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Exploring Saudi Teachers' Goal Orientations: An Appeal for Mastery Goal Orientation as a Vision for a Better Future

by

Afnan M. Alrshed

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the

Doctor of Philosophy in Foundations of Education: Educational Psychology

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An Abstract of

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Saudi Arabia launched a strategic plan to further develop its overall education plan. The strategic plan contains goals to develop classroom environments that concentrate on inculcating learning skills (e.g., critical thinking and problem solving), fostering students' self-development, improving students' confidence, promoting students' spirit of creativity, and increasing students' desire to be challenged in the learning context ("Education and Vision 2030," 2017). The goals are aligned with the principles of Achievement Goal Theory (AGT), a key motivational theory in Educational Psychology. Indeed, motivational theories often guide educational philosophies which seek to increase students' interaction and engagement in learning. AGT is considered to be an essential factor that influences students' intrinsic motivation and desire not only to learn but also to continue learning. Teachers are the heart and soul of the education system, and they are the most immediately influential component in students' learning and development. There is a lack of research evidence regarding Saudi teachers' Goal Orientation. Thus, the present study's focus was to explore teachers' Goal Orientation in Saudi Arabia using a descriptive survey design. The sample of the study consisted of 292 teachers. The data

was analyzed using the Rasch model for dichotomous data. The demographic information of the teachers revealed that 83.83% of teachers had not been exposed to Achievement Goal Theory. The results show that teachers preferred Mastery Orientation (MO) strategies with some students but not all. It seems that teachers did not have a comprehensive grasp of the importance of practicing MO strategies with all students most of the time. The results suggest that teachers' selection of MO strategies could be influenced considerably by certain characteristics of both the situation and the student. Also, the results identified the areas where teachers fail to practice the most important MO strategies on learning with students, which will help determine teachers' developmental needs to establish a mastery-oriented classroom.

Keywords: Achievement Goal Orientation; Achievement Goal Structure; TARGET framework, Saudi Education, Saudi Vision 2030, Rasch Model

I dedicate my work to my daughters

Elan and Lateen

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Chapter One

Background

Education is an effective means of building a generation capable of both representing its own culture and interacting with other cultures. Recognizing this, the King of Saudi Arabia, Salman bin Abdulaziz, stated that education is a fundamental aspect of human life that is pivotal to fulfilling the ambitions of Saudi citizens toward growth and ascent in knowledge and learning ("Vision 2030," 2018). Furthermore, the Crown Prince of Saudi Arabia, Mohammed bin Salman, stated that Saudi endeavors seek to make the Kingdom of Saudi Arabia become recognized as a global force to be reckoned with by educating and qualifying its citizens (Education Evaluation Commission, 2017). Additionally, he emphasized that Saudi Arabia is responsible for ensuring that its educational system is appropriately implemented in order to fulfill its citizens' aspirations. Thus, it can be inferred that the Ministry of Education (MoE) in Saudi Arabia looks to follow the footsteps of countries with advanced educational systems (e.g., Finland, the United Kingdom, and the United States) by partnering with leading educational organizations such as the Global Education and Skills Forum (GESF; Abdelhafez, 2016). More specifically, GESF—an initiative of the Varkey Foundation—brings together the world's topmost educational leaders "… to demonstrate that education is the key to solving global issues" (Varkey, 2018). The Varkey Foundation (2020) believes on teachers' effect on the educational system specifically and the future generally, and posted an explicit formela that every education system have to follow worldwide "more qualified teachers [lead to] more quality education [leads to] better future for all!" Meanwhile, the minister of the MoE in Saudi Arabia, Dr. Hamad Al Al-

Sheikh, stated that the responsibility of education is placed on the shoulders of all the country's teachers and principals and the MoE will make more effort to preparing qualified teachers (Al-Zaid, 2019).

The above-mentioned statements about the importance of education and the role of teachers emerged when Saudi Arabia launched Vision 2030 in April 2016. The vision was formulated by the Council of Economic and Development Affairs and approved by the Council of Ministers. This represents a plan for the country to achieve notable international standing in all domains, including education and economics. As regards education, Vision 2030 primarily aims to confront regional challenges (e.g., lack of quality education) as well as global challenges (e.g., low Saudi universities' rankings). Additionally, it concentrates on protecting developmental gains and ensuring that Saudi Arabia continues to grow nationally and internationally. The Document of Saudi Vision 2030 specifically indicates that the country is responsible for enabling students to achieve results that are above international averages on global education indicators ("Vision 2030," 2016).

The question arises, therefore, as to how to enable students to achieve these results. Hakeem (2012), a scholar on the politics of education, stated that improving an educational system requires efforts toward preparing qualified teachers. The MoE has developed a comprehensive plan to improve the Saudi educational system through preparing qualified teachers to achieve Vision 2030. Abdelhafez (2016) mentioned that one aspect of the MoE plan focuses on preparing preservice teachers and training in-service teachers to meet global educational development. Teachers are the leaders of their classrooms and are the members of the schools who have maximum interactions with

students. Moreover, teachers have an enormous influence on students' goals and motives toward learning. When teachers are well prepared, they are capable of providing students with knowledge and experiences (Abdelhafez, 2016). Additionally, well-prepared teachers can make the learning process more interesting and enjoyable as well as making students interact and engage more in learning. Hakeem (2012) asserted that qualified teachers are able to empower students and invest all the available resources in enhancing the effectiveness of the learning process. As such, these qualified teachers will innovate and develop the educational process, thus, helping the MoE accomplishes Vision 2030.

The MoE, drawing from Hakeem's (2012) research, strives to produce qualified teachers and improve their financial and social levels to motivate them in carrying out the mission of educating students diligently and effectively. Moreover, the MoE believes that teachers should work in a highly competitive workplace (Education Evaluation Commission, 2017). To this end, the MoE has classified teachers into four career paths; each path has its own requirements (e.g., teaching license and years of teaching experience) and privileges (e.g., increase in salary and reduction of teaching load). The four career paths of teachers are as follows: assistant, practitioner, advanced, and expert. Teachers' career paths depend on their academic degree, scores on teaching license exam, years of teaching experience, and annual evaluations (Education Evaluation Commission, 2017). The path of assistant teacher requires only a diploma certificate with no prior teaching experience. The path of practitioner teacher requires both a bachelor's degree or higher (i.e., master's or doctorate) with no prior teaching experience and passage of the teaching license exam with a score of 50 to 69. The path of advanced teacher requires a bachelor's degree with over six years of teaching experience, a master's degree with five

years of teaching experience, or a doctorate degree with four years of teaching experience, and passage of the teaching license exam with a score of 70 to 84. The path of expert teacher requires a bachelor's degree or higher (i.e., master's or doctorate), more than 10 years of teaching experience, and passage of the teaching license exam with a score of more than 85. Furthermore, teachers have to renew their teaching licenses every five years, which requires they attend some professional development programs and pass the license exam to be able to continue practicing in their field (Education Evaluation Commission, 2017).

As it appears and is indicated by the MoE, these teacher career paths are more likely to promote teachers' competence only to outperform other teachers, and are less likely to promote teachers' desire to develop their competence in the teaching profession. On a related note, Pollard and Anderson (2008) assume that teachers perform best when they strive to learn and acquire competence. Many researchers suggest that encouraging teachers to enhance their competence is the best way to improve students' performance and advance the quality of teaching experiences (Selvi, 2010; Pantić et al., 2011). However, concerning the privileges of these career paths (i.e., increase in salary and reduction of teaching load), King et al. (2017) found that extrinsic motivation can be experienced in a more internalized manner and promote adaptive educational outcomes in Qatar, a neighbor country of Saudi Arabia. Briefly, there is a debate about whether the MoE is implementing the best approach to improve teaching and, therefore, the Saudi educational system.

Saudi society believes that the reform of the Saudi educational system primarily relies on teachers' knowledge, behaviors, skills, values, attitudes, and mindset (Al-

Zahrani, 2019). Teachers are the central pillars of the educational process; they are role models and ideal change-makers (Hakeem, 2012). Al-Zahrani (2019) stated that teachers should understand the rules of the teaching profession, the best teaching practices, and the need to develop their teaching strategies to overcome the challenges that will stand in the way of excellence and creativity. He also stated that many competitions in the field of teaching should take place to motivate teachers toward self-development. Thus, the MoE encourages competition among teachers through pursuit of training using two approaches: local and global programs. Locally, the MoE has provided several training workshops for teachers in multiple fields, such as management, leadership, measurement, evaluation, curricula and instruction, and educational technology (Educational Center for Professional Development, 2019). Globally, the MoE has offered partnership programs with international universities (e.g., University of Delaware and California State University) intended to expose teachers to different educational experiences; this program is called Khbrat and has its own qualifications for admission. To promote competition, only teachers who have more than five years of teaching experience, outstanding annual evaluations, and participation in more than 75 hours of training can join the Khbrat training program (The Ministry of Education, 2016). All these efforts from the MoE aim to produce a sophisticated teacher who can help to elevates the education system in Saudi Arabia (Abdelhafez, 2016). As it mentioned previously, the MoE believes that better education will elevates the social and economic conditions of Saudi citizens and help them to fulfill their aspirations.

The MoE Strategical Plan for Education

The MoE in Saudi Arabia has developed a strategic plan to achieve the educational goals of Vision 2030. In brief, one of these goals is to develop classroom environments that concentrate on inculcating learning skills (e.g., critical thinking and problem solving), fostering students' self-development, improving students' confidence, promoting students' spirit of creativity, and increasing students' desire to be challenged in the learning context ("Education and Vision 2030," 2017). Another goal is to change the traditional teacher-centered classroom to a more student-centered classroom, where teachers addressing each student's unique learning needs, inspiring them to be their best, and improving their decision-making strategies. Thus, the Saudi Vision for education is aligned with the principles of Achievement Goal Theory (AGT), a key motivational theory in Education Psychology. To ground the reader in AGT, the next section provides an overview of this theory.

Achievement Goal Theory

AGT is one of the dominant motivational frameworks for explaining individuals' purposes or reasons for engaging, choosing, and persisting in different learning activities or achievement tasks (i.e., Personal Goal Orientation; Pintrich, 2003; Brophy, 2005; Schunck et al., 2014). When AGT was first published, it was used only to explain how and why students approach and react to achievement situations; it refers to the overarching purpose of achievement behavior. At the beginning of the 1990s, some researchers started to consider the possibility of using the AGT framework in the classroom learning environment (i.e., Achievement Goal Structure) by the teachers to promote students' Goal Orientation (GO) that can boost their engagement in the learning

context (Ames, 1992; Maehr & Midgley, 1991).

When AGT was first established, its main focus was on personality as a cause of students' achievement (Personal Goal Orientation) where students have specific achievement goals in a learning context: mastery goals or performance goals. Mastery goals coincide with individuals' desire to learn and acquire new knowledge in order to gain competence (mastery-approach) or to not lose competence (mastery-avoidance goals). According to Wolters et al. (1996), Mastery-Approach Goals (MAG) are the most beneficial goal orientation for students' cognitive engagement and achievement in the learning context. MAG is characterized by focusing on intrapersonal and self-referenced assessments of achievement as well as on accomplishing a task-referenced standard (e.g., doing well on a task) and a self-referenced standard (e.g., doing better than one has done before; Elliot & McGregor, 2001). Students who are mastery-oriented are more apt to use deep cognitive learning strategies—such as linking new materials with prior knowledge and comprehension monitoring—to generate meaningful experiences (Pintrich et al., 1987). Further, mastery-oriented students are more disposed to focus on developing their abilities, mastering a new skill, fulfilling challenging tasks, and understanding learning materials (Van Yperen, 2006). Pintrich (2000) stated that mastery-oriented students experience learning as self-improvement and intellectual development. Additionally, Wolters (2004) indicated that MAG is positively associated with greater effort and persistence in learning and achievement. Thus, mastery GO drives students to improve and work harder in their learning journey.

In contrast, performance goals coincide with individuals' desire to perform better (performance-approach goals) or to not perform worse (performance-avoidance goals)

relative to others. Pursuing Performance-Approach Goals (PAG) focuses on accomplishing an others-referenced standard (e.g., doing better than others). Students with PAG have a desire to be viewed positively in the eyes of others, which make them experience learning as self-enhancement and demonstrating ability (Pintrich, 2000). Performance-oriented students are focused on demonstrating competencies and how they will be evaluated relative to others. Harackiewicz et al. (2002) indicated that PAG might have positive effects on academic motivation because it encourages students to evaluate their competencies based on normative comparison with others. Nevertheless, Pintrich et al. (1987) suggest that when students who pursue PAG find themselves to be unsuccessful and feel less efficacious, then it is very likely that their PAG switch to Performance Avoidance Goals, which is maladaptive with negative academic and socioemotional outcomes (Elliot & Church, 1997; Elliot & McGregor, 2001; Elliot, 1999). Performance GO drives students to focus on showing their ability to others more than learning and improvement.

