wakes up the student's senses and allows the brain to get ready to learn. As Fatin mentioned, "funny stories about math operations help them retain my instructions." Such a theme is consistent with Willis's (2010) research. Willis found that the emotions associated with humor positively affect memory and the brain functions used to activate engagement and that humorous or incongruous events helped to increase student attention and on-task behavior or engagement and increase their enjoyment of the task (Willis, 2010). Also, Celik & Gundogdu (2016) found out that implementing humor and concept cartoons in 9th-grade lessons increased students' success and attitude toward the lesson, decreased the students' anxiety level, and positively affected knowledge retention. Deiter

(2000) concluded that humor help concept retention if humorous content is relevant to taught concept. Humor plays a remarkable role that directly stimulates and influences the student's memory and learning capacity (Sahin, 2021).

Using humor minimized the negative effect of making mistakes in class. Students sometimes avoid participating in class discussions to avoid making mistakes in front of their peers and to hide that they need help understanding the concept being taught.

Teachers' appropriate use of humor plays a role in eliminating that fear and disseminating the fact that making mistakes is part of learning. Humor is an effective teaching tool that relieves such tension and stress. It makes the classroom atmosphere more comfortable and less intimidating for students still learning new concepts (Deiter, 2000; Embalzado & Sajampun, 2020; Yang, 2021), motivating, relaxing, and cheers the learners (Ziyaeemehr et al., 2011). Making mistakes is associated with harmful and destructive emotions that a humorous attitude can overcome. Positive humor, specifically self-enhancing humor, is positively associated with positive emotions (such as optimism, self-esteem, cheerfulness, well-being, and self-confidence).

In contrast, it is negatively associated with negative emotions (such as depression, anxiety, stress, and lousy mood) (Maritn & Ford, 2018). The teacher's use of humor when making mistakes illustrate to students his comfortable making mistakes to the point that such experiences can be shared in the classroom. Thus, it creates a model for students to feel confident in their skills in an environment to overcome learning barriers. (Berk, 2003)

Research question five asked participants to respond to an open-ended question that asked their perception of the most appropriate style of humor for elementary, middle, and high school students. The qualitative analysis illustrated that teachers considered affiliative humor the best type for elementary students; affiliative and self-enhancing

humor should be used for middle schoolers, while self-enhancing humor should be the most appropriate type of humor for high school students.

For elementary students, affiliative humor was viewed as the most appropriate humor. Through thematic coding of the participants' reasons for such a choice, three themes appeared (a) this age group easily understands affiliative humor. (b) affiliative humor helps build a relationship between the teacher and the student at this age. (c) affiliative humor enhances the classroom environment.

Affiliative humor is easily understood by elementary students' theme is logical since affiliative is a friendly and non-hostile form of humor that amuses others and facilitates relationships, often using jokes and funny stories. The key for elementary students to understand and enjoy such humor is selecting age-appropriate funny stories and jokes. Menéndez-Aller et al. (2020) found out that the age of the subjects was important in the affiliative use of humor. The trend was that the older someone is, the less they employ or enjoy affiliative uses of humor.

Affiliative humor helps build a relationship between the teacher, and the student theme is expected as positive humor brings teachers and students closer (Seaman, 2017). It reduces social distance and strengthens positive communication (Şahin, 2021). Affiliative humor is frequently used by teachers to evoke positive emotions in school settings and to enhance their interpersonal relations (Sahin, 2021). Furrer & Skinner (2003) found out that the teacher-student relationship uniquely contributes to students' emotional engagement with their teacher.

Affiliative humor enhances the classroom environment theme is consistent with Tunnisa et al. research. Tunnisa et al. (2019) found that a teacher's humor creates a positive, exciting, and fun classroom environment. Also, Embalzado & Sajampun (2020) found that a humorous classroom helps students enjoy learning in a relaxed atmosphere.

For middle school students, affiliative and self-enchaining humor was believed to be the most appropriate type. A major theme emerged through thematic coding of the participants' responses for the reasons behind selecting both types. Such a theme modeling each type of humor is vital for the students as each style has a function to fulfill. Affiliative humor may aid in initiating a relationship, while self-enhancing humor may be used to cope with problems. (Vela, 2013). Research shows that middle school students tend to be engaged with teachers who display their sense of humor and/or use activities that are categorized as fun, playful, and humorous (Conklin, 2014). Lew & Park's (2016) results show that positive humor styles (affiliative and self-enhancing) are positively associated with a creative personality. There was a significant correlation between coping humor and sense of humor, humor style, and creative personality. Klein & Kuiper (2006) explained how both types of adaptive humor play an essential role in developing healthy relationships with peers. Students who use affiliative humor help maintain group cohesiveness or gain the support of a peer group. While the students use self-enhancing humor to help maintain or enhance their self-esteem. Both of which bring in peer acceptance and reduce the chances of bullying. Teaching students socialemotional skills to modeling the proper use of humor is essential. Such modeling helps students fully understand and appreciate affiliative and self-enhancing humor instead of aggressive and self-defeating humor (Ogurlu, 2015).

As for high schoolers, self-enhancing humor was believed to be the most appropriate type. The qualitative analysis identified one primary theme as to why such a type of humor is selected for high school students. High schoolers are mature enough to understand it and need teachers to model its use as a stress reliever. Such a theme is consistent with Yip and Martin's work. Yin and Martin (2006) found that emotional management ability was positively correlated with self-enhancing humor. They argued

that strategically utilizing self-enhancing humor is an essential interpersonal skill and may contribute to other social competencies, such as initiating friendships and coping with stress. Also, Menéndez-Aller et al. (2020) found that self-enhancing was positively correlated with optimism and negatively correlated with anxiety and depression, demonstrating a protective role. Schools are where students spend most of their day and learn most of the needed social competencies. Teachers' modeling of positive humor help students knows how and when to use it best (Ogurlu, 2015).

Implications

One critical function of teachers is to attract their students' attention and ensure they are engaged in the class. According to Reeve (2012), students engage in their studies when they are motivated, inspired, challenged, and satisfied with their education process (Reeve, 2012). Teachers have the most significant opportunity to engage students by fashioning conditions within the classroom (Van Uden et al., 2013), shaping students' learning and motivation (Collie et al., 2016), and generating a caring and stimulating educational environment (Shernoff et al., 2016). As a result of this study's examination of teachers' perceptions regarding using humor as a facilitator of student engagement in the classroom, implications for teachers emerged.

Despite its limitations, the qualitative findings of this study have important implications regarding the teachers' use of humor in the classroom. Baumgartner and Morris (2008) showed that humor-based teaching is more engaging and exciting for the students. Humor has been promoted as a teaching tool that enhances student engagement and learning (Neumann & Neumann, 2009). The teacher can plan for humor and execute it to hook their students' attention and boost their engagement (Berk, 2002). McKeachie and Svinicki (2006) stated that transmitting knowledge through informal methods such as humor can produce and sustain interest and deep learning in students. Buskist et al.