In the early 1990s, AGT moved quickly to focus in the classroom context as a cause of students' GO. A situated person-in-context perspective (i.e., Achievement Goal Structure) was included in the theory for describing and analyzing the influence of classroom environments and teachers' practices on students' achievement motivational patterns (Ames, 1992; Maehr & Midgley, 1996). Ames (1992) illustrated that students tend to acquire the goals that are stressed in their classroom as their own guiding purposes for their achievement. Indeed, students' adoption of a specific GO is influenced by the emphasized goals they perceive in the learning context. Maehr and Midgley (1996) suggest that the school's overarching achievement goal structures and classroom

characteristics including teacher instructional practices impact students to the adoption of different GOs (i.e., mastery approach, mastery avoidance, performance approach, and performance avoidance). For example, Young et al. (1992) found that students are more mastery-oriented in mathematics class, but they are performance-oriented in social studies class. As such, Maehr and Midgley (1996) suggest that different classrooms structures encourage different students' motivational orientations because classrooms structures often vary in terms of mastery and performance goal emphasis. After these studies, Pintrich (2000) asserted that different classroom structures impact students' adoption of holding multiple achievement goals (e.g., high-mastery/high-performance pattern; high-mastery/low-performance pattern; low-mastery/high-performance pattern; and low-mastery/low-performance). Harackiewicz et al. (2002) found that students with high-mastery associated with any other GO (i.e., high-performance or low-performance) tend to have high academic achievement. Meece and Holt (1993) found that students with only mastery goal orientation achieve higher grades than students who have combined mastery goal and performance goal. Mastery GO will outperform any other goal orientation even if the environment drove students to hold another goal.

Some scholars assert that students' GOs are shaped by the strategies and practices being used in the classroom (Daniels et al., 2013). Essentially, teachers' strategies and practices in the classroom should emphasize mastery goals, rather than performance goals. There are specific dimensions in the classroom context, highlighted by Carole Ames, that teachers can control in order to support the adoption of Mastery Orientation (MO). Indeed, Ames (1992) identified the nature of specific classroom strategies (i.e., TARGET framework) that teachers can use to promote mastery- focused classroom. The

TARGET framework has six instructional dimensions: *task, authority, recognition, grouping, evaluation, and time*; Ames (1992) explained a specific way of implementing MO strategies in these dimensions. These strategies are helpful tools for teachers to foster their students' GO.

Reviewing the possibility of Saudi teachers fulfilling MO strategies in Saudi education shows that it is certainly conceivable to implement them in the Saudi classroom to create a mastery-focused classroom. There are many MO strategies on the *Task* dimension, and these strategies should focus on increasing students' involvement and interest in learning (Ames, 1992). The MoE develops and distributes school textbooks to all students and teachers. These school textbooks include many educational tasks and activities for teachers and students to use; in addition, teachers are allowed to design their own tasks and activities around the subject matter. The MoE wants to give teachers the potential to be creative in their classroom activities and their teaching profession. Admittedly, one of the MoE's written values for education is to empower students to be capable of facing modern life requirements ("Education and Vision 2030," 2017). To accomplish this value, the MoE attempts to improve teachers, thus, they can help enable their students to be proficient in handling all life challenges and continue striving toward improvement throughout their life.

The *Authority* dimension involves students taking leadership roles in the classroom and independence in their learning (Ames, 1992), and it is also likely to implement its MO strategies in the Saudi classrooms. In spite of the fact that the power dimension in Saudi Arabia scored high after analyzing it through the lens of Hofstede's six dimensions of culture (Hofstede et al., 1990), indicates that Saudi people accept a

hierarchical order. To this end, Saudi culture is not an egalitarian society, where everyone has an equal right. Everybody in Saudi society has a place, which needs no further justification. The lack of egalitarianism will reflect on the students-teachers relationship in the classroom, where teachers will always want to be considered as the authority figure with power in the classroom. However, one of the MoE goals for teachers is to make the classroom more focused on students rather than teachers ("Education and Vision 2030," 2017), which aligns with the mastery goal structure. The MoE believes that when the classroom is teacher-centered, students will not be comfortable to participate and criticize the information that teachers present to them ("Education and Vision 2030," 2017). Therefore, students will not acquire a deep understanding of the subject matters as Ames (1992) indicated. According to Hofstede's six dimensions of culture, specifically the uncertainty avoidance dimension, security is an important element in Saudis' motivation ("Hofstede insights," 2019). As such, students are more likely to engage and criticize the presented topic in the classroom when they feel safe. Essentially, the MoE encourages teachers to create a safe and interactive learning environment for students to express their thoughts, and this environment can drive students to grow and develop their view of learning.

Problem Statement and Significance of Study

As noted earlier, the MoE in Saudi Arabia aims to promote students' spirit of creativity and desire to be challenged in the learning context. In fact, students' thoughts of purpose and meaning of school and learning are generated by the social context of classrooms (Nicholls & Hazzard 1993), which indicates that teachers play a significant role in constructing students' thoughts of purpose for school and learning. Maehr and

Midgley (1996) affirmed that students could sense their teachers' actions, which affects how they will invest in learning. They revealed that stressing Mastery Orientation (MO) in the classroom will encourage students to view education as something worth pursuing in its own right and as an opportunity for growth and improvement. Likewise, Ames and Archer (1988) stated that students who perceived an emphasis on MO in their classroom preferred challenging tasks and held more positive attitudes toward learning. Additionally, Borlongan-Conway et al. (2010) found that MO is positively related to individuals' creativity. Consequently, MO is the way to positively contribute in achieving Saudi Vision 2030.

A mastery-oriented classroom includes an array of instructional practices that encourage intellectual development through effort and engagement in challenging activities (Ames, 1992). Students in such classrooms are engaged in tasks that are meaningful, and they are encouraged by their teachers to collaborate and support each other's learning. Students in this type of classroom are focusing on learning and progressing in gaining deep knowledge. By contrast, performance-oriented classrooms include practices that promote interpersonal comparisons and normative evaluation regarding students' academic abilities (Ames, 1992). Teachers in such classrooms exert control through a system of rewards such as public honor rolls or special privileges. Thus, students in this type of classroom are focusing on demonstrating performance and ability relative to others. The performance classroom environment distracts students from learning and drives them to focus on external recognition and reward. The purpose and meaning of education for students is defined by the classroom environment and thereby

all the strategies and practices in this environment shape the kind of learners they will become (Maehr & Midgley, 1996).

Teachers play a significant role in education. They are the makers and facilitators of the learning process; which makes them the heart and soul of the education system. They are the most immediately influential components in students' learning and development. The improvement of the education system cannot occur as a whole without parallel improvement in the teachers who make up the education system. Based on anecdotal evidence, MO strategies are not part of the Saudi teachers' "toolbox." A Jordanian professor working in one of the Saudi universities indicated that Arab teachers do not have a good understanding of fostering MO in their classrooms because they are not mastery-oriented themselves. To buttress this point, there is evidence that teachers in Saudi Arabia have been trained to use extrinsic motivation to motivate all students to work harder toward fulfilling the Saudi Vision 2030 (Educational Center for Professional Development, 2019), even though the performance-focused environment alone is not conducive to promoting MO among students as envisioned by the MoE. According to AGT, a performance-focused environment cannot motivate all students to work hard in the classroom; nor can it promote students' creativity (Collins & Amabile, 1999; Runco, 2007). Students need to have teachers who foster MO in their classroom.

It is significant to train and equip Saudi teachers to focus on MO in their classroom in order to positively contribute in achieving Saudi Vision 2030. The MoE has established several training programs to promote the qualities of MO for students (The Ministry of Education programs, 2018). These training programs organized by the MoE are not specifically defined within the AGT framework. They are designed to promote

students' spirit of creativity and desire to be challenged in the learning context. However, it appears that the MoE has failed to consider that teachers' practices in the classroom can play a significant role in promoting students' spirit of creativity and desire to be challenged in the learning context. Indeed, the MoE has developed many professional development programs for teachers to help improve their teaching practices. Most of these professional development programs focused on encouraging teachers to integrate technologies in the classroom (Educational Center for Professional Development, 2019). There is only one program titled motivation, and it trains teachers to use reward with all students in the classroom (i.e., external motivation), which is not aligned with AGT and the importance of promoting MO among students. It is worth noting that the Performance Orientation (PO) is related to external motivation, while MO is related to internal motivation and that MO is far more likely to lead to the development of the characteristics of students that the MoE is advocating for in Vision 2030.

Essentially, the AGT framework can help to positively contribute toward accomplishing the Saudi Vision 2030 for education. It is important for teachers to understand AGT and the teaching practices that can influence students to be mastery-goal oriented. Ames (1992) suggests that teachers' understanding and use of mastery strategies can have a significant role in helping students to be mastery-oriented. She also argues that the goal orientation present in a classroom has the potential to influence students' adoption of specific GOs. In Arabic studies, the role of teachers in promoting students' MO has been marginalized. Most Arabic studies fail to recognize that teachers and classroom environments have an impact on students' motivational goals, while, in fact, teachers play a significant role in students' adoption of specific goal orientation through

the creation of classroom environment. For example, in a mastery-focused classroom environment students are encouraged to collaborate and support each other's learning (Ames & Archer, 1988), and not to compete with each other to win a prize, which in return will make students more likely to adopt MO. In fact, Anderman and Anderman (1999) stated that when teachers promote competition during their lessons, students are more likely to adopt PO. Moreover, Urdan and Turner (2005) reviewed empirical evidence demonstrating that students' perception of the goals emphasized by teachers influences students' GO and achievement at school. From these studies, one could conclude that students can learn which goals are most important to pursue in any given classroom. However, at this time we do not know the GO used by Saudi teachers in their classroom. In a thorough review of the literature, no studies have been located that presented formal evidence regarding Saudi teachers' GO, and this lack of knowledge will hold back the improvement of Saudi educational system. As such, there is a need for examining Saudi teachers' GO.

Three primary beneficiaries will derive advantages from studying Saudi teachers' GO: teachers, the MoE, and students. Teachers could realize that strategies applied in the classroom can boost their students' engagement in the learning context. Also, they could recognize that quality of motivation is important, and not all students can be motivated in the same manner. When formal evidence of teachers' GO is obtained, the MoE can provide appropriate professional development programs for its teachers, thus achieving its strategic plan. Ultimately, students are the biggest beneficiary because they will have teachers who are well prepared to motivate them to become mastery-oriented. This not only fulfills the ambitions of Saudi leaders and contributes to achieving the Saudi Vision

2030, it also helps motivate student learning and encourages a love for learning that will transcend the four walls of the classroom.

Purpose Statement and Research Question

The purpose of the proposed study is to explore Riyadh, Saudi Arabia's public-school teachers' self-reported GO. To achieve the study's purpose, the researcher addressed the following research question:

- What is the Goal Orientation of the Riyadh, Saudi Arabia's public-school teachers?

Research Hypothesis

Due to the lack of research about Saudi teachers' GO, there is no formal hypothesis for the current study. This study developed a specific baseline that future research can build on it.

Variable

To answer the research question, one variable will be measured. The variable will be teachers' GO.

Chapter Two

Literature Review

"The most important attitude that can be formed is that of desire to go on learning" John Dewey (1938, p. 48).

At any point in the history of highly developed countries, the importance of education has always been great. Education develops a perspective for looking at life. It helps build opinions and have points of view on things in life. It helps citizens figure out who they are and how they can serve their countries. As teachers are the heart and soul of any education systems, it is vital to focus on preparing them to improve the education system. Highly qualified and effective teachers understand that learning is much deeper than just presenting facts and knowledge to students and asking them to memorize and recall them. They regularly encourage their students to use higher-order thinking skills, which is more naturally achieved when teachers employ mastery-orented strategies. These strategies aim for deep and long-lasting learning, which will involve understanding the lessons, applying critical thinking, linking ideas and making connections between prior and new knowledge, and the ability to transfer knowledge to new and different contexts (Zaid et al., 2018). Higher-order thinking has a decisive role in increasing students' motivation and enhancing their results of learning (Nguyễn & Nguyễn, 2017). Essentially, motivation is a critical component of learning (Cocea & Weibelzahl, 2007), and it is not students' responsibility alone to generate it; it is collaborative work between school, students, and home (Maehr & Midgley,1996). Schunk (2016) defined motivation as "the process of instigating and sustaining goal-directed behavior" (p. 341). Middleton and Midgley (1997) stated, "Rather than focusing on the level of motivation (i.e., high

effort, low interest), the focus is on the goals or purposes that are perceived for achievement behavior" (p. 710). The learning environment is responsible for students' motive to learn, grow, and be creative. Thus, the answer to motivation may lie in the context.

Cognitive theories agree on the importance of goals to motivate students (Schunk et al., 2014). Goals provide a framework within which students interpret and react to events (Dweck & Leggett, 1988). Knowing how (i.e., strategies) and why (i.e., goal orientation) students learn is essential to their motivation. Indeed, Goal Orientations (GOs) have a tremendous influence on students' achievement (Schunck et al., 2014). Ames (1992) agrees that GO shapes how students approach and react to achievement situations. Maeher and Midgley (1991) established the importance of studying achievement GO influences at the school as well as at the personal and classroom levels, making a case for a focus on mastery GO in each instance. Butler and Shibaz (2008) stated that Achievement Goal Orientation (AGO) is considered a Social-Cognitive Theory of motivation that explains the manner in which students approach learning and different tasks. The theory evolved through several phases over time. The following sections will present the historical development of the AGO, and sometimes throughout this chapter, it is called Achievement Goal Theory (AGT). In other words, the terms AGO and AGT have used in this chapter interchangeably.