(2002) found that students report they not only learn a great deal from humorous teachers, but they also enjoy the process of learning from them. The teacher can use humor to help connect with the students if and only if the teacher uses the appropriate type of humor. The appropriate type depends on the type of humor and the student's developmental stage. Positive humor (affiliative and self-enhancing) should be the only type used by teachers in the classroom. Through positive humor, students get engaged, teachers build healthy relationships with their students, a relaxed classroom environment is created, and memorable class experiences are tailored. Selection between the two types of positive humor depends on the student's developmental stage. The study qualitive results implicated that affiliative humor is found to be more appropriate for elementary students while using both affiliative and self-enhancing was recommended for middle school students, and self-enhancing humor was seen as more appropriate for high school students.

Also, humor use in class must be purposeful and planned. Purposeful humor is an umbrella that includes appropriate humor (affiliative and self-enhancing humor), the right timing for the use of humor (beginning, middle, or end of class), and the frequency of its use and content-relatedness. Most teachers mentioned that humor must be well-planned and embedded in the lesson plan to stay manageable. Prior to constructing a lesson where humor will be used as an educational tool to facilitate learning, the teacher should consider the purpose and placement of the humor. Humor may be used at the beginning of the class as an ice breaker, in the middle of the class to offer a mental break or to call students' attention, and at the end of the class, to create a memorable monument.

Neumann & Neumann (2009) concluded that the use of humor may delay the drop in attention following the start of the class and return attention to its initial high levels at later points in the lesson. Additionally, humor may be used before or after a concept and,

as such, will increase one's memory and attention or may be used as a reward (Willis, 2010). Also, the frequency of humor use must be planned for, as much use might delude students from the concept taught.

The study reveals that humor is an effective tool that can benefit both the student and the teacher. From a teacher's perspective, humor is a free, convenient resource that helps the teacher to build rapport with the student (Krasnopolskyi et al., 2020), enhances the classroom environment (Strean, 2011), helps reduction of teacher tension levels, and redirection tool for student misbehavior (Seaman, 2017). From a student perspective, humor reduces tension, stress, and boredom (Rainsberger, 1994), makes the class more desirable to attend, helps students retain information taught (Smith, & Wortley, 2017), increases students' attentiveness to tasks, motivation, understanding, and recall of concepts.

Nevertheless, for such benefits to be ensured, teachers must have humor communication skills training program (Vela, 2013). In such programs or professional development events, educators will be informed about the role of humor in classrooms, the appropriate types of humor, the benefits of the use of the appropriate humor in class as a state by current research, and the most efficient way to embed purposeful content-related humor in the lesson plans. It is essential to promote the practical use of humor in school settings by creating consciousness and awareness among teachers of the fact that humor can be used as an effective instructional tool (Sahin, 2021). Also, helping teachers unleash the power of positive humor on their resilience in coping with the job-related stressor. As teachers used affiliative and self-enhancing styles more often, they were less likely to experience chronic fatigue (Kruczek, 2019).

Recommendations for Future Research

There are several recommendations suggested for future research. First, the researcher recommends replicating this study in a public-school setting. The public schools will have a bigger sample of teachers and a more diverse population of teachers. The private schools had a small number of teachers and a large majority of Middle Eastern teachers, which limits the generalization capability. Also, public schools have a bigger pool of teachers, allowing a random selection of participants. Huge public schools with a larger number of teachers that are more diverse in race may yield different results among those populations. Second, replicating the same study but incorporating field observations to collect data will add more accuracy and validity to the findings. The self-reported survey instrument used for the study limits its accuracy to the teachers' honesty. Third, further investigation is needed to examine the effect of teacher certification on their use of humor as a facilitator of student engagement and whether different grade levels need different types of positive humor.

Finally, researchers may investigate further how humor's three psychosocial elements affect class engagement in its three learning domains—knowing that from a psychological perspective, humor is a form of social play that consists of three psychosocial elements: cognitive (understanding the joke), emotional (mirth), and behavioral (laughter) (Martin & Ford, 2018). Human humor is undoubtedly a multifaceted phenomenon with at least three components (motor, affect, and cognition) (Meyer et al., 2007). While Fredricks et al. (2004) viewed engagement as a "metaconstruct" involving the behavioral domain (e.g., positive conduct, active participation, academic learning time), emotional domain (e.g., positive emotions, sense of belonging to the institution, low anxiety levels), and cognitive domain (e.g., learning strategies and self-regulation). Both humor and student engagement have cognitive, emotional, and

behavioral elements that ignite the interest in how such elements can be affected by each other.

REFERENCES

- Al-Nofaie, H. (2017). Rapport-building strategies: Snapshots from Saudi EFL classrooms. *International Journal of Language Academy*, *5*(8), 304–315. https://doi-org.libproxy.uhcl.edu/10.18033/ijla.3826.
- Altınkurt, Y., & Yılmaz, K. (2011). Humor styles of primary school teachers. *Pegem Journal of Education and Instruction*, *1*(2), 01-08.
- Anderman, L. H., Andrzejewski, C.E., & Allen, J. (2011). How do teachers support students' motivation and learning in their classrooms? Teachers College Record, 113, 969-1003. Retrieved from http://www.tcrecord.org/library/abstract.asp?contentid=16085
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pasal, A., Pauly, E., & Zellman, G. (1976). Analysis of the school preferred reading programs in selected Los Angeles minority schools, REPORT NO. R-2007-LAUSD. Rand Corporation (ERIC Document Reproduction Service No. 130 243).
- Asilioglu, B. (2021). A Study on Humor Styles of Teacher Candidates. *International Education Studies*, *14*(3), 138-146.
- Azzam, A. M. (2014). Motivated to learn: A conversation with Daniel Pink. Educational Leadership, pp. 72, 12–18. Retrieved from http://www.ascd.org/publications/educational-leadership/sept14/vol72/num01/Motivated-to-Learn@-A-Conversation-with-Daniel-Pink.aspx
- Baldwin, E. (2007). Humor perception: the contribution of cognitive factors.
- Banas, Dunbar, N., Rodriguez, D., & Liu, S.-J. (2011). A Review of Humor in Educational Settings: Four Decades of Research. *Communication*Education, 60(1), 115–144. https://doi.org/10.1080/03634523.2010.496867

- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.
- Baumgartner, J. C., & Morris, J. S. (2008). Jon Stewart comes to class: The learning effects of America (the book) in the introduction to American government courses. *Journal of Political Science Education*, *4*, 169-186. doi:10.1080/15512160801998015
- Bergen, D., & Fromberg, D. P. (2009). Play and social interaction in middle childhood. Phi Delta Kappan, 90, 426-430. http://dx.doi.org/10.1177/003172170909000610.
- Berk, R. A. (2002). *Humor as an instructional defibrillator: Evidence-based techniques in teaching and assessment.* Stylus Publishing, LLC.
- Berk, R. A. (2003). Professors Are from Mars [R], Students Are from Snickers [R]: How

 To Write and Deliver humor in the classroom and Professional Presentations.

 Stylus Publishing, LLC, 22841 Quicksilver Drive, Dulles, VA 20166.

 Chicago.
- Belland, B., Kim, C., & Hannafin, M. (2013). A framework for designing scaffolds that improve motivation and cognition. *Educational Psychologist*, 48(4), 243–270. https://doi-org.libproxy.uhcl.edu/10.1080/00461520.2013.838920
- Bobis, J.M., Way, J., Anderson, J., & Martin, A.J. (2016). Challenging teacher beliefs about student engagement in mathematics. *Journal of Mathematics Teacher Education*, 19, 33-55. DOI: 10.1007/s10857-015-9300-4.
- Bolkan, S., & Goodboy, A. (2015). Exploratory Theoretical Tests of the Instructor Humor-Student Learning Link. *Communication Education*, *64*(1), 45–64. https://doi.org/10.1080/03634523.2014.978793

- Brackett, M. A., & Simmons, D. (2015). Emotions matter. Educational Leadership, 73(2), 22–27. Retrieved from http://www.ascd.org/publications/educational-leadership/oct15/vol73 /num02/Emotions-Matter.aspx
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization:

 Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement. *Journal of Educational Psychology*, 98 (1), 1–13.
- Bundick, M. J., Quaglia, R. J., Corso, M. J., & Haywood, D. E. (2014). Promoting student engagement in the classroom. Teachers College Record, 116(4), 1-34. Retrieved from http://www.tcrecord.org/content.asp?contentid=17402.
- Buskist, W., Sikorski, J., Buckley, T., & Saville, B.K. (2002). Elements of master teaching. In S.F. Davis, & W. Buskist (Eds.). *The teaching of psychology: Essays in honor of Wilbert J. McKeachie and Charles L. Brewer* (27-39).
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, 47(1), 1-32.
- Celik, & Gundogdu, K. (2016). The effect of using humor and concept cartoons in high school ICT lessons on students' achievement, retention, attitude, and anxiety. *Computers and Education*, 103, 144–157. https://doi.org/10.1016/j.compedu.2016.10.008
- Centre for Education Statistics and Evaluation (CESE) (2015). Student engagement and well-being in NSW: Initial results from a pilot of the Tell Them From Me student feedback survey. *Learning Curve*, 7, 1-8.
- Centre for Education Statistics and Evaluation (CESE) (2017). Improving high school engagement, classroom practices, and achievement. *Learning Curve*, 18, 1-19.

- Cerasoli, C. P., Nicklin, J. M., & Ford, M. T. (2014). Intrinsic motivation and extrinsic incentives jointly predict performance: A 40-year meta-analysis. *Psychological bulletin*, *140*(4), 980.
- Chandler, C. S. (2014). The influence of school factors on teacher efficacy in student engagement. Kansas State University.
- Clarke, V., Braun, V., & Hayfield, N. (2015). Thematic analysis. *Qualitative psychology:*A practical guide to research methods, 222(2015), 248.
- Coggshall, J. G., Osher, D., & Colombi, G. (2013). Enhancing educators' capacity to stop the school-to-prison pipeline. Family Court Review, pp. 51, 435–444. http://dx.doi.org/10.1111/fcre.12040
- Collie, R. J., Martin, A. J., Papworth, B., & Ginns, P. (2016). Students' interpersonal relationships, personal best (PB) goals, and academic engagement. *Learning and Individual Differences*, pp. 45, 65–76.
- Conklin, H. G. (2014). Toward more joyful learning: Integrating play into frameworks of middle grades teaching. American Educational Research Journal, 51, 1227-1255. http://dx.doi.org/10.3102/0002831214549451
- Creswell, J. (2002). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications.
- Cushman, K. (2014). Eight conditions for motivated learning: Schools and teachers can be more intentional about encouraging student motivation. Phi Delta Kappan, 95(8), 18-23. Retrieved from http://pdkintl.org/publications/kappan/
- Darling-Hammond, L. (2000). How teacher education matters. *Journal of teacher education*, *51*(3), 166-173.
- Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*. University of Rochester Press.

- Deiter, R. (2000). The use of humor as a teaching tool in the college classroom. *NACTA Journal*, 20–28.
- Dinerstein, M., & Smith, T. D. (2021). Quantifying the supply response of private schools to public policies. *American Economic Review*, *111*(10), 3376-3417.
- Dotterer, A, & Lowe, K. (2011). Classroom context, school engagement, and academic achievement in early adolescence. *Journal of Youth and Adolescence*. 40, 1649-1660. DOI: 10.1007/s10964-011-9647-5.
- Eccles, J. S., & Wang, M.-T. (2012). So what is student engagement anyway:

 Commentary on Section I. In S. Christenson, A. L. Reschy, & C. Wylie (Eds.),

 Handbook of research on student engagement (pp. 133–145). Springer.
- Ellington, T. (2018). Student perceptions of instructor humor as a predictor of student intellectual stimulation, Academic Interest, and engagement. ProQuest Dissertations Publishing.
- Elliot, A. J., & Dweck, C. S. (Eds.). (2005). *Handbook of competence and motivation*. New York: Guilford.
- Embalzado, H., & Sajampun, P. (2020). Perspectives of students in Thailand on the use of humor in university classroom. *International Education Studies*, *13*(4), 17–26
- Fata, I. A., Komariah, E., & Irfandy. (2018). Laugh and learn: Evaluating from students' perspective of humor used in English class. *Al-Ta'lim Journal*, *25*(2), 117. https://doi.org/http://dx.doi.org/10.15548/jt.v25i2.425
- Fernandez, S. (2011). The relationship between teachers' emotional intelligence and sense of humor and student achievement (Doctoral dissertation). Retrieved from the ProQuest Theses and Dissertations database. (UMI No. 3467199)
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, pp. 59, 117–142.

- Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter? In Handbook of research on student engagement (pp. 97-131). Springer.
- Forker, S. L. (2020). Online teachers and their perceptions of the teacher/student relationship and student engagement. ProQuest Dissertations Publishing.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School Engagement: Potential of the Concept, State of the Evidence. *Review of educational research*, 74(1), 59-109. https://doi.org/10.3102/00346543074001059.
- Furrer, C., & Skinner, C. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148–162.
- Garner, P. W., Mahatmya, D., Brown, E. L., & Vesely, C. K. (2014). Promoting desirable outcomes among culturally and ethnically diverse children in social-emotional learning programs: A multilevel heuristic model. Educational Psychology Review, pp. 26, 165–189. http://dx.doi.org/10.1007/s10648-014-9253-7
- Gest, S. D., Rulison, K. L., Davidson, A. J., & Welsh, J. A. (2008). A reputation for success (or failure): The association of peer academic reputations with academic self-concept, effort, and performance across the upper elementary grades.

 *Developmental Psychology, 44(3), 625–636.
- Hackathorn, J., Garczynski, A. M., Blankmeyer, K., Tennial, R. D., & Solomon, E. D. (2011). All kidding aside: Humor increases learning at knowledge and comprehension levels. Journal of the Scholarship of Teaching and Learning, 11(4), 116–123. Retrieved from http://files.eric.ed.gov/fulltext/EJ956757.pdf
- Hamilton, P. L. (2013). It is not all about academic achievement: Supporting the social and emotional needs of migrant worker children. Pastoral Care in Education, pp. 31, 173–190. http://dx.doi.org/10.1080/02643944.2012.747555
- Hammersley, M. (2012). What is qualitative research? A&C Black.