Students' Achievement Goal Orientation

The initial work on AGT began with students in the 1970s (Elliot, 2005). Researchers sought to understand why students of presumably similar intelligence and ability reacted in different ways when they failed at an achievement task. For example,

some students were avoiding the task altogether, while other students were making extra effort to accomplish the task. AGT grew from a two-goal framework to a 3 x 2 achievement goal framework (see Figure 1). Over the past two decades, AGTs have revealed several orientation models for learning and achievement. Maehr and Zusho (2009) demonstrated that AGT was developed independently and collaboratively by John Nicholls, Marty Maehr, Carol Ames, and Carol Dweck. The first model was a dichotomous achievement goal (i.e., two-goals), and it came under different labels such as learning versus performance (Dweck & Leggett, 1988), task-involvement versus ego-involvement (Nicholls 1984), and mastery goal versus performance goal (Ames & Archer, 1988). Ames and Archer (1988) introduced the idea that the GO construct could be applied in the classroom. Thus, students could pursue one of two types of goal orientations: performance (i.e., ego-related) goals—where students demonstrate their competencies compared to others—and mastery (or task-related) goals—in which students are involved in developing their competencies. In general, the early work of AGT suggested that mastery-oriented goals lead to a wide range of positive outcomes, while performance-oriented ones lead to a wide range of negative outcomes. However, some contemporary findings from different studies regarding the effects of performance goals are incompatible with the two-goal framework. Dweck and Leggett (1988) indicated that while performance goals sometimes produce negative outcomes (e.g., avoiding negative judgments), at times they lead to positive outcomes (e.g., seeking positive judgments). Dweck's explanation of her finding on performance-oriented goals was influential because it paved the way for the trichotomous achievement goal framework (i.e., three-goal model; Maehr & Zusho, 2009).

A decade after Dweck's explanation, Elliot (1999) modified the dichotomous achievement goal framework by adding a third orientation: performance-avoidance goals. To illustrate, he included the valence—approach and avoided—associated with these goals to produce the trichotomous framework. In other words, this model has three goal orientations: mastery, performance-approach, and performance-avoidance goals. The third goal orientation (performance-avoidance goals) focuses on avoiding any task based on the normative incompetence. After this modification, the outcomes of performance-oriented goals were not completely negative (Maehr & Zusho, 2009).

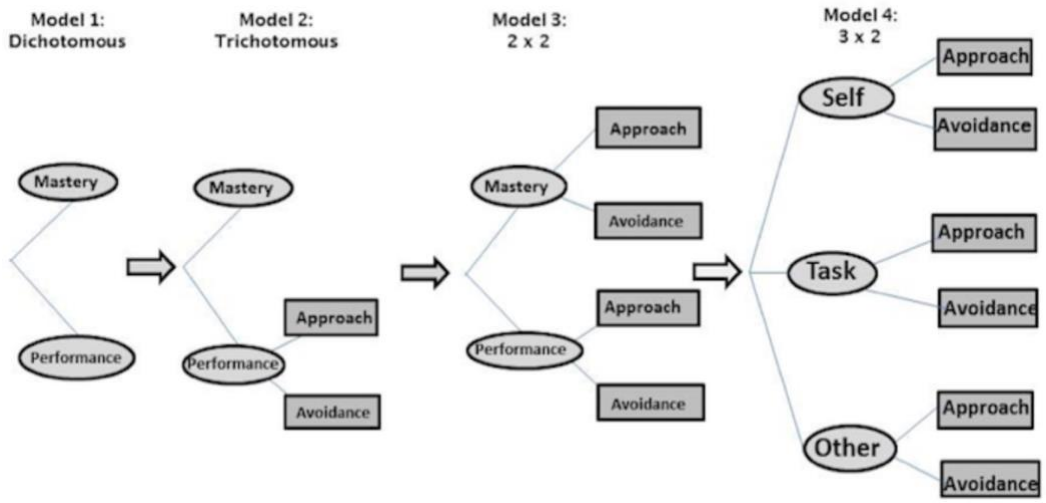
Elliot (1999) also proposed that there might be an avoidance form of mastery-oriented goals. Therefore, he modified the trichotomous achievement goal framework by adding a fourth goal orientation: mastery-avoidance goals. This modification has produced another achievement goal framework, the four-goal model (2 x 2 achievement goal framework). The fourth goal orientation (mastery-avoidance goals) focuses on avoiding task-based or intrapersonal incompetence (Elliot, 1999). The 2 x 2 framework has two approach goals (mastery and performance approach) and two avoidance goals (mastery and performance avoidance). The two approach goals have been shown to facilitate positive outcomes, while the two avoidance goals have been shown to lead to negative achievement outcomes (Elliot, 1999). Pintrich (2000) indicated that mastery-avoidance goals were more likely to produce fewer ideal outcomes than those for mastery-approach goals, but they had less harmful consequences than those for performance-avoidance goals. To illustrate, the scholars linked mastery goals to adaptive outcomes, while they linked performance goals to less adaptive outcomes depending on students' efficacy (Pintrich, 2000; Middleton & Midgley, 1997; Shim & Ryan, 2005).

Furthermore, some researchers related performance-avoidance goals to maladaptive outcomes and mastery-avoidance goals to less maladaptive outcomes (e.g., Elliot, 1999).

In the 2 x 2 model, students' goals were focused on the following standards: (1) task-based, (2) self-based, or (3) other-based goals. As an illustration, students with Mastery Orientation (MO) focus on fulfilling the task-based and self-based goals (i.e., competence), whereas students with Performance Orientation (PO) focus on fulfilling the other-based goals (i.e., competence and incompetence). MO contains two different standards, task- and self-based, which raises the question of whether these standards are similar enough to belong in a single goal constructor or different enough to be in separate GOs (Elliot et al., 2011). Therefore, Elliot et al. developed a 3 x 2 achievement goal framework, which has six GOs: task-approach, task-avoidance, self-approach, self-avoidance, other-approach, and other-avoidance. In task-based goals, competence is defined in terms of success or failure depending on what the task itself requires, while in self-based goals, competence is defined in terms of doing well or poorly relative to how one has performed in the past or can do in the future. However, in the other-based goals, competence is defined in terms of doing well or poorly relative to others (Elliot et al, 2011).

Figure 1

The development of achievement Goal theory. Adapted from "The 3 x 2 Achievement Goal Model in Predicting Online Student Test Anxiety and Help-Seeking," by Y. Yang, J. Taylor and L. Cao, 2016, International Journal of E-Learning and Distance Education, 32, 1-16.



Knowing how and why students learn is vital for their academic achievement. AGT grew out of, and in response to, several motivational theories raised in the 1970s (Urdan, 2010). AGT mainly emphasizes the motivational role of goals that students adopt during their academic life. Looking to other motivation theories, AGT and Self-Determination Theory (SDT) are both Social Cognitive Theories of motivation that emerged in the 1980s. While AGT and SDT have similarities, their distinction is important. Essentially, both theories emphasize the way individuals construe the meaning of an activity, which will influence the quality of their engagement in it. Butler (1989) and Ryan and Deci (1989) suggested that these two theories complement each other because each theory focuses on a different body of meaning and perceptions of motivation. The SDT investigates how social factors impact an individual's motivation

through the mediating variables of competence, autonomy, and relatedness. It examines the effects of goal involvement on intrinsic motivation. On the other hand, AGT investigates how perceptions of mastery- and performance-promoting environments, created by significant others (e.g., educators), interact with dispositional goals to influence cognition, affect, and behavior in achievement contexts. In fact, AGT can produce SDT outcomes and vice versa. For example, Butler (1989) showed that mastery goals can promote intrinsic motivation. In addition, when students are intrinsically motivated, they are more likely to pursue mastery goal orientations. Ames (1992) stated that autonomy and grouping (i.e., relatedness in SDT) are essential components in the classroom to encourage students to be mastery-oriented. Nevertheless, in AGT, not all competence is the same. Nicholls (1989) stated that AGT is competency-based where individuals strive to gain competence (mastery-oriented) or demonstrate competence (performance-oriented).

AGT is one of the most important theory of motivation in education. AGT has foundational roots in other motivational theories including Attribution Theory (Urdan, 2010). Attribution theory investigates the perception of causality or the judgment of why a particular event occurred (Weiner, 1972), whereas AGT focuses on the purposes that an individual is pursuing a specific goal. Both theories have focused on students' constructions of the meaning of success and failure. However, AGT has added that there is more than one way of defining success (Nicholls, 1989). For instance, performance goals oriented students to define success as demonstrating competence by showing superior, or masking inferior ability, whereas mastery goals oriented students define success as learning and strive to develop competence by acquiring valuable skills and

deep understanding (Dweck, 1986; Nicholls, 1989). Butler and Shibaz (2008) stated that AGT describes the way people approach learning and different tasks. Schunk et al. (2014) stated that "goal-orientation theories were developed specifically to explain [students'] achievement behavior" (p. 186). Achievement goals refer to "the purposes or reasons an individual is pursuing an achievement task, most often operationalized in terms of academic learning tasks" (Pintrich, 2000, p. 93). These reasons may be to learn (i.e., a mastery orientation), do better than others (i.e., a performance-approach orientation), or avoid failure (i.e., a performance-avoidance orientation). Therefore, AGT can be described as the purpose of academic engagement. In the AGT, goals are assumed to guide students' behaviors and cognition while engaging in an educational task. For example, students in a specific learning environment adopt different achievement GOs. This difference in adoption posits that students vary from each other regarding the purpose of their achievement behavior, and these differences may depend on the situational, event, or environmental factors.

Teachers' Achievement Goal Orientation

In a way similar to students adopting GOs for learning, teachers can also construct their own GOs for teaching. Butler (2007) said, "the school is an achievement arena not only for students but also for the teachers" (p. 242). After Carole Ames proposed the classroom GO in 1992, the effect of teachers on their students' GOs was considered (Elliot, 2005). Additionally, Shim et al. (2013) revealed that teachers' GOs are essential to creating classroom goal structures, which in turn influence students' learning. Teachers' GO is a newer area of research and appears to have its beginnings in 2007 from studies by Butler (2007) and Papaioannou and Christodoulidis (2007).

Butler (2007) and Papaioannou and Christodoulidis (2007) stated that teachers are just like students; they seek to be successful in their jobs. However, the way that teachers strive for success is different from students. Butler (2007) described teachers' GO as how teachers approach their profession and determine success in various tasks and goals within the field. Further, Cho and Shim (2013) defined teachers' GOs for teaching as different orientations toward teaching competence, such as developing or demonstrating teaching competence. Scholars have linked teachers' GOs for teaching to instructional practices (Shim et al., 2013), job satisfaction (Retelsdorf et al., 2010), and professional demeanors (Butler, 2007).

Two models of teachers' GOs have emerged for teaching: the trichotomous and four-factor model. Papaioannou and Christodoulidis (2007) used a trichotomous model to describe teachers' GO. The model had its roots in students' GOs: mastery, performance-approach, and performance-avoidance. When teachers are more mastery oriented, they are willing to use various teaching strategies in their classroom and promote the positive change associated with their instructional practices (Papaioannou & Christodoulidis, 2007). The performance approach is when teachers desire to appear competent in front of others, while performance avoidance is when teachers desire to avoid appearing incompetent in front of others.

Butler (2007) set up the four-factor model of teachers' GOs. The model has four GOs: mastery, work-avoidance, ability-approach, and ability-avoidance. Mastery GO indicates that teachers are intrinsically motivated, act to the best of their ability, and obtain knowledge to understand the content area (Butler, 2007), and be able to explain it adequately to their students. This orientation applies to teachers who are "striving to

learn, develop, and acquire professional understandings and skills" (Butler, 2007, p. 242). Likewise, work avoidance is an intrinsic motivation; however, it applies to teachers who seek to do the least amount of work possible to complete their teaching requirements (Butler, 2007). Cho and Shim (2013) specify that "work-avoidance goals refer to the goal of getting the job done with a minimum amount of effort and time" (p. 13). Work avoidance-goal teachers have an intrinsic desire to complete their work and not to improve themselves. Their goal is always to finish what they been assigned to do.

The ability approach and avoidance are derived from extrinsic motivations. Ability-approach orientation is another name for the performance approach (i.e., performance GO), and it refers to being motivated to do well in relation to others (Cho & Shim, 2013). Butler (2007) stated that the ability approach applies to teachers who "demonstrate superior teaching ability" (p. 242). Subsequently, teachers who adopt the ability approach orientation strive to appear better than their colleagues. Indeed, those teachers find professional motivation from delivering better performance reviews than their peers and having their students outperform other classes on standardized tests (Shim et al., 2013). The fear of looking inept causes teachers to invoke ability avoidance (i.e., performance-avoidance) as their orientation, "concealing their lack of teaching capacity" (Cho & Shim, 2013, p.13). Teachers adopting ability-avoidance orientation strive to hide their incompetence as a teacher (Butler, 2007). Fasching et al. (2010) explained that the main difference between a teacher using the ability approach and one using ability avoidance is that the ability-approach teacher strives to be considered one of the best, whereas the ability avoidance teacher is satisfied with being viewed as adequate.

Teachers' GOs for teaching have been recognized as an essential aspect of

teachers' motivation (Butler, 2007), and they are more likely to generate useful evidence to enhance the quality of student learning (Cho &Shim, 2013). Butler (2007) mentioned that GOs are very useful in understanding both students' and teachers' motivation for schoolwork as well as teachers' influence on student motivation. Moreover, teachers' GOs often predicts the classroom's GO (Shim et al., 2013). Some scholars found that students' GOs are shaped by their teachers' GOs and the strategies being used in the classroom (Dresel et al., 2013). As such, teachers' strategies in the classroom should emphasize mastery goals, rather than performance goals. For the sake of this study, the researcher will focus on Mastery-oriented Teachers versus Performance-oriented Teachers in the following sections.

Mastery-oriented Teachers

Most researchers who study GOs suggest that of the four orientations (mastery, performance approach, performance avoidance, and work avoidance), teachers should have a Mastery GO (Retelsdorf et al., 2010; Shim et al., 2013; Butler & Shibaz, 2008). Hoyle and John (1995) defined the teaching profession as a continuous commitment to professional development, collaboration, and personal reflection, which aligns with Butler's (2007) description of mastery-oriented teachers as "striving to learn, develop, and acquire professional understandings and skills" (p.242). Therefore, it is best for both teachers and students to have a Mastery GO because it will increase their confidence and desire to learn more to improve themselves.

Being mastery oriented is one of the essential characteristics that teachers should possess in their teaching profession. Throndsen and Turmo (2013) found that "teachers' goal structure showed the same pattern as the teachers' approaches to instruction" (p.

316). Likewise, Dresel et al. (2013) suggested that teachers' GO was typically reflected in their instructional practices and classroom goals. Thus, when teachers are mastery oriented, they are more likely to use mastery-oriented teaching strategies in their classrooms. Along this line, students will adopt a Mastery GO.

Some literature illustrated that when teachers are mastery focused, they will be associated with many positive attributes such as help-seeking behaviors, high self-efficacy, higher-order thinking, and job satisfaction (Butler, 2007; Dellinger et al., 2008; Cho & Shim, 2013; Gorozidis & Papaioannou, 2011; Nitsche et al., 2011; Retelsdorf & Günther, 2011; Papaioannou & Christodoulidis, 2007). These attributes will help teachers succeed in their profession. In particular, it has been found that mastery-oriented teachers have a positive correlation with reflection, feedback, and help-seeking behaviors (Butler, 2007). To illustrate, mastery-oriented teachers have the internal reflection that drives them to improve themselves as well as the desire to be more knowledgeable, even if that requires them to seek feedback from others, such as administrators, colleagues, and parents. Furthermore, some researchers found a positive correlation between teachers' GO and their self-efficacy. Teachers' self-efficacy refers to an "individual's beliefs in their capabilities to perform specific teaching tasks at a specified level of quality in a specified situation" (Dellinger et al., 2008, p. 752). Teachers with a mastery GO had a high self-efficacy for teaching (Cho & Shim, 2013; Gorozidis & Papaioannou, 2011; Nitsche et al., 2011). As such, mastery-oriented teachers believe in their ability to guide their students to success in learning.

Retelsdorf and Günther (2011) found a positive correlation between teachers' GO and their use of higher-order thinking. They found that mastery-oriented teachers

promote more comprehensive learning in the classroom. Teachers with a mastery GO encourage their students to engage in questioning and help-seeking behavior (Retelsdorf & Günther, 2011). Many studies found that mastery-oriented teachers always support their students, and their students are always interested in those teachers' classes (Retelsdorf et al., 2010; Retelsdorf & Günther, 2011; Runhaar et al., 2010). Interest is often considered a process that contributes to learning and achievement. Indeed, it plays a substantial role in learning and academic achievement. As such, students' interest in a specific subject will trigger their attention toward it. As a result of giving attention, students will be empowered to learn more about the subject and understand it.

Mastery-oriented teachers are happy with their job. Some scholars found that mastery GO is positively associated with job satisfaction (Papaioannou & Christodoulidis, 2007), interest in teaching, low levels of burnout and occupational strain (Retelsdorf et al., 2010), training participation, and greater use of adaptive coping strategies toward work challenges (Skaalvik & Skaalvik, 2013). When classifying mastery-oriented teachers, Shim et al. (2013) said, "teachers with this goal orientation [Mastery GO] view the crux of teaching as facilitating student learning" (p. 99). Additionally, these teachers have a desire to develop more effective teaching methods and continuously develop their abilities as teachers, which is in line with Butler's (2007) definition that these teachers are seeking "to learn, develop, and acquire professional understandings and skills" (p. 242). Accordingly, mastery-oriented teachers will not view their job as boring because they are constantly developing and improving themselves. All these studies indicate that Mastery GO is important for teachers' career morale.

Mastery GO corresponds with the notion that when individuals are mastery

oriented (i.e., pursuing their personal growth), they engage in activities (i.e., participation in training) more optimally even in a high-controlling work environment. Fasching et al. (2010) found that mastery-oriented teachers do not change their orientation to another orientation. Consequently, teachers who possess a mastery-oriented pattern enjoy engaging and persisting in challenging activities because they recognize it as an opportunity for further developing their skills and teaching practices (Dweck & Leggett, 1988; Nicholls, 1989). Thus, once teachers are trained to be mastery oriented, they will keep improving themselves and, therefore, the students and the educational system as a whole.

Performance-oriented Teachers

Compared to Mastery GO, performance GO has some maladaptive outcomes (Ames, 1992). Teachers engage in performance GO when they perceive teaching and learning as a way to achieve desired goals, such as reputation or rewards. This type of orientation does not align with the definition of teaching profession that been presented by Hoyle and John (1995). One aspect of opposing the definition of teaching profession is that performance-oriented teachers are not focusing on their professional development or collaborating with their colleagues for the sake of learning and improvement.

Performance-oriented teachers are centralized on their own ability and sense of self-worth (Covington, 1984; Dweck, 1986). Their ability manifest itself by doing better than others, surpassing normative-based standards, or achieving success with little effort (Ames, 1984; Covington, 1984). When teachers adopt a performance GO, their self-worth is determined by a perception of their ability to perform (Covington & Omelich, 1984). As a result, performance-oriented teachers will not have a desire to be lifelong

learners seeking improvement. Performance-orientated teachers' main purpose is not on learning but on showing off their ability to display themselves as successful ones.

The learning interests of performance-orientated teachers and their attitudes towards learning tend to diminish when they encounter any learning difficulty (Ryan et al., 2001). They frequently avoid any challenging experiences to protect their self-perceptions. When teachers are performance oriented, they are more likely to use performance-oriented teaching strategies in their classrooms, such as encouraging students to work solo and comparing their work with their classmates. Along this line, students will adopt a performance GO, which will not direct them to improve themselves and generate their desire for learning. Performance-oriented teachers will be more likely to encourage their students to get attention rather than paying attention.

Some literature illustrated that when teachers are performance focused, they will be associated with some negative attributes, such as refraining from exposing inadequate ability by seeking help, lower-order thinking, and job burnout (Butler, 2007; Butler & Neuman, 1995; Good et al., 1987; Newman, 1991; Ryan & Pintrich, 1997; Butler, 2000; Nicholls, 1984; Papaioannou & Christodoulidis, 2007). These negative attributes do not lead to the development of the teaching profession, and also will not help teachers succeed in their profession. In particular, it has been found that performance-oriented teachers have a negative correlation with feedback and help-seeking behaviors (Butler, 2007). Performance-oriented teachers perceive help seeking as a sign of incompetence (Butler & Neuman, 1995; Good et al., 1987; Newman, 1991). Furthermore, Ryan and Pintrich (1997) found that performance GO was associated with the perceptions of help-seeking as threatening to self-esteem, which result in avoidance of help-seeking.

Performance-oriented teachers believe that help-seeking shows a lack of ability in front of others. Thus, they may try to avoid it as much as possible.

Literature on the process of thinking distinguishes between two levels of processing on learning and studying: deep processing of thinking that emphasizes elaboration and knowledge construction (higher-order thinking), and shallow processing of thinking that emphasizes memorization (lower-order thinking; Biggs, 1985; Entwistle, 1998). As noted earlier, mastery GO tend to promote higher-order thinking skills. Butler (2000) conforms that performance GO tend to encourage shallow processing skills. Performance-oriented teachers may believe that higher-order thinking is an inefficient means of demonstrating their abilities, and only individual with low ability needs to engage in the high-order thinking; thus, they rely on shallow processing instead to show that they are smart by nature. Nicholls (1984) stated that individuals with performance GO may actively avoid engaging in higher-order thinking processing because they believe that the effort associated with this level of thinking is an indication of low ability. Indeed, individuals are unlikely to engage in higher-order thinking processing unless they are sufficiently motivated to achieve outcomes that require mastery and self-improvement (Miele & Wigfield, 2014), which cannot be found in performance-oriented teachers.

As presented, teachers' job satisfaction was positively related to mastery GO. However, Papaioannou and Christodoulidis (2007) found that job satisfaction is unrelated to performance-approach goals, and negatively related to performance-avoidance goals. Performance-oriented teachers always try to show their ability to others, during this process, they may experience high stress level, which will lead them to suffer from work burnout. Many researchers have predicted that performance GO associated with teachers'

burnout (Retelsdorf et al., 2010; Parker et al., 2012). Their predictions were based on findings that performance GO were positively associated with stress and anxiety among students (Elliot & Church, 1997), and negatively associated with students' emotional well-being (Kaplan and Maehr, 1999). Teachers' burnout can be viewed as reflecting the well-being in one's work, which is associated with poor teaching, as reflected in high use of performance-oriented practices and low use of mastery-oriented practices (Parker et al., 2012). Retelsdorf et al. (2010) assert that higher levels of performance GO were associated with lower levels of interest in teaching and higher risk for experiencing burnout. All these studies provide some evidence that performance GO does not have a decent outcome for teachers' career morale.

As indicated earlier, performance-oriented teachers' purpose for improvement is to earn others' appreciation. Zhang et al. (2016) revealed that performance-oriented teachers cannot take control and make things happen in their work environment; they rather just adjust to a situation. They also stated that these teachers cannot take charge to improve their teaching methods, proactive problem solving, use of personal initiative, and proactive feedback seeking (Zhang et al., 2016). Performance GO indeed are related to negative emotions after failure (Pekrun et al., 2009), and undesirable behaviors such as cheating to appear good in front of others (Anderman & Danner, 2008). As such, once teachers are performance-oriented, they will not work in improving themselves and, therefore, neither their teaching nor the educational system will improve.

Teacher Achievement Goal Orientation and its Stability

Many studies on teachers' GO have recommended that it is best for teachers to have an mastery GO. Gorozidis and Papaioannou (2016) stated that it would enormously

benefit the educational world if teachers can be trained to be mastery oriented in their profession. Therefore, it is critical to explore whether teachers' other GOs (i.e., ability-approach, ability avoidance, and work-avoidance) are changeable if we (i.e., researchers and decision-makers) want to help teachers to be mastery oriented. In other words, if teachers' GO is not changeable, all of the efforts to produce mastery-oriented teachers would be futile. Thus, acknowledging the malleability of GO may help in training teachers to become mastery oriented.

Three traits of teachers' GO were found in the literature review: fixed, situational-dependent, and quasi-traits (Fasching et al., 2010; Malmberg, 2008; Praetorius et al., 2014). Cho and Shim (2013) indicated that most researchers might consider teachers' GO to be a fixed trait. In consensus, Fasching et al. (2010) wrote that "there is a broad general agreement that goal orientations have to be conceptualized as relatively stable motivational orientations" (p. 11). Teachers' GO appears to be accepted by researchers as a set piece of an individual's disposition; however, this belief of stability was not supported by empirical evidence. Praetorius et al. (2014) argued that teachers' GOs were typically only measured once; therefore, researchers assumed that it is a fixed trait. Praetorius et al. (2014) examined whether teachers' GOs would change when they measured them during three different periods during the school year. They found that teachers' GOs changed based on events, stating that "[O]ur results have revealed that teachers' achievement goals [GOs] – even though operationalized as dispositions – are influenced considerably by characteristics of the occasions in which they are assessed" (p. 385). Therefore, they suggested that teachers' GO is a situational-dependent trait.

Fasching et al. (2010) investigated the changes in GO among pre-service teachers

during their two years of practical training at schools. They measured the GO of pre-service teachers five separate times over two years. They found that mastery, ability approach, and ability avoidance GOs declined over the course of the pre-service teachers' training phase. Fasching et al. (2010) argued that GO changes when contextual conditions change, "for example, after the transition from one educational setting to another" (p. 12). They found that pre-service teachers with a mastery GO did not change their orientation, but their trajectory for the mastery orientation declined. While pre-service teachers with a performance GO or ability avoidance orientation showed either a decline in their trajectory for the orientation or a decrease in the GO with a movement toward a work avoidance orientation, pre-service teachers with a work-avoidance orientation maintained their orientation throughout the two-year period. Therefore, Fasching et al. (2010) suggested that teachers' GO is a quasi-trait for some pre-service teachers.