- Havik, T., & Westergård, E. (2020). Do teachers matter? Students' perceptions of classroom interactions and student engagement. *Scandinavian Journal of Educational Research*, 64(4), 488-507.
- Hughes, J. N., & Cao, Q. (2018). Trajectories of teacher-student warmth and conflict at the transition to middle school: Effects on academic engagement and achievement. *Journal of School Psychology, pp. 67*, 148 162. http://dx.doi.org/10.1016/j.jsp.2017.10.003
- Jang, H., Reeve, J., Ryan, R. M., & Kim, A. (2009). Can self-determination theory explain what underlies the productive, satisfying learning experiences of collectivistically oriented Korean students? *Journal of Educational Psychology*, pp. 101, 644–661. https://doi.org/10.1037/a0014241.
- Johnson, R. B., & Christensen, L. (2019). Educational research: Quantitative, qualitative, and mixed approaches. Sage publications
- Jonas, P. M. (2010). Laughing and learning. Lanham, MD: Rowman and Littlefield Education.
- Kaufeldt, M. (2010). Begin with the brain: Orchestrating the learner-centered classroom.

 Corwin
- Kirsh, G., & Kuiper, N. A. (2003, June). Humor used in adolescent relationships and associations with psychological well-being. In *Annual Conference of the Canadian Psychological Association, Hamilton*.
- Klein, & Kuiper, N. A. (2006). Humor styles, peer relationships, and bullying in middle childhood. *Humor (Berlin, Germany)*, 19(4), 383–404. https://doi.org/10.1515/HUMOR.2006.01

- Krasnopolskyi, V., Khairulina, N., Tyshakova, L., & Dubova, H. (2020). Humor application in teaching English to future lawyers of Ukraine. *Arab World English Journal*, 307–320. https://doi-org.libproxy.uhcl.edu/10.24093/awej/elt3.25
- Kruczek. (2019). Teachers' humor and its relationships with chronic fatigue the mediating role of the sense of stress at work. *Medycyna Pracy*, 70(3), 343–361. https://doi.org/10.13075/mp.5893.00814
- Kinney, P. (2009). Instructional practices. Principal Leadership: Middle-Level Edition, 9(7), 48–50. Retrieved from https://principals.org/utility/partners-and-advertisers/principal-leadership-magazine?SSO=true
- Kinney, P. (2014). It is the students. Principal Leadership, 14(7), 62–63. http://dx.doi.org/10 .1177/2329490614535052
- Lam, S. F., Wong, B. P., Yang, H., & Liu, Y. (2012). Understanding student engagement with a contextual model. In *Handbook of research on student engagement* (pp. 403-419). Springer.
- Lei, S. A., Cohen, J. L., & Russler, K. M. (2010). Humor on learning in the college classroom: Evaluating benefits and drawbacks from instructors' perspectives.

 Journal of Instructional Psychology, 37, 326-331. Retrieved from http://www.projectinnovation.biz/jip 2006.html
- Lew, & Park, S. H. (2016). A Path Model of Adolescents' Humor and

 Creativity. *International Information Institute (Tokyo)*. *Information*, 19(4), 1139–
 1139.
- Makewa, L. N., Role, E., & Genga, J. A. (2011). Teachers' use of humor in teaching and students' rating of their effectiveness. *International Journal of Education*, 3(2), 1.
- Mantooth, J. D. (2010). *The effects of professor humor on college students' attention and retention*. ProQuest Dissertations Publishing.

- Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79(1), 327–365.
- Martin, R. A., & Ford, T. (2018). *The psychology of humor: An integrative approach*. Academic Press.
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37(1), 48-75.
- Martinez, J., Stecher, B., & Borko, H. (2009). Classroom assessment practices, teacher judgments, and student achievement in mathematics: Evidence from ECLS. *Educational Assessment*, 14, 78-102. DOI: 10.1080/10627190903039429.
- Menéndez-Aller, Á., Postigo, Á., Montes-Álvarez, P., González-Primo, F. J., & García-Cueto, E. (2020). Humor as a protective factor against anxiety and depression. *International journal of clinical and health psychology*, 20(1), 38-45.
- Meyer, M., Baumann, S., Wildgruber, D., & Alter, K. (2007). How the brain laughs:

 Comparative evidence from behavioral, electrophysiological and neuroimaging studies in human and monkey. Behavioural brain research, 182(2), 245-260.
- Miranda, R. (2012). Urban high school teachers' beliefs concerning essential science teaching dispositions. Science Educator, 21(1), 44–50. Retrieved from http://nsela.org/index.php ?option=com_content&view=article&id=138:online-articles&catid =51:sej&Itemid=85.
- McGhee, P. (2011). Children's riddles: First sign of an adult sense of humor. The

 Laughter Remedy. Retrieved from http://www.laughterremedy.com/2011/02

 /children's-riddles- first-sign-of-an-adult-sense-of-humor/

- McKeachie, W.J., & Svinicki, M. (2006). *Teaching tips: Strategies, research, and theory for college and university teachers*. New York: Houghton Mifflin Publishing Co.
- Morrison, G. M., Robertson, L., Laurie, B., & Kelly, J. (2002). Protective factors related to antisocial behavior trajectories. *Journal of Clinical Psychology, pp. 58*, 277–290.
- Mosher, R., & McGowan, B. (1985). Assessing student engagement in secondary schools: Alternative conceptions, strategies of assessing, and instruments.

 University of Wisconsin, Research and Development Center (ERIC Document Reproduction Service No. ED 272812).
- Neumann, D. L., Hood, M., & Neumann, M. M. (2009). Statistics? You must be joking: The application and evaluation of humor when teaching statistics. *Journal of Statistics Education*, 17(2).
- Newmann, F., Wehlage, G. G., & Lamborn, S. D. (1992). The significance and sources of student engagement. In F. Newmann (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11–39). Teachers College Press.
- Nienaber, K., Abrams, G., & Segrist, D. (2019). The funny thing is instructor humor style affects the likelihood of student engagement. *Journal of the Scholarship of Teaching and Learning*, 19(5), 53-60.
- Nicholas, T. (2019). Instructor-student rapport as a psychological need for students.

 [Doctoral dissertation, University of Kentucky] *Theses and Dissertations--*Communication. https://doi.org/10.13023/etd.2019.411
- Nicoll, W. G. (2011). Developing resilient youth: The fourth R of education. Bloomington, IN: Abbott Press.

- Ogurlu, U. (2015). Relationship between cognitive intelligence, emotional intelligence, and humor style. International Online Journal of Educational Sciences, 7(2), 15–25. http://dx.doi.org/10.15345/iojes.2015.02.003
- Papa, L. A. (2015). The impact of academic and teaching self-efficacy on student engagement and academic outcomes.
- Pedler, M., Yeigh, T., & Hudson, S. (2020). The teachers' role in student engagement: A review. *Australian Journal of Teacher Education*, 45(3), 48–62.
- Persinski, J. L. (2015). The impact of teacher efficacy and student engagement on eleventh-grade South Carolina US history and constitution end-of-course state exam scores. Gardner-Webb University.
- Porter, S. R., Whitcomb, M. E., & Weitzer, W. H. (2004). Multiple surveys of students and survey fatigue. *New directions for institutional research*, 2004(121), 63-73.
- Rainsberger, C. D. (1994). Reducing stress and tension in the classroom through the use of humor
- Rebecca L. Edwards, Sarah K. Davis, Allyson F. Hadwin, & Todd M. Milford. (2020).

 Exploring Student Engagement Factors in a Blended Undergraduate Course. *The Canadian Journal for the Scholarship of Teaching and Learning*, 11(3), 1–22.
- Reeve, J. (2012). A self-determination theory perspective on student engagement.

 In *Handbook of research on student engagement* (pp. 149–172). Springer, Boston,

 MA.
- Reschly, A. L., & Christenson, S. L. (2012). Jingle, jangle, and conceptual haziness: Evolution and future directions of the engagement construct. In *Handbook of research on student engagement* (pp. 3-19). Springer.

- Reyes, M., Brackett, M., Rivers, S., White, M., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, 104(3), 700–712. DOI: 10.1037/a0027268.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–70.
- Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.
- Ryan, A., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437–460. Retrieved February 13, 2021, from http://www.jstor.org/stable/3202465
- Ryan, R. M., & Powelson, C. L. (1991). Autonomy and relatedness as fundamental to motivation and education. *The Journal of Experimental Education*, pp. 60, 49–66. https://doi.org/10.1080/00220973.1991.10806579.
- Şahin, A. (2021). Humor used in school settings: The perceptions of teachers. *SAGE Open*, 11(2), 21582440211022691.
- Sahin, A., & Gök, R. (2020). The Effects of the Schools' Humor Climates on Perceived Stress Levels of the Teachers. *International Journal of Contemporary Educational Research*, 7(1), 71–84.
- Saldaña, J. & Omasta, M. (2017). Qualitative research: Analyzing life. CA: Sage.
- Salmee, S. A., & Arif, M. M. (2019). A study on the use of humour in motivating students to learn English. *Asian Journal of University Education*, *15*(3), 257–265.
- Seaman, L. G. (2017). Exploring student engagement and middle-school students'

 perceptions of humor used as a teaching tool (Doctoral dissertation, Northcentral University).

- Schlechty, P. (2005). Creating great schools: Six critical systems at the heart of educational innovation. Jossey-Bass.
- Schlechty, P. C. (2011). Engaging students: The next level of working on the work. John Wiley & Sons.
- Shaukat, S., & Iqbal, H. M. (2012). Teacher Self-Efficacy as a Function of Student Engagement, Instructional Strategies, and Classroom Management. *Pakistan Journal of Social & Clinical Psychology*, 9(3).
- Shernoff, D.J., Kelly, S., Tonks, S.M., Anderson, B., Cavanagh, R.F., Sinha, S., & Abdi, B. (2016). Student engagement as a function of environmental complexity in high school classrooms. *Learning and Instruction, pp. 43*, 52–60. https://doi.org/10.1016/j.learninstruc.2015.12.003
- Sinclair, M. F., Christenson, S. L., Lehr, C. A., & Anderson, A. R. (2003). Facilitating student learning and engagement: Lessons learned from Check & Connect longitudinal studies. *The California School Psychologist, pp.* 8, 29–41.
- Skinner, E.A., & M.J. Belmont. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology* 85, no. (4) 571 –81.
- Skinner, E. A., & Pitzer J. R. (2012). Developmental dynamics of student engagement, coping and everyday resilience. In S.Christenson, A. Reschly, & C., Wylie (Eds.), Handbook of research on student engagement (1st ed., pp 21-44) Springer. DOI 10.1007/978-1-4614-2018-7 1
- Skinner, E. A., Pitzer, J. R., & Steele, J. S. (2016). Can student engagement serve as a motivational resource for academic coping, persistence, and learning during late elementary and early middle school? *Developmental Psychology*, 52, 2099 –2117. http://dx.doi.org/10.1037/dev0000232

- Smith, V. D., & Wortley, A. (2017). "Everyone's a Comedian." No Really, They Are: Using Humor in the Online and Traditional Classroom. *Journal of Instructional Research*, 6, 18-23.
- Strean, W. B. (2011). Creating student engagement? HMM: Teaching and learning with humor, music, and movement. *Creative Education*, *2*(3), 189.
- Steele, J. (2017). The role humor plays in facilitating rapport, engagement, and motivation in graduate online learning environments. University of North Texas.
- Sun, Y., Ni, L., Zhao, Y., Shen, X. L., & Wang, N. (2019). Understanding students' engagement in MOOCs: An integration of self-determination theory and theory of relationship quality. *British Journal of Educational Technology*, 50(6), 3156-3174.
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative* research journal.
- Syafiq, A. N., & Saleh, M. (2012). Humor English teaching material for improving students' speaking skills with high and low motivation. *Language Circle: Journal of Language and Literature*, 7(1)
- Taylor, L. & Parsons, J. (2011). Improving student engagement. *Current Issues in Education*, 14(1), 3–32.
- Terrenghi, I., Diana, B., Zurloni, V., Rivoltella, P. C., Elia, M., Castañer, M., Camerino, O., & Anguera, M. T. (2019). Episode of situated learning to enhance student engagement and promote deep learning: preliminary results in a high school classroom. *Frontiers in psychology*, 10, 1415.

 https://doi.org/http://dx.doi.org/10.3389/fpsyg.2019.01415
- Tight, M. (2020). Student retention and engagement in higher education. *Journal of Further and Higher Education*, 44(5), 689–704.

- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education*, *17(7)*, 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1
- Tunnisa, D., Mahmud, M., & Salija, K. (2019). Investigating Teacher's Sense of Humor in Indonesia. *International Journal of Language Education*, *3*(2), 99–114.
- Unruh, T. (2015). *Flipped versus traditional models: A comparative study*. ProQuest Dissertations Publishing.
- Van Amburgh, J. A., Delvin, J. W., Kirwin, J. L., & Qualters, D. M. (2007). A tool for measuring active learning in the classroom. *American Journal of Pharmaceutical Education*, 71(5), 85–93.
- Van den Berghe, L., Vansteenkiste, M., Cardon, G., Kirk, D., & Haerens, L. (2014).

 Research on self-determination in physical education: Key findings and proposals for future research. *Physical Education and Sport Pedagogy*, 19(1), 97–121. https://doi.org/10.1080/17408989.2012.732563
- Van Uden, J. M., Ritzen, H., & Pieters, J. M. (2014). Engaging students: The role of teacher beliefs and interpersonal teacher behavior in fostering student engagement in vocational education. *Teaching and Teacher Education*, *37*, 21-32
- Van Uden, J.M., Ritzen, H., & Pieters, J.M. (2013). I think I can engage my students.

 Teachers' perceptions of student engagement and their beliefs about being a teacher. *Teaching and Teacher Education*, 32, 43-54.

 https://doi.org/10.1016/j.tate.2013.01.004.
- Vathsala Sagayadevan, & Senthu Jeyaraj. (2012). The Role of Emotional Engagement in Lecturer-Student Interaction and the Impact on Academic Outcomes of Student Achievement and Learning. *The Journal of Scholarship of Teaching and Learning*, 12(3).