Fasching's et al. (2010) findings have raised the following question: Why is teachers' GO a quasi-trait for only some teachers and not all of them? Cho and Shim (2013) suggest that teachers' GO is a quasi-trait for teachers with low self-efficacy, and a fixed one for teachers with high self-efficacy. Skaalvik and Skaalvik (2013) proposed that school goals may affect teachers' GO. Cho and Shim (2013) found that teachers with low self-efficacy often adopt their schools' GO for both their classroom goals and personal achievement goals. Other studies (e.g., Daniels et al., 2013; Eren, 2009; Malmberg, 2008) mentioned that perhaps teachers begin their teaching profession with a mastery GO, but their GO changes because of their level of self-efficacy. In other words, teachers with low self-efficacy quickly succumb to their schools' GO, which illustrates the power of the school environment on teachers' GO. Therefore, Gorozidis and

Papaioannou (2016) recommend that schools should provide a suitable environment for the promotion of an MO to foster educational innovation and teachers' professional development.

Eren (2009), Fasching et al. (2010), and Malmberg (2008) proposed that pre-service teachers' GO has the potential to be changed, and this change should occur through teacher education programs. Mansfield and Beltman (2014) stated that if GO is a fixed or quasi-trait, identifying teachers' GOs and training them to maximize it would be beneficial. On the other hand, Gorozidis and Papaioannou (2016) indicated that if the orientation is a situational trait, the best course of action would be to train teachers on how to employ specific orientations for different professional situations they may encounter and provide environments that support constructive orientations. From what has been presented, regardless of whether GO is a fixed or situational trait, scholars suggested that it is essential to train teachers about GOs and how to use them effectively.

Achievement-goal Structure

The AGT is also being used to analyze the influence of schools' and classrooms' structure on students' learning and achievement. Schools' structure plays a significant rule in all aspects of students' development and achievement. Schools are often overwhelmed by an array of new things to try and to do for students' development and improvement. School goal structures are exposed through different paths, such as instructional policies and practices (Maehr & Midgley, 1996). These paths implicitly or explicitly carry goal-related messages about educational purposes and expectations in the schools (Maehr, 2001). Presumably, schools should support creating a context that focuses students' attention on learning, challenge, and effort. A context that focuses on

students’ growth and progress and not demonstrating their ability relative to others. Schools, in particular contextual characteristics in the classroom, can promote students' mastery or performance goals (Maehr & Midgley, 1996). Briefly, schools have to provide a context that promotes mastery GO rather than performance GO for instruction and individual development.

Many studies indicated a positive relationship between the goal structure students perceive as highlighted in a classroom or school environment and their adoption of the personal GO (Anderman & Midgley, 1997; Kaplan & Maehr, 1999; Midgley & Urdan, 2001; Murdock et al., 2001; Roeser et al., 1996). Schools that present various goal structures have different standards to define their students' academic success and evaluate their competencies. Schools with mastery GO structure value learning, individual development, and individual growth of competencies (Anderman & Wolters, 2006). In this type of schools, teachers focus on skills development, mastery, and improvement, which can motivate their students to be mastery-goal oriented. By contrast, schools with a performance GO structure support interpersonal competition among individuals, social comparisons, and demonstration of superior competence (Urdan & Turner, 2005). Teachers in this type of schools concentrate more on ability grouping or competitive grading systems, which can increase the likely hood for students to be performance-goal oriented.

Ames and Archer (1988) were the first who studied achievement-goal structure in actual classroom context. In their study, they documented the benefits of the mastery-focused classroom for students' achievement and development. Ames and Archer designed and used a student-report measurement to assess the salience of mastery and

performance orientations in the classroom context. They identified a set of classroom dimensions related to the adoption of mastery or performance orientation. According to their study, to assess a mastery-focused classroom, students first were asked to rate their agreement with items related to the importance of understanding their work, learning from their mistakes, and working hard to learn. By contrast, to assess a performance-focused classroom, students were asked to rate their agreement with items related to the importance of doing better than others, avoiding mistakes, and working hard to get a higher grade. They found that students in a mastery-focused classroom report using more MO strategies, such as using more practical learning strategies and preferring challenging tasks. In contrast, students in a performance-focused classroom report using more PO strategies, such as focusing on their ability and attributing failure to lack of ability.

Maehr and Midgley (1991) boost the importance of studying school's context that influences the classroom - and personal - goal orientations, making a case for a focus on mastery goals in each instance. Shim et al. (2013) revealed that teachers' GOs are essential to creating classroom goal structures, which in turn can positively influence students' learning. Daniels et al. (2013) noticed that the strategies being used in the classroom can shape students' GOs. All these scholars emphasize the effect of classroom environments not only on students' academic engagement and achievement but also on their motivation and their self-perceptions. In a nutshell, teaching strategies used in the classroom are vital to foster students' mastery GO.

TARGET Framework

Building on Ames's study with Archer, Ames (1992) outlined the mastery GO from actual parameters in the classroom. She focused on six highly salient aspects of the

classroom learning environment that can be adjusted to foster a mastery GO. She proposed a framework called TARGET to identify critical instructional practices associated with a mastery or performance orientation in the classroom. The framework was used proudly to assess the goal structures of classrooms. Ames (1992) indicated that there are specific dimensions in the classroom context that teachers can control to support the adoption of different GOs. For example, Ames (1992) identified the nature of specific classroom motivational strategies (i.e., TARGET framework) that teachers can use to foster mastery GO in the classroom. The purpose of this motivational strategy is to increase students' involvement and interest in learning. Lüftenegger et al. (2014) found that TARGET mastery goal structure has an impact on students' personal mastery GO over time. The TARGET framework focuses on instructional dimensions related to Task design, distribution of Authority/autonomy, Recognition/rewards of students, Grouping arrangements, Evaluation practices, and Time allocation.

Task Design. Ames (1992) mentioned that one of the primary components of classroom learning is the design of tasks and learning activities. There are various motivational strategies related to task design that goes along with a mastery-oriented classroom. In such classroom, tasks and activities should embed information on how students make judgments about their abilities and their willingness to apply effortful strategies (Ames, 1992). Lepper and Hodell (1989) found that tasks are more likely to create an intrinsic purpose to learning when enriched with a personal challenge and tap students' interest over time. When tasks are related to students' reality, they can activate their interests, which will make learning more meaningful. Furthermore, tasks and activities should allow students to see the value in what they are doing and how it relates

to real-life. When students are focused on the task and value learning, they are more likely to exhibit active engagement (Brophy, 1987; Brophy et al., 1983) and to feel more satisfied with school learning (Nicholls et al., 1985). Tasks-in a mastery-focused classroom- are challenging, have realistic short-term goals, and have particular purposes. Tasks in such classroom are "expressed as an opportunity for growth, as something fun and interesting and worth doing in its own right" (Maehr & Midgley, 1996, P. 116). Conversely, tasks-in a performance-focused classroom- do not have any value or particular purposes for students to engage in, such as memorizing, recalling, and reciting. In fact, tasks without purposes can make students feel that learning is a waste of time.

Distribution of Authority/Autonomy. A healthy distribution of authority is essential to create a mastery-focused classroom. Deci et al. (1981) refer to teachers' distribution of authority as teachers' tendency toward students' autonomy. According to Ames (1992), students sense of control has a significant impact on their independent thinking and learning experiences. As such, teachers should allow students to control their own learning by involving them in decision-making in the classroom. For example, teachers can enhance students' authority by offering them choices over their assignments, fostering active participation, and encouraging students to take initiative about their own learning. Indeed, a controlling teaching classroom is not a notable contribution to intellectual growth (Maehr & Midgley, 1996). Maehr and Midgley insisted that students have to feel safe in order to give their thoughts to ideas, to concentrate on the development of any skills, and to gain an appreciation of ways of expressing their opinions. They believe that in order to make learning effective, the classroom should be free from fear. Ryan et al. (1985) intimated that giving students choices can be viewed as

promoting students' decision-making skills, particularly when those choices are structured in such a way that is guided by interest and not by a desire to minimize effort and protect feelings of self-worth or avoid failure. Several studies verified an exciting of a positive relationship between the students' autonomy in the classroom environment and students' intrinsic motivation (Deci et al., 1981; Grolnick & Ryan, 1987; Ryan et al., 1985). Maehr and Midgley (1996) stated that when the learning experience is totally in the hands of others, students' intrinsic interest in learning can diminish. Authority in mastery-focused classroom concentrates on giving students opportunities to develop responsibility and independence, whereas in performance-focused classroom, it concentrates on controlling students' behaviors.

Recognition/Rewards of Students. Ames (1992) stated that recognizing students' achievement appropriately helps in promoting students' desire to learn. Most first-year teachers use rewards and other external encouragements to engage students in certain types of activities or behaviors (Newby, 1991). Rewards often are public and granted on a differential basis; and therefore, they can make ability salient (Ames, 1992). From another perspective, Arden and Harry (1990) suggested that rewards can sometimes shift the focus away from one's ability due to an increase in task persistence on ego-involving tasks. Schunk (2016) asserts that rewards can have two different aspect: informational and controlling. Students would lose their intrinsic motivation to perform the behavior when they perceived rewards as controlling (Ryan & Deci, 2017). Ryan and Deci (2017) mentioned that if a student perceives a reward as being controlled, s/he will be less intrinsically motivated because this reward undermines the student sense of autonomy. On the other hand, if the students perceive the reward as informational, students will

experience intrinsic motivation because the reward supports their competencies' needs. Students are more likely to engage in tasks when they believe that they are capable of success in them. Thus, the more experiences and activities students engage in, the more competencies they will have. Schunk et al. (2014) state that successes produce intrinsic pleasure and perceptions of competence and control, which in return strengthen intrinsic motivation. As a result, students will start to perform the activities for rewards inherent in the task, such as enjoyment. Schunk et al. (2014) stated that extrinsic motivation when used properly, may become internalized. Thus, using rewards properly will lead to increases on students' skills on a particular task and will help students to gain new experiences.

Grouping Arrangements. In such a classroom environment, students should be encouraged to collaborate and support each other's learning. According to Ames (1992), the goal of the group dimension is to establish a classroom where individual differences are excepted, and all students develop a sense of belongingness. Also, she illustrated that grouping in the classroom involves using heterogeneous (i.e., in ability) cooperative groups and peer interaction to encourage working with others. Taylor (2011) indicated that grouping students in the classroom could improve learning and prepare students for life experiences. There are many shreds of evidence determined that creating facilitated opportunities for grouping in the classroom enables students to improve their skills in working productively with others (Bennett & Gadlin 2012; Jackson et al., 2014). For example, in the meta-analysis done by Johnson et al. (2014) examining over 168 studies of undergraduate students, they determined that students learning in a collaborative situation had higher knowledge acquisition, retention of material, and higher-order

problem solving and reasoning abilities than students who are working alone. Moreover, Kuh et al. (2007) found that students who work in a group can handle more complex problems than an individual student can, and thus they can gain more expertise and become more engaged in a discipline. Indeed, grouping creates more opportunities for critical thinking and can promote students learning and achievement. When students work together, they can encourage and challenge each other, which is critical for mastery-oriented students. Grouping in a mastery-focused classroom is essential, whereas, in a performance-focused classroom, students are more likely to work in solo.

Evaluation Practices. Ames and Ames (1984) stated that students might be oriented toward different goals depending on the evaluation practices that have been implement in the classroom. The matter is not whether students are evaluated; in fact, it involves students' perceptions of the meaning of the evaluative information (Mac Iver, 1987). Students could perceive evaluation as an attempt to inform or control. When an evaluation is perceived as an attempt to inform, students are more likely to focus on improvement. Ames (1992) indicated that if grades are accompanied by an opportunity to improve, it becomes a more salient self-evaluative factor. She also suggests that offering students opportunities to improve their grades reveals to them that making mistakes are part of the learning process and not an indicator of failure. On the other hand, students could perceive evaluation as an attempt to control, which make them more likely to focus on displaying their ability. The controlling evaluation is pointed when the evaluation in the classroom is normative, presented publicly, emphasizes social comparison, and highly differentiated (Ames, 1992). This type of evaluative has pressure and emphasis on social comparison information, which in return has negative consequences for students' interest

(Deci & Ryan, 1985), the pursuit of challenging tasks (Elliott & Dweck, 1988), and usage of learning strategies (Ames, 1984). Indeed, it has been found that the focus on social comparison criteria interferes with effort-based strategies that require deeper levels of information processing (Graham & Golan, 1991). In a word, evaluation in mastery-focused classrooms should be informative where it is done privately and should also frame mistakes as an opportunity to learn and improve.

Time Allocation. The time strategy is closely linked to the design of tasks and authority. Ames (1992) treated the time and task as a single joint dimension. Time encompasses the appropriateness of workload, the pace of instruction, and the time allotted for students to introduce their own topics and interests. Focusing only on the quantity of the subject matter that students should know by the end of the year will make time management difficult in the classroom because students vary in the amount of time needed to learn any material or do any task. Allotment of time for students to complete their work will allow them to think about each concept profoundly and ask more questions in every class. Accommodating the students' differences can be challenging. However, it is vital to maximizing students' interest to learn. Thus, a degree of flexibility should always be conceivable in classroom time allocation. In a mastery-focused classroom, time should be utilized to ensure students have access to materials at the pace they require to engage deeply with the content.