- Vela, L. E. (2013). Investigating the Effect of Humor Communication Skills Training on Pro-social and Anti-social Humor Styles, Cognitive Learning, Self-efficacy, Motivation, and Humor Use. West Virginia University.
- Victoria, M. (2019). The Use of Humour in the Off-Task Spaces of the Language Classroom. *ELT Journal*, 73(2), 186–196.
- Vivona, B. D. (2018). Considering Humor and Adult Education. *PAACE Journal of Lifelong Learning*, 27, 67-81.
- Wang, M., Degol, J., & Henry, D. (2019). An Integrative development-in-sociocultural-context model for children's engagement in learning. *The American Psychologist*, 74(9), 1086–1102. https://doi.org/10.1037/amp0000522
- Wang, M., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using multidimensional perspective. Learning and Instruction, pp. 28, 12–23. http://dx.doi.org/10.1016/j.learninstruc .2013.04.002
- Wanzer, M. B., Frymier, A. B., & Irwin, J. (2010). An explanation of the relationship between instructor humor and student learning: Instructional humor processing theory. Communication Education, 59, 1-18. http://dx.doi.org/10.1080/03634520903367238
- Wanzer, M. B., Frymier, A. B., Wojtaszczyk, A. M., & Smith. T. (2006). Appropriate and inappropriate uses of humor by teachers. Communications Education. 55, 178-196. http://dx.doi.org/10.1080/03634520600566132
- Wentzel, K. (2009). Students' relationships with teachers as motivation contexts. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation in school* (pp. 301–322). Malwah, NJ: Erlbaum.

- West, M. S., & Martin, M. M. (2019). Students' perceptions of instructor appropriateness and humor homophily. *Communication Education*, 68(3), 328–349. https://doiorg.libproxy.uhcl.edu/10.1080/03634523.2019.1608368
- Weiss, C. C., Carolan, B. V., & Baker-Smith, E. C. (2010). Big school, small school:(Re) testing assumptions about high school size, school engagement, and mathematics achievement. *Journal of youth and adolescence*, *39*(2), 163–176.
- Willingham, D. T. (2009). Why don't students like school? A cognitive scientist answers questions about how the mind works and what it means for the classroom. San Francisco, CA: Jossey Bass.
- Willis, J. (2010). Research-based strategies to ignite student learning. Alexandria, VA: Association for Curriculum and Development. http://dx.doi.org/10.14507/er.v0.820
- Yang, P. (2021). *Humor and its use during a lesson: Can it help students to remember things better?* ProQuest Dissertations Publishing.
- Yip, J. A., & Martin, R. A. (2006). Sense of humor, emotional intelligence, and social competence. *Journal of research in personality*, 40(6), 1202-1208.
- Ziyaeemehr, A., Kumar, V., & Abdullah, M. S. F. (2011). Use and non-use of humor in academic ESL classrooms. *English Language Teaching*, *4*(3), 111-119.
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education*, 11(3), 167-177.

APPENDIX A:

TEACHER'S PERCEPTION OF HUMOR AS A FACILITATOR TO STUDENT ENGAGEMENT

Research Design Process

State of Uncertainty/ Discomfort

Do Teachers Perceive Teacher Humor in Class as a Facilitator of Student Engagement?



Previous Research

Literature Review

- -Student Engagement.
- -Teacher Efficacy and Student

Engagement.

-Different Styles of Teacher

Humor.

-Humor and Student Engagement.



Theories

Self Determination Theory

Student's Intrinsic Motives to be

Engaged:

- Relatedness.
- Autonomy
- Competence

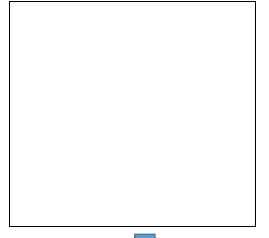
Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations:

Classic definitions and new directions. Contemporary

Educational Psychology, 25(1), 54-70.

In 2015, Bolkan and Goodboy found out that the

positive effects generated by humor impacts student



learning and cognitive engagement through the fulfillment of students' needs for competence, relate.

Bolkan, S., & Goodboy, A. (2015). Exploratory Theoretical Tests of the

Instructor Humor-Student Learning Link. Communication

Education, 64(1), 45-64.

https://doi.org/10.1080/03634523.2014.978793





Research Questions/ Hypothesis

Quantitative

1-Is there a relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy?

H0: There is no relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy.

H1: There is a relationship between the teacher's level of affiliative humor or self-enhancing humor and their student engagement efficacy

2-Does grade level assigned influence the teachers' level of affiliative or self-enhancing humor?

H0: The grade level assigned do not influence the teachers' level of affiliative or self-enhancing humor.

	H1: The grade level assigned does influence the teachers' level of
	affiliative or self-enhancing humor.
	3- Does the teacher's certification status influence by the teacher's
	level of affiliative or self-enhancing humor?
	H0: The teacher's certification status is not influenced by the teacher's
	level of affiliative or self-enhancing humor.
	H1: The teacher's certification status is not influenced by the teacher's
	level of affiliative or self-enhancing humor.
Qualitative	4-What are teachers' perceptions of the style of humor as a
	facilitators of student engagement in classes?
	5-What is the style of humor most appropriate for elementary,
	middle, and high school students?



Research Design

Mixed Method

Research design in which the researcher uses a combination of quantitative and qualitative approaches in a single study

Sequential Design. (Quant-qual)

Johnson, B., & Christensen, L. (2008). Educational research: Quantitative, qualitative, and mixed approaches, (3th Ed.). Los Angeles: Sage Publications.

Subjects Sampling Technique

Private School Teachers	Purposeful Sampling					
	(Nonrandom Sampling Technique)					
(Research Gap)	It is a technique where the researcher specifies					
	the characteristics of the population of interest					
	and locates individuals with those					
	characteristics.					
	Johnson, B., & Christensen, L. (2008). Educational research:					
	Quantitative, qualitative, and mixed approaches,					
	(3th Ed.). Los Angeles: Sage Publications.					
Procedures	Data Collection Technique					
Sequential design. (Quant- qual)	Electronic Survey					
	(Structured Questions)					
	Semi-Structured Interviews					
Quantitative Methodology	Qualitative Methodology					
Survey Instrument	Phenomenology					
	Sy.					
Constructs Measured	Instruments Used					
1-Teacher's efficacy in student	1-The nine Likert Teacher					
engagement.	Efficacy in Student Engagement					
2- Affiliative humor	Scale developed by Tschannen-Moran					
3- Self-enhancing humor	and Woolfolk Hoy (2001).					
	2- Humor Styles Scale designed by					
	Martin et al. (2003).					

3-Ор	en-Ended Semi-Structured
inter	view

Research Model

Teacher Humor

Student Engagement

- Cognitive - Cognitive
- Affective - Emotional
- Behavioral - Behavioral

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research*, 74(1), 59-109

Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37(1), 48-75.