Summary

The present study aims to explore Riyadh, Saudi Arabia's public-school teachers' self-reported GO. Thus, it is essential to begin chapter two by reminding the readers about the primary purpose of education and teachers' role in achieving the purpose

through the lens of motivation focusing on AGO. Following that, the chapter presented the historical development of AGO through three main sections: Students' Achievement Goal Orientation, Teachers' Achievement Goal Orientation, and Achievement-goal Structure. The first section introduced AGT's initial work that began with students in the 1970s (Elliot, 2005) and how it evolved through several phases over time, reaching a 3 x 2 achievement goal framework. Furthermore, the chapter presented several research articles that provide evidence that mastery GO is the best for students' self-improvement, intellectual development, achievement, and creativity (Ames, 1992; Borlongan-Conway et al., 2010; Meece & Holt, 1993; Pintrich, 2000; Wolters, 2004). Additionally, it presented many related studies found in the literature associated with students' GO and found that students' adopting to specific GO is depend on the situational, event, or environmental factors.

The second section focused on reviewing the historical development of teachers' GO. Historically, two models of teachers' GOs have emerged for teaching: the trichotomous and four-factor model. Each orientation was discussed in detail, focusing on mastery GO and performance GO. Moreover, this section reviewed related studies on teachers' GO and found that teachers' GOs play an essential role in constructing classroom goal structures (Shim et al., 2013), which can influence students' learning. Teachers' GO can influence the use of specific teaching strategies in the classroom, and it can be visible through the strategies they use with their students. Researchers found that performance-oriented teaching cannot lead to mastery outcomes (Pintrich et al., 1987), but mastery-oriented teaching can lead to both the positive outcomes of performance (i.e., high grades) and mastery outcomes (Harackiewicz et al., 2002; Meece & Holt, 1993;

Wolters, 2004). For example, when teachers focus on learning to gain knowledge and not grades, students will learn and gain competence. Then their competence will appear naturally instead of being motivated by letter grade. Thus, teachers should be exposed to AGO through their teacher preparation programs (Eren, 2009; Fasching et al., 2010; and Malmberg, 2008), so they can cultivate mastery-oriented students.

The third section reviewed achievement-goal structure in the classroom context. Many researchers suggested and recommended facilitating a mastery GO environment that enables students to adopt a mastery GO (Anderman & Midgley, 1997; Kaplan & Maehr, 1999; Midgley & Urdan, 2001; Murdock et al., 2001; Roeser et al., 1996). Ames (1992) focuses on six dimensions of the classroom that can be structured to promote mastery-oriented students. She proposed the TARGET framework to identify important instructional practices associated with a mastery or performance orientation in the classroom. The framework was explained in detail throughout this chapter and used to build the current study instrument to grasp if Saudi teachers are inclined towards MO strategies or PO strategies via self-reported preference of strategies associated with these GOs. The following Chapter describes the current study's methodological aspects, including research design, instrumentation, data collection procedures, and data analysis.

Chapter Three

Methodology

Research Method and Design

The researcher employed a quantitative approach to analyze Saudi teachers' Goal Orientation (GO). In a larger sense, a quantitative approach allows studies to be generalized to a wider population as well as contributed to the theory on the subject (Leedy & Omrod, 2005); this study can be generalized to a broader population of Saudi teachers. Given that the study focused on exploring Saudi teachers' self-reported GO, a non-experimental quantitative research was used. Johnson (2001) stated that non-experimental research involves variables that are studied as they exist in the environment without any manipulation. As the study focus is on exploring Saudi teachers' GO that cannot be manipulated, a non-experimental research was well suited for this research study.

At the same time, the study was primarily a survey design, and it can be classified as a descriptive survey design because the main goal was to describe Saudi teachers' GO at a single time. Creswell (2012) defines descriptive survey designs as those in which "the researcher collects data at one point in time" to "examine current attitudes, beliefs, opinions, or practices" (p. 377). The researcher gathered the data on December 2020, which represents one single point in time for this study. The descriptive survey design was well suited for the purpose of this study, which is to examine Saudi teachers' GO. It is really important to learn about Saudi teachers' GO in order to determine whether the educational goals of Saudi Vision 2030 can be achieved.

Population, Sample, and Sampling Procedure

In non-experimental quantitative studies, researchers frequently select a sample from a target population, which is a group of individuals with the same feature that the researcher identifies in a study (Creswell, 2012). In Saudi Arabia, there are different types of schools: public, private, comprehensive, and international. The total schools in Saudi Arabia are 30,625, where 26,248 (86%) are public schools (Strategic Gears Management Consultancy, 2018). The sample of the study comprised of Saudi public-school teachers, and was conducted with the permission of the MoE (see Appendix A) because the MoE is the gatekeeper of all Saudi public schools. As such, the target population of the study was elementary, middle, and high school teachers who teach at public schools in Riyadh city in Saudi Arabia. The researcher chose Riyadh city because it is the capital of Saudi Arabia, and it is the home city of the researcher. Thus, the researcher could have more access to Saudi teachers.

The sampling frame of this study was limited to the elementary, middle, and high school teachers who teach at public schools in Riyadh. According to the Ministry of Education's Statistical Cards for the academic year of 2017- 2018, there are 18,294 male teachers and 24,523 female teachers in Riyadh public schools (Al-Wahaibi, 2018). Based on the statistical table guidelines for sample size selection, approximately 400 participants were sufficient for the study.

In this study, convenience and snowball sampling was used, respectively. These are non-probability sampling methods (Creswell, 2012). The convenience sampling is also known as opportunity or availability sampling. Vogt (2007) proposed that convenience sampling is the most widely used and the least justifiable sampling

techniques "because it is convenient to do so" (p.81). The justification of using the convenience sampling approach in this study was due to that the MoE does not share teacher contact information, which was needed for the study. The snowball sampling was a beneficial as a second step in the study. The snowball sampling is known as network, chain referral, or reputational sampling. This sampling begins with one or a few participants and spreads out on the basis of links to large numbers of participants (Creswell, 2012). This form of sampling has the advantage of recruiting large numbers of participants as proposed by Creswell (2012). To achieve these samplings, first, the researcher reached out to teachers whose contact information is available to the researcher, asking them to participate in the study. Based on cultural considerations, the researcher, being a female, sent the survey to female teachers and used a male assistant to send the survey to male teachers. Then, these teachers were asked to forward the survey to other teachers they know who work at public schools. In the study, probabilistic sampling is not possible because it was difficult to obtain a list of contact information of all teachers who teach at public schools in Riyadh through the Ministry of Education (MoE) due to privacy purposes.

Instrumentation

As indicated earlier, data was collected using a survey. The researcher developed a new survey instrument, based on the literature review of Achievement Goal orientation and Achievement Goal Structure, a self-reported questionnaire with three sections (see Appendix A). The survey was designed to disallow participants from going back to a previous section to change their answers once submitted. The first section presented the Informed Consent Form and three questions to conform that the participants are teachers

who teach in public school at Riyadh city. The Second section was designed to capture teachers' Goal Orientation through 20 scenarios with two statements for each scenario to select from in order to express performance or mastery orientation strategies that the teacher would use with the student in the scenario. The strategies were "focused on six highly salient dimensions of the classroom learning environment [TARGET framework] that can be structured to emphasize a mastery goal orientation" or performance goal orientation (Ames, 1992, p. 332). The researcher was aware that in actual classrooms students have different GOs, and to best represent an actual classroom; some of the scenarios in the survey were developed to describe students who are mastery-oriented. For example:

> Ahmad has a passion towards learning. He is always focusing on his teacher and wants to absorb information as he learns. He always ready to welcome new information and looking for many different kinds of learning strategies.

Other scenarios were developed to describe students who are performance-oriented. For example:

> Ohood loves to receive favorable judgment from her teachers and others around her. She submitted the first assignment in your class, and you gave her poor feedback on her assignment. After the feedback, she hates you and your subject because the feedback makes her feel that she is not smart in your class.

The teachers were instructed to read each scenario, and then select only one statement from the presented two statements. For instance, in Ohood scenario the statement that expresses performance orientation strategy: "I should stop giving Ohood feedback and just provide her with the assignment grade," where the statement that expresses mastery

orientation strategy: “I should keep providing Ohood with feedback along with assignment grade.” Teachers were asked to imagine that students in the scenarios were in their classroom, and then select the best strategies from their perspective that they should apply it to the student in each scenario.

The third section of the survey was designed to capture the teachers’ demographic information, such as gender, educational stage/level taught, subject of teaching, years of teaching, age, professional development abroad, and education theories that teachers been exposed to. The researcher deliberately put the demographic information section in the last part of the survey. Due to that, the researcher presented some education theories in the demographic information for the teachers to select; looking at the theories’ names may influence teachers’ answers to the survey. The demographic information was used to best reflect the population of Saudi teachers in public schools. The researcher wanted to make sure that the sample was representative of the population adequately for the purpose of generalization.

The survey was administered using a web-based survey website, Qualtrics. In 2012, Creswell suggested that web-based surveys are becoming popular due to the fact that the Internet is accessible to most people. Furthermore, during the 2020 pandemic (i.e., COVID-19) most communication between people was a web-based to prevent people interaction and spread the disease. In fact, people can access the Internet everywhere and anytime by using their mobile devices. According to Richy and Klein (2007), “Web-based surveys are rapidly becoming the norm in many areas of research” (p. 118), and researchers can easily use “a wide variety of low-cost software that formats survey instruments for delivery over the Internet” (p. 118). The office of Institutional

Research at the University of Toledo (UT) has acquired a site license for Qualtrics to students and faculty. Qualtrics is a company that allow researchers or other beneficiaries to produce and distribute surveys. It allowed the researcher to create a survey and distribute it using a link for the Survey page. Qualtrics has a Multilanguage survey feature, which gave participants the option to participate in either Arabic or English language. When the researcher uploaded the survey's result, all responses (in both languages) merged as one set of results regardless of the language in which the survey was taken.

Validity and Reliability

Given that the study is a descriptive study, and the survey instrument was designed to be used in one time to help guide Saudi educational police in the future. The newly developed instrument needed to be valid and reliable. Validity can be defined as "a demonstration that a particular instrument in fact measures what it purports to measure" (Cohen, 2000, p. 133). Before collecting the responses, the researcher obtained face and content validity evidence. The researcher sent the survey via email to two academic professors: one works in the University of Toledo and the other works in King Saud University in Riyadh at Saudi Arabia. The professors were asked to review and comment on the survey items. Specifically, they were asked to comment on scenarios' and statements' (i.e., strategies) clarity, wordiness, organization, and overlapping responses. They provided the research with valuable feedback. For example, one of the suggestions is to not specify any subject or class in any scenario to make sure that all scenarios are possible for all teachers to imagine them. Another suggestion is to provide the theories' names (i.e., in the third section of the survey) in both Arabic and English language. Due

to that the theories were originated in English and some teachers may know the theories' names in English but not in Arabic.

After collecting teachers' responses, the researcher evaluated the quality of the survey. She employed Rasch analysis to obtain construct validity evidence and reliability. The Rasch analysis provided evidence of how well the survey items are measuring the same underlying construct. The researcher presented the construct validity evidence in Chapter 4 as part of the study's results. On the other hand, reliability is the consistency of the study's results. According to Creswell (2013), "Reliability means that scores from an instrument are stable and consistent. Scores should be nearly the same when researchers administer the instrument multiple times at different times. Also, scores need to be consistent" (p. 159). The Rasch model provided the reliability in two indices: item and person. The item reliability is the extent to which the survey will produce the same result on different sample whereas person reliability is the extent to which the sample will produce the same result on different items that measure the same underlying construct. The researcher presented the item and person reliability evidence in Chapter 4 as part of the study's results.

Data Collection Procedures

In this study, the Ministry of Education (MoE) is the gatekeeper in granting permission for the study to be conducted. Thus, the researcher obtained a letter from the MoE (see Appendix B) allowing her to use the public schools' teachers in the study. Additionally, due to that the study involves interaction with human subjects (NHS Determination Form, 2015), the researcher obtained approval from UT's Institutional Review Board (IRB; see Appendix C). In the IRB application, the researcher explained

that the design of the study and procedures have minimal harm and risks and have maximal benefits on the participants (Jacobs, 2008). She described the benefits of the study in increasing teachers' awareness of different strategies to use in their classroom. The researcher also explained that participants' names were not included in the survey, and the survey was set up to not collect the user's IP Address by enabling anonymize responses (i.e., hyperlink) in the survey options. By doing that, there was no way that anyone, including the researcher and especially the MoE, can link teachers' responses to individuals' names or locations.

After the University of Toledo's IRB permission was granted, as mentioned earlier, the researcher distributed the survey to female teachers and used a male assistant to send the survey to male teachers. The survey was distributed through a smart device communication application (i.e., WhatsApp, an instant messaging application broadly used in Saudi Arabia) on December 2020. Before filling out the survey, teachers were asked to complete an online informed consent form (i.e., Waiver of Written Consent for Exempt Research, 2019). The Informed Consent Form (see Appendix D) was used to inform teachers about the "nature and implications of the research and that participation [is] voluntary" (Homan, 2001, p. 330), which implies that teachers had the right to make decisions for themselves, either to complete the survey or to withdraw from the study. Additionally, the researcher and the assistant resend the survey link to the teachers up to two times during the week to remind them to participate in the study. When the data collection was completed, the researcher retrieved the data from her Qualtrics account for analysis.

Data Analysis

The researcher used Rasch model to achieve the purpose of the study and answer its Research Question. As discussed previously, to answer the Research Question, the researcher developed an instrument to explore teachers' Goal Orientation (GO) that is made on an ordinal scale. The Rasch model was needed in the study because it helped the researcher to convert ordinal scores into useful measures on an interval scale (Rasch, 1960). The instrument in the study contained items with two possible responses (mastery vs. performance); thus, the researcher focused on the method of paired comparison in the Rasch model. A key characteristic of the Rasch model is that a comparison between any two persons is independent of a particular set of items. Likewise, a comparison between any two items is independent of a particular population. According to the basic Rasch model, as proposed by Georg Rasch (1960), the probability of a correct response to a dichotomously scored test item is a function of the difference between the persons' responses and the items' difficulty.

For this study, Rasch model provided valuable and meaningful information about both the developed instrument and teachers' responses regarding their GO. In other words, using the Rasch model allowed the researcher to investigate and understand teachers' GO in more details. Importantly, Rasch analysis provided solid evidence whether or not there is a statistically significant differences in teachers' selection of performance goal orientation over the mastery goal orientation. Furthermore, the Rasch model provides useful visual information about whether teachers are mastery oriented or performance oriented.

Rasch Model Overview

Rasch model is a mathematical formula that was created by Georg Rasch (1960). The mathematics behind the model illustrates the notion that when attempting to measure a concept, participants are more likely to correctly answer the easy items more than the difficult items. Additionally, all items are more likely to be correctly answered by participants with high ability, in the specific concept that being measured, than by those who have low ability. Wright and Stone (1999) stated that Rasch model is grounded in the notion that the more difficult an item on a survey is, the more likely for participants to provide unsuccessful response.

Rasch analysis is a method of constructing observed raw scores into linear systems within which persons and items can be measured clearly (Wright, 1985). Wright and Linacre (1989) prescribed that one of the most important functions of the Rasch analysis is to transform scores into measures with more defined meanings. Generally, researchers seek to analyze their data by using Rasch model if they want to identify specific heading characteristics of participants (Bond & fox, 2015). As such, the inference is the underlying principle in Rasch model. Essentially, Rasch analysis works on examining data and sees how well the data fit together and cooperate to determine the intended underlying meaning. This underlying meaning is considered as persons' latent variable, which is, in this study, teachers' GO.

In Rasch model, the measures of person responses and item difficulty are independently calibrated from each other and expressed in units called logits. This units are log-odd transformations of observed scores across all person responses and items difficulty. These measures are placed on a common frame of reference, called the logit

scale. Mcnamara (1996) described a logit scale as a true interval scale that express the relationship between person responses and item difficulty. Both person responses and items difficulty will be mapped into one scale, with the same linear interval units (logits), called a Wright map (Wilson, 2005). Many researchers have defined that a Rasch model is an item response model aiming to measure one or more quantitative latent variable on a metric level of measurement (Rasch, 1960; Rost, 2001; Wright & Stone, 1999). There are several critical characteristics that comprise the Rasch model, such as sufficiency, dimensionality, difficulty, fit, separability, reliability, and validity.

Sufficiency. Indicates that the collected raw scores from the survey should covers all the information about the latent variable measured in the study. Rasch (1980) inscribes, “the best estimate of the ability parameter for a person can be derived from his raw score only" (p.76). For Rasch, the raw score is a sufficient statistic for the latent trait that been measured. Item parameter and person parameter are calculated from raw score.

Dimensionality. It refers to the number of traits that the survey contains. One of the main features to make meaningful estimations when studying human performance is to focus only on one trait at a time (Blond & Fox, 2015). Focusing on one trait at a time is referred to as unidimensionality. Wright (1996) insisted that unidimensionality represents a fundamental requirement when a Rasch model is used in order to obtain a measurement for the latent variable of interest. Combining a number of traits into a single questionnaire can result in bold predictions, which in return produces a less useful exploration of the desired underlying meaning (Blond & Fox, 2015).

Difficulty. It refers to the likelihood that an item will obtain a favorable response. This could be seen in the current study as the difficulty to select an option for a statement.

To illustrate, items that are more difficult to select in a favorable manner will obtain fewer responses than items that are easier to respond in a favorable manner. The statistic that is needed for item difficulty is the total score for each item (Kersten & Kayes, 2011). The probability of solving an item depends only on the item's difficulty and the person's ability (Green & Frantom, 2002). As such, items that are more difficult, and persons with greater ability are reported in Rasch analyses as positive logits whereas easier items or persons with a lesser ability are reported as negative logits (Fink, 2007).

Fit. It is an essential consideration within the Rasch framework. Blond and Fox (2015) stated, "fit is at the core of Rasch measurement" (p.113). They defined fit as a quality control mechanism that evaluates the compatibility of data with the Rasch model. The Rasch fit analysis "can express either the pattern of responses observed for each candidate across items (person fit) or the pattern for each item across persons (item fit)" (Blond & Fox, 2015, p. 515). The analysis of fit is essential to investigate that the instrument's items are holding one trait (unidimensionality) and that participants' responses had lent themselves to the confident computation and communication of a person measure along with a single trait. In other words, Rasch fit analysis determines whether each item contributes to the measurement of the construct by assessing the extent to which an item or person performs within the underlying latent trait (Blond & Fox, 2015). There are two statistics to assess Rasch fit analysis: infit and outfit. Infit is estimations that help to identify expected responses, while the outfit is estimations that help to identify unexpected responses (Wright & Stone, 1979). The expectation of the Rasch Model is that items that are difficult to select from will be less frequent, while items that are easier to select from will be more frequent.

Separability. It denotes the property that there are no interaction effects between person responses and items (Rost, 2001). Purportedly, from separability, it is possible to estimate the person parameters without estimating the item parameter and knowing their distribution. Likewise, it is possible to estimate the item parameters without estimating the person parameters and knowing their distribution. Green and Frantom, (2002) stated that the function of separation in the Rasch model "measures the spread of both items and persons in standard error units" (p. 8). You (2010) indicated that the larger the separation, the better the instrument is at distinguishing between the persons and items.

Reliability. It refers to how well the stability of the instrument remains intact when it is replicated (Blond & Fox, 2015). In Rasch, reliability estimate is represented as a separation of statistically different levels found in the sample. Wright (1996) stated that reliability is the amount of variance remaining after measurement error is subtracted, which called the True Variance. The reliability estimate in the Rasch model is based on the same concept as Cronbach's alpha: "Analogous to Cronbach's alpha, it is bounded by 0 and 1" (Blond & Fox, 2015, p. 523). The Rasch model analysis provides two indices of reliability: person and item. The person reliability index indicates what the replicability of person ordering would be expected if the sample was given another similar set of items measuring the same construct (Blond & Fox, 2015). The item reliability index indicates what the replicability of item responses would be if the same items were given to another same size-sample of similar participants (Blond & Fox, 2015). High reliability shows that the analysis is reliably separating tasks into different levels of difficulty and ability (Blond & Fox, 2015). As such, consistency in results can be expected.

Validity. It is an argument that involves judgment about a meaning. A survey should truly measure what it claims to measure. The survey's developers need to provide evidence that their instrument is measuring what it purports to measure. The Rasch model has many ways to gather evidence supporting validity of the participants. Fisher (1994) implies that the Rasch analysis is a powerful tool for evaluating construct validity. Blond and Fox (2015) refer to construct validity as "theoretical argument that the items are actual instantiations or operationalizations of the theoretical construct or latent trait under investigation—that is, that the instrument assesses exactly what it claims to assess" (p. 513). In fact, validity is an argument that the researcher can investigate, and is not established by reference to some simple statistics. Consequently, there are many analyses in the Rasch model that can investigate the validity, such as fit and item-person maps. In Rasch model, fit statistics used to examine how well each item fit within the underlying construct; items can: infit, outfit, overfit, and underfit. Once infit mean square (MNSQ) for item statistics are near 1.0, items are considered valid (Fink, 2007). Item-person maps provide visual results of items difficulty, person ability and error estimations. According to Blond and Fox (2015), items and persons that lie outside the boundaries (t values between -2 and +2) cannot be interpreted meaningfully, and items and persons that lie inside the boundaries are considered valid.

Chapter Four

Results

The study intended to explore Saudi teachers' Goal Orientations (GOs) uses descriptive survey design. To analyze the collected data and achieve the purpose of the study, descriptive statistics were utilized to describe Saudi teachers' characteristics, such as gender, educational level taught, career path levels, classroom setting, teaching experience, age, attending professional development workshops outside the country, and exposure to specific motivational theories. Furthermore, the Winsteps Rasch analysis software was used to conduct the reliability and validity of the newly developed survey. Additionally, the Rasch analysis was used to explore Saudi teachers' GOs. The results of Saudi teachers' GOs are reported via the TARGET framework lens to grasp Saudi teachers' selection of motivational strategies associated with mastery GO and performance GO.

Participants

The participants in this study were teachers who work in public schools in Riyadh city, Saudi Arabia. A total of 811 responses were received. Five hundred nineteen of them were excluded for two reasons: 366 responses for not meeting the study criteria (teaching in a public school in Riyadh city, Saudi Arabia), and 153 responses because they were incomplete responses. The Rasch analysis indeed are able to handle partially incomplete data. However, the incomplete responses received were extremely incomplete, which led to not having enough information to enable the Rasch analysis to satiate the missing data. When the data were run including the incomplete responses, there were no significant difference in the results. Nevertheless, they could inflate the

reliability or other statistical test results in the analysis. Linacre (2012) stated that "incomplete data are usually less reliable than complete data" (p. 361). For the purpose of this study, including data that might not be reliable is not useful. Thus, the incomplete responses were removed from the measure during the process of data cleaning. Therefore, the total number of responses entered into the Rasch measurement for analysis were 292 responses. During the measurement, the Rasch analysis discovered 11 outliers; the outliers' outfit MnSq values were significantly misfit. This could indicate that the 11 participants were not reading the questions carefully, or they were not honestly participating in the survey. The outlier's responses were defeating the purpose of the survey; thus, they had to be deleted from the measure because they were not appropriately participating in the survey.

To describe Saudi teachers' characteristics, descriptive statistics of the demographic information were used. The results showed that the overall mean age of the participants (teachers) was 43.5 years (SD = 7.3). Also, the results revealed that teachers are from different classroom setting, such as English, Arabic, Math, Computer Science, Islamic Studies, Social Studies, Sciences, etc. Table 1 demonstrates participants' demographic information and displayed that 83.83% of Saudi teachers have not been exposed to Achievement Goal Theory.

Table 1

Characteristics of Teachers

Characteristic	N (percentage)
Gender	
Male	94 (32.2%)
Female	198(67.8%)

Characteristic	N (percentage)
Educational Level Taught	
Elementary	95 (32.55%)
Middle	81 (27.85%)
High	116 (39.6%)
Teacher's Career Path Levels	
Assistant Teacher	17 (5.74%)
Practitioner Teacher	195 (66.89%)
Advanced Teacher	41 (13.85%)
Expert Teacher	18 (6.09%)
Teacher but not employed yet	21 (7.09%)
Years of Teaching Experience	
1-5	11 (3.72%)
6-10	40 (14.53%)
11-15	53 (17.91%)
16-21	72 (24.66%)
< 21	116 (39.19%)
Age	
22-29	9 (3.08%)
30-39	70 (23.97%)
40-50	168 (57.53%)
< 50	45 (15.41%)
Attending Professional Development Workshops Outside the Country	
Yes	36 (12.2%)
No	256 (87.8%)
Motivational Theories Teachers Exposed to Within Their Teacher Preparation Programs or Professional Development Workshops	
Achievement Goal Theory	54 (16.17%)
Self-Determination Theory	23 (6.89%)
Goals Theory	31 (9.28%)
Intelligent Theory	70 (20.96%)
None of the Above	155 (46.71%)

Reliability and Separation Indices

The Winsteps Rasch analysis software utilized the 20 items (scenarios) to identify the reliability of the newly developed survey. Three scenarios were deleted from the

analysis because they were discriminated improbably; the value of their point-biserial were negatively correlated. The Rasch analysis provided person and item reliability for 281 Saudi teachers (persons) and 17 scenarios (items). Additionally, to further describe the person and the item reliability, the Rasch analysis provided person and item separation indexes. As shown in Table 2, the test statistics for the Rasch analysis indicated sufficient item reliability but not person reliability. The reliability of the person was 0.40, which indicates low confidence. Linacre (2012) reported that the low person reliability of measurement could suggest the need for adding more items (scenarios) in the survey. When looking at the person separation index, the analysis did not show a separation within teachers. Consequently, the person strata index (statistically significant groups) was calculated to find the number of groups that could be distinguished by the measure (Schumacker & Smith, 2007). The person strata resulted in 1.59 groups, which indicates and confirms no separation within teachers. Stuve (2015) stated, "person separation, which classifies people, below 2 indicates that the instrument may not differentiate between low and high performers" (p. 49). The absent appearance of teachers' separation indicated that the survey did not differentiate among teachers in their GOs. Bond and Fox (2015) proposed that the person separation and the number of person strata generated by the survey "might be less important only if we are looking at group-level descriptions" (p. 461), which is the main focus of the study (i.e., describing teachers' GOs). The researcher proposed to provide statistically significant differences in teachers' selection of performance GO over the mastery GO or vice versa. However, due to the lack of separation in teachers' GOs, statistical significance cannot be detected. Thus, if more scenarios were asked, perhaps, the Rasch analysis would detect a statistical

significance. As such, lengthening the survey will help increase the person reliability and find statistical significance in Saudi teachers' GOs.