	Data Analysis									
Туре	Questions	Variables/Type	Tests							
Quantitative	1-Is there a relationship	-Teacher Humor.	Pearson's							
	between the teacher's level	(Continuous Variable)	Product-							
	of affiliative humor or	-Teacher Efficacy in	Moment							
	self-enhancing humor and	Student Engagement.	correlations							
	<u> </u>	(Continuous Variable)	(r)							

	their student engagement		
	mon student engagement		
	efficacy?		
	2- Does grade level		
		-Teacher Humor.	
	assigned influence the	(Continuous Variable)	One way
	teachers' level of	-Grade Level.	ANOVA
	affiliative or self-	(Categorical Variable- 3	
	enhancing humor?	categories)	
	3- Does the teacher's	-Teacher Humor.	Independent
	certification status		Independent
	certification status	(Categorical Variable-2	T-test.
	influence by the teacher's	categories)	
	level of affiliative or self-	-Teacher Certificate.	
	enhancing humor?	Categorical Variable-2	
		categories)	
Qualitative	4-What are teachers'	-Teacher perception	Thematic
	perceptions of the style of		inductive
	humor as a facilitators of		coding
	student engagement in		
	classes?		
	5-What is the style of	-Teacher perception	Thematic
	humor most appropriate		inductive
	for elementary, middle,		coding
	and high school students?		

Conclusion

Question one: There was not a statistically significant relationship between teachers' level of affiliative and self-enhancing humor and efficacy in student engagement.

Question two: The grade level does not influence neither the level of affiliative humor nor the level of self-enhancing humor of the teachers.

Questions three: There was not a statistically significant mean difference in the level of affiliative and self-enhancing humor based on certification status.

Question four: Humor is a great tool to boost student engagement through (a) its use to satisfies students' psychological needs, (b) teachers' humor helps build a strong teacher- student relationship, (c) humor enhance the classroom environment, (d) humor creates subject relatability, (e) the use of humor enhances information retention, (f) the use of humor minimized the negative effect associated with making mistakes in class Question five: that teachers considered affiliative humor to be the best type for elementary students, both affiliative and self-enhancing humor should be used for middle schoolers while self-enhancing humor to be the most appropriate type of humor for high school students.









Link to Previous Research

The qualitative results of the current study support the previous research that found that humor is an excellent tool for student engagement.

Implications for theory

Develop a theory on how humor's cognitive, behavioral, and affective aspects align with the student engagement cognitive, behavioral, and affective aspects.

Implications for Practice

Professional
developmental
events for
teachers to
help them
identify and
utilize the
appropriate
type of humor
in their
classes.

More Research

1-Replicating this study
-in a public-school setting
- incorporating
field observations
to collect data.
2- more research
is needed to
examine the effect
of teacher
certification on
their use of humor

APPENDIX B:

HUMOR STYLE SCALE

Humor Styles Questionnaire

People experience and express humor in many different ways. Below is a list of statements describing different ways in which humor might be experienced. Please read each statement carefully, and indicate the degree to which you agree or disagree with it. Please respond as honestly and objectively as you can. Use the following scale:

Totally Disagre	Moderately e Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderate Agree	ly		Tota Agre			
1	2	3	4	5	6			7			
1.	I usually don't lau	gh or joke arou	nd much with other p	eople.	1	2	3	4	5	6	7
2.	If I am feeling dep	oressed, I can us	sually cheer myself up	with humor.	1	2	3	4	5	6	7
3.	If someone makes	a mistake, I wi	ll often tease them ab	out it.	1	2	3	4	5	6	7
4.	I let people laugh	at me or make i	fun at my expense mo	re than I should.	. 1	2	3	4	5	6	7
5.	I don't have to wor to be a naturally he		making other people in.	laugh I seem	1	2	3	4	5	6	7
6.	Even when I'm by	myself, I'm of	ten amused by the ab	surdities of life.	1	2	3	4	5	6	7
7.	People are never of	offended or hurt	by my sense of humo	or.	1	2	3	4	5	6	7
8.	I will often get car family or friends le		atting myself down if	it makes my	1	2	3	4	5	6	7
9.	I rarely make othe	r people laugh	by telling funny storie	es about myself.	1	2	3	4	5	6	7
10.			usually try to think of myself feel better.	of something	1	2	3	4	5	6	7
11.	When telling jokes concerned about h		ny things, I am usually e are taking it.	y not very	1	2	3	4	5	6	7
12.			accept me more by sa blunders, or faults.	ying something	1	2	3	4	5	6	7
13.	I laugh and joke a	lot with my frie	ends.		1	2	3	4	5	6	7
14.	My humorous out depressed about th		ps me from getting or	verly upset or	1	2	3	4	5	6	7
15.	I do not like it who putting someone d		umor as a way of crit	icizing or	1	2	3	4	5	6	7
16.	I don't often say f	unny things to p	out myself down.		1	2	3	4	5	6	7
17.	I usually don't like	e to tell jokes or	r amuse people.		1	2	3	4	5	6	7

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Totally Disagro		Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Modera Agre		,		otal			
1	2	3	4	5	6			,	7			
18.	If I'm by myself ar of something funny		inhappy, I make an e elf up.	ffort to think		1	2	3	4	5	6	7
19.			hat is so funny that I not appropriate for t			1	2	3	4	5	6	7
20.	I often go overboar or trying to be fund		yself down when I ar	n making jokes	3	1	2	3	4	5	6	7
21.	I enjoy making peo	pple laugh.				1	2	3	4	5	6	7
22.	If I am feeling sad	or upset, I usua	ally lose my sense of	humor.		1	2	3	4	5	6	7
23.	I never participate are doing it.	in laughing at o	others even if all my	friends		1	2	3	4	5	6	7
24.	When I am with fr people make fun o		, I often seem to be the	he one that oth	er	1	2	3	4	5	6	7
25.	I don't often joke a	round with my	friends.			1	2	3	4	5	6	7
26.			about some amusing way of coping with p			1	2	3	4	5	6	7
27.	If I don't like some	one, I often use	humor or teasing to	put them down	n.	1	2	3	4	5	6	7
28.			g unhappy, I often co iends don't know ho		cing	1	2	3	4	5	6	7
29.	I usually can't thin	k of witty thing	gs to say when I'm w	ith other peopl	e.	1	2	3	4	5	6	7
30.			ele to feel amused l hen I'm by myself.	can usually		1	2	3	4	5	6	7
31.	Even if something it if someone will be		to me, I will not laug	gh or joke abou	t	1	2	3	4	5	6	7
32.	Letting others laug in good spirits.	h at me is my v	vay of keeping my fr	iends and fami	ly	1	2	3	4	5	6	7

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Scoring

Affiliative Humor: 1*, 5, 9*, 13, 17*, 21, 25*, 29*

Self-Enhancing Humor: 2, 6, 10, 14, 18, 22*, 26, 30

Aggressive Humor: 3, 7*, 11, 15*, 19, 23*, 27, 31*

Self-Defeating Humor: 4, 8, 12, 16*, 20, 24, 28, 32

* Note: Items marked with * are reverse keyed; i.e., 1=7, 2=6, 3=5, 4=4, 5=3, 6=2, 7=1 After reversing these items, sum across all 8 items in each scale to obtain scale totals.

Interpretation

Affiliative Humor: tendency to share humor with others, tell jokes and funny stories, amuse others, make others laugh, enjoy laughing along with others

Self-Enhancing Humor: tendency to maintain a humorous outlook on life even when not with others, use humor in coping with stress, cheer oneself up with humor

Aggressive Humor: tendency to use humor to disparage, put down, or manipulate others; use of ridicule, offensive humor; compulsive expression of humor even when inappropriate

Self-Defeating Humor: tendency to amuse others at one's own expense, self-disparaging humor; laughing along with others when being ridiculed or put down; using humor to hide one's true feelings from self and others

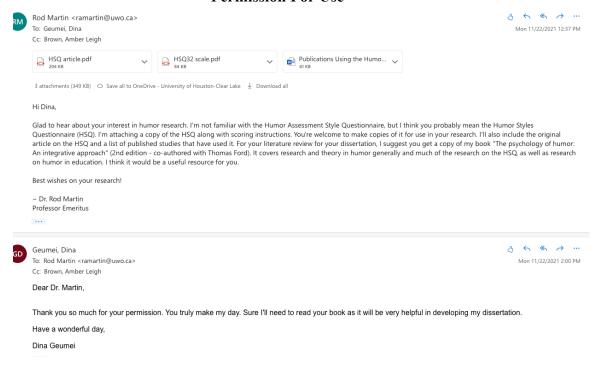
Source

Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality*, 37, 48-75.

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APPENDIX C:

TEACHER EFFICACY IN STUDENT ENGAGEMENT SCALE

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

Question	1	2	3	4	5	6	7	8	9
	None		Very		Some		Quite		A
	At		Little		Degree		A Bit		Great
	All								Deal
1- How much can you do to									
get through to the most									
difficult students?									
2- How much can you do to									
help students think									
critically?									
3- How much can you do to									
motivate students who show									
low interest in schoolwork?									
4- How much can you do to									
get students to believe they									
can do well in schoolwork?									

Question	1 None At All	2	3 Very Little	4	5 Some Degree	6	7 Quite A Bit	8	9 A Great Deal
5- How much can you do to help your student value learning?									
6- How much can you do to foster student creativity?									
7- How much can you do to improve the understanding of a student who is falling?									
8- How much can you assist families in helping their children do well in school?									

APPENDIX D:

HUMOR AND STUDENT ENGAGEMENT SURVEY COVER LETTER

Greetings! You are being solicited to complete the Teachers' perception of humor as a facilitator of student engagement survey. The purpose of this survey is to assess the teachers' perception of humor as a promoter of student engagement at the classroom level. The data obtained from this study will allow researchers to understand the role of teachers' humor in facilitating student engagement.

Please try to answer all the questions. Filling out the survey is entirely voluntary but answering each response will make the survey most useful. This survey will take approximately 5-10 minutes to complete, and all your responses will be kept completely confidential. No obvious undue risks will be endured, and you may stop your participation at any time. In addition, you will also not benefit directly from your participation in the study. You will complete the Humor Styles Scale and the Teacher Efficacy in Student Engagement Scale—via the electronic survey link provided in the recruitment email. In addition, you will be asked if you would like to voluntarily participate in a follow-up interview with the researcher about the research topic.

Please know that every effort will be made to maintain the confidentiality of your study records. The data collected from the study will be used for educational and publication purposes, however, you will not be identified by name. For federal audit purposes, the participant's documentation for this research project will be maintained and safeguarded by the Principal Investigators or Faculty Sponsor for a minimum of three years after completion of the study. After that time, the participant's documentation may be destroyed.

Your cooperation is greatly appreciated and your willingness to participate in this study is implied if you proceed with completing the survey. Your completion of the

survey is not only greatly appreciated, but invaluable. If you have any further questions, please feel free to contact me anytime, or my Chair Committee member, Dr. Amber Brown.

Thank you!

Dina Geumei

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THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281.283.3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT. (FEDERALWIDE ASSURANCE #FWA00004068)

APPENDIX E:

HUMOR STUDY INTERVIEW PROTOCOL

Hello, my name is Dina Geumei. I am a doctoral candidate from the University of Houston Clear Lake. I appreciate your willingness to assist me in my dissertation study. Thank you for taking the time to talk to me today. Before we begin, do you have any questions about the informed consent form that you completed earlier?

The interview will take about one hour, and I am going to supplement my notes by audio-recording our interview, is this, okay?

Today is (DATE/TIME), and I am speaking with (PARTICIPANT). I am going to be asking you a few general questions, and all your answers will be confidential. Your responses will be used to better understand the role of teacher's humor on student engagement at the classroom level. You may choose to skip any question if you are not comfortable answering. If you need to take a break, please let me know.

Demographic:

Please tell me about you as a teacher.

- 1- How many years have you been teaching?
- 2- What degrees in education do you have?
- 3- Which grade level are you currently teaching?
- 4- What is the main content area you are teaching?
- 5- Are you Texas Certified? If not, what type of certificate do you have?
- 6- Do you currently work part-time or full-time?
- 7- What is your racial Identity?

Humor:

We are starting the humor part of our interview,

- 8- In class, how do you use humor to attract the attention of your students?
- 9- Do you believe that the use of humor facilitates the increase of student engagement in the class? And why?
- 10- Does the use of humor help you as a teacher to explain topics that are hard for students to understand and stay focused on? Explain?
- 11- What type of humor do you use of the two positive types of humor? (Affiliative humor, and Self-enhancing humor)

To help you in the process of answering questions let me define different types of humor Affiliative humor is defined as t. the tendency to share humor with others, tell jokes and funny stories, amuse others, make others laugh, enjoy laughing along with others. While self-enhancing humor is defined as the tendency to maintain a humorous outlook on life even when not with others, use humor in coping with stress, cheer oneself up with humor. (Martin et al., 2003).

- 12- In your opinion, which style of humor is most appropriate for elementary students? And why?
- 13- In your opinion, which style of humor is most appropriate for middle school students? And why?
- 14- In your opinion, which style of humor is most appropriate for high school students? And why?
- 15- What do you think of the use of humor and its instructional tool, how you use it? And why is important?

Engagement (Affective)

16- How would you describe the overall student experience in your class? how they feel when they are in your class? are they interested in learning? Do they sometimes show

signs of boredom? When? Do they sometimes show signs of contentment in class? When? How does the use of humor help in that regard?

Engagement (Behavioral)

17- Describe the level of student engagement during class interaction and teacher led class discussions? And when humor is utilized, do you believe student engagement is increased? (To help you in the process of answering these questions let me itemize to your classroom interaction answering questions, participating in class discussion, chance to discuss things that they find confusing, practicing what they learned)

Engagement (Cognitive)

18- Tell me what students do in your class when they do not understand something. How do they approach you for extra help? will you use humor to help them in this regard? And how?

Thank you so much for taking the time to talk with me today. I and everyone on the research team really appreciate your help. If you have any questions in the future, please feel free to contact us using the information on the paperwork we gave you earlier. Thank you again!