Table 2

Summary Statistics of the Survey

Teachers					Infit		Outfit	
	Raw Score	Count	Measure	Model Error				
					MnSq	Zstd	MnSq	Zstd
Mean	11.7	17.0	1.31	0.68	-	-	-	-
S.D.	2.1	0.00	0.95	0.13	-	-	-	-
Real Rmse	0.74	Adj.Sd	.60	Separation	. 81	Person	Reliability	0.40
Items					Infit		Outfit	
	Raw Score	Count	Measure	Model Error				
					MnSq	Zstd	MnSq	Zstd
Mean	192.6	281.0	0.00	0.20	0.99	0.00	1.04	0.3
S.D.	71.3	0.00	1.76	0.11	0.10	1.4	0.28	1.6
Real Rmse	0.23	Adj.Sd	1.75	Separation	7.65	Person	Reliability	0.98

The item reliability showing in Table 2 is 0.98, which indicates a high confidence. To further describe item reliability, item separability was provided, and it showed 7.65 different levels of difficulty among the scenarios. The value of item separability means the survey can differentiate (>7, item reliability < 8) levels of scenarios in terms of difficulty. Linacre (2012) recommended that item separation indices of more than (3) and less than (9) are desirable. For the present data, the item reliability and separability indices showed that there are enough spread in the scenarios' difficulty along the continuum instead of just one cluster of scenarios.

Validity

To accurately apply and interpret the results, it is vital for the survey to be valid. The validity of the survey being used can be determined through different strands of evidence in the Rasch analysis, including item reliability, fit statistics, and item-person maps. As mentioned earlier, the Rasch analysis of this study showed high confidence in item reliability (98%), which indicates that only (2%) of item measure variability can be attributed to measurement error. Additionally, the high reliability of the items (scenarios) implies that it is possible to rely on the order of scenarios' estimate when it is given to other similar samples (Bond & Fox, 2015). The result of the item reliability suggests that the responses of 281 teachers provide more valid and meaningful information about the survey.

Fit statistics are an additional evidence that can indicate the validity of the survey. In the Rasch analysis, fit analysis shows how each item adheres to the underlying survey construct and how teachers respond to the survey in a way that the Rasch had expected (Bond & Fox, 2015). Bond and Fox (2015) stated that the first statistics that researchers should check in the fit tables is point-biserial correlations. The point-biserial correlation indicates that all scenarios are working in one direction as intended by the survey. Thus, positive correlations of items (scenarios) are important, and any negative correlation of items (scenarios) would indicate that they were discriminated improbably (Bond & Fox, 2015). As such, it is best for researchers to delete the negatively correlated items to eliminate the noise (Linacre, 2012). Figure 1 displays the item fit table, where three scenarios (3, 9, and 10) were deleted from the measurement due to the negative correlations of the point-biserial. The negative correlation indicated that these scenarios

were not functioning as they were expected to function. In other words, many teachers answered these scenarios unexpectedly. The Rasch analysis expected teachers to select Performance Orientation (PO) strategies on these scenarios, but teachers selected Mastery Orientation (MO) strategies instead. Thus, these three scenarios were flagged for further investigation to understand why teachers misinterpreted them. Scenarios (3 and 10) are describing students' learning in general and did not state students' relationship with the teacher in the classroom, while scenario (9) the PO strategy is negatively worded statement. Thus, these three scenarios need to be reworded.

Figure 2

Item Fit Statistics table from the Rasch measurement. The "Item Dimension" represents the TARGET framework identified on each scenario, and "Student G" represents student's GO in each scenario.

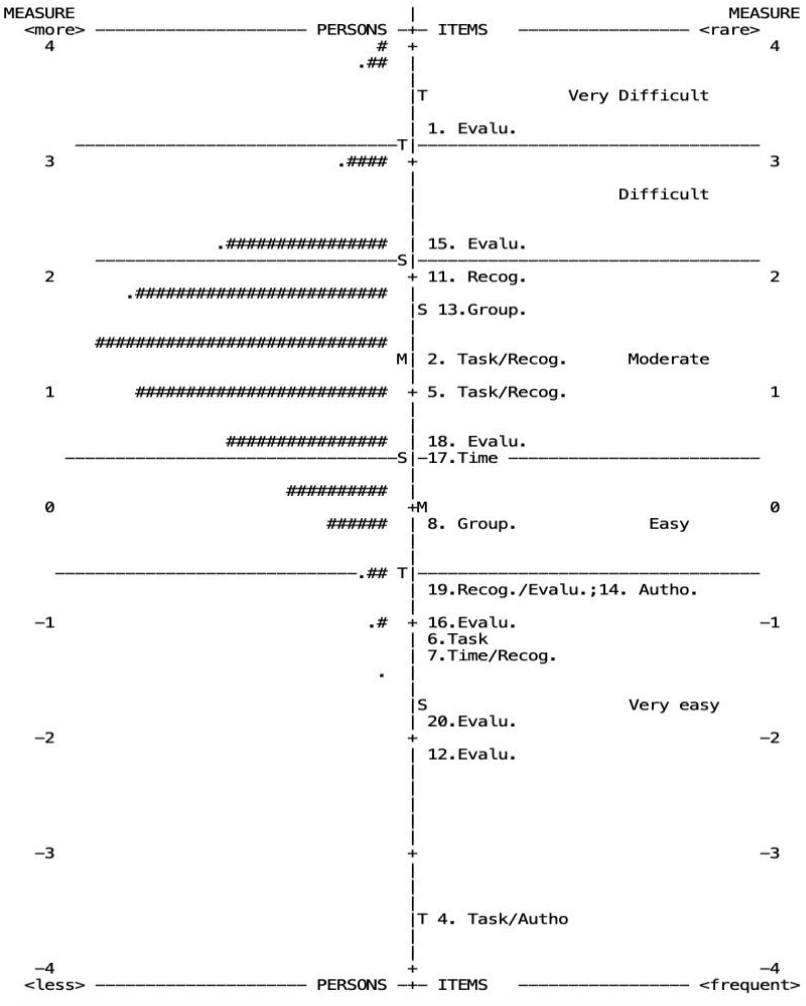
Item NUMBER	TOTAL SCORE	COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	ITEM Dimension	Student G
1	43	281	3.29	.18	1.09	.8	1.40	2.0	.22	.34	85.7	85.8	Evaluation	Perf.
2	140	281	1.31	.13	.92	-2.0	.95	-.8	.45	.38	70.6	65.4	Task/Recognition	Mast.
3	DELETED												Task	Perf.
4	278	281	-3.62	.58	.96	.1	1.56	.9	.11	.09	98.9	98.9	Task/Authority	Mast.
5	154	281	1.07	.13	1.04	.9	1.04	.7	.34	.37	63.4	66.0	Task/Recognition	Mast.
6	251	281	-1.12	.20	.95	-.3	.82	-.8	.31	.25	88.9	89.3	Task	Mast.
7	256	281	-1.34	.22	.93	-.4	.86	-.5	.30	.23	90.7	91.0	Time Allocation/Recognition	Mast.
8	215	281	-.07	.15	.86	-1.9	.74	-2.2	.48	.32	81.0	77.7	Grouping	Mast.
9	DELETED												Recognition	Perf.
10	DELETED												Evaluation	Perf.
11	103	281	1.94	.13	.97	-.5	1.07	1.0	.39	.38	72.0	69.1	Recognition	Perf.
12	269	281	-2.17	.30	.94	-.1	.61	-1.0	.27	.17	95.7	95.7	Evaluation	Perf.
13	118	281	1.68	.13	.92	-1.8	.98	-.3	.45	.38	75.6	66.9	Grouping	Perf.
14	240	281	-.73	.18	.89	-.9	.82	-.9	.38	.28	86.7	85.5	Authority	Perf.
15	81	281	2.36	.14	1.19	2.7	1.49	4.2	.15	.37	71.0	73.8	Evaluation	Perf.
16	246	281	-.93	.19	.89	-.9	.84	-.7	.37	.26	88.9	87.5	Evaluation	Mast.
17	194	281	.36	.14	1.16	2.6	1.28	2.8	.17	.35	66.3	72.2	Time Allocation	Mast.
18	181	281	.60	.13	1.07	1.4	1.06	.7	.29	.36	65.2	69.4	Evaluation	Perf.
19	239	281	-.70	.18	.91	-.7	.80	-1.1	.37	.28	85.7	85.2	Recognition/Evaluation	Perf.
20	266	281	-1.92	.27	1.05	.3	1.44	1.2	.09	.19	94.6	94.6	Evaluation	Perf.
MEAN	192.6	281.0	.00	.20	.99	.0	1.04	.3			81.2	80.8		
S.D.	71.3	.0	1.76	.11	.10	1.4	.28	1.6			11.1	11.1		

Once the point-biserial correlations were all positive, the fit statistics for the 17 scenarios were investigated. The Rasch analysis reported two aspects of fit: item infit and

item outfit. According to Linacre (2012), the MnSq value range between 0.5 to 1.5 supports a productive measurement of items' infit and outfit. Figure 1 shows that almost all items' MnSq values appear to have sufficient fit except the outfit MnSq (1.56) for item (4). In line with Linacre (2012), the fit MnSq range between 1.5 to 2.0 is assumed to be unproductive but not degrading for the measurement. After further investigation, item (4) was found to be the easiest scenario in the survey, as seen in Figure 3.

Figure 3

Map of persons and items distributions (Wright map) shows 281 (person) teachers in the left-hand column and 17 (items) scenarios in the right-hand column, where each '#' in the persons column represents 2 teachers and each '.' represents one teacher. The vertical line between the two columns is the logit scale. Person and item are distributed on the same scale. The M in this scale = mean, S = one standard deviation, and T = two standard deviations.



A person-item map (Wright map) was used as another way to investigate the validity of the survey. The Rasch analysis generated the Wright map to visually represent teachers

and items (scenarios) together in meaningful graphic or map form, which can help explain teachers and scenarios in more detail (Bond & Fox, 2015). The TARGET framework dimensions and the scenarios' number were used to label the scenarios. According to Linacre (2012), the items (scenarios) that fall close enough to the logit scale contribute to the measurement of the single construct defined in the survey, and those that fall far from it are measuring another construct that is irrelevant to the main construct of the survey. The visual representation of the Wright map showed that all scenarios fall close to the logit scale. This is sufficient initial evidence to logically conclude that scenarios follow a single line of enquiry.

Additionally, the Wright map showed that the scenarios had better infit statistics and distinguished difficulty. Each scenario is located along the logit scale according to its estimated value, where more positive scenarios are difficult. Fink (2007) stated that more difficult items are reported in Rasch analyses as positive logits whereas easier items are reported as negative logits. Based on the visual inspection of the Wright map, there are eight scenarios above the item's mean logits (positive), and nine scenarios below the item's mean logits (negative). The different levels in the survey are interpreted based on teachers' collectivity on selecting MO strategies: very difficult, difficult, moderate, easy, and very easy scenarios. To illustrate, scenario (4) was the easiest scenario for all teachers to select MO strategy, and scenario (1) was a very difficult scenario for teachers to select MO strategy with it compared to the other scenarios. Scenario (8) was reported as easy for teachers, and it sits right near the midpoint (0 logits) on the difficulty scale and below teachers' ability mean. It is worth noting that the extremely easy scenario (4)

has the least precise estimates (largest SEs), whereas the error estimates for the remaining 16 scenarios are comparatively quite small, as seen in Figure 2.

The long distances between the scenarios on the logit scale suggest that there are broad variations between the scenarios' difficulties. Thus, teachers who are close to the gaps in the line are not as precisely measured by means of the survey. The Wright map showed that the distance between the very difficult scenario is large as well as the easiest one, which indicates that there is an instance of construct under-representation in the survey (Bagheai, 2008). More precise estimates of teachers who fall in these gaps were needed; therefore, more scenarios should be added to fill the gaps. In other words, the survey needs more difficult scenarios like scenarios (1 and 15), so teachers' GOs can be estimated more precisely. The Wright map clearly indicates that the responses of 281 teachers provided more detailed information regarding the 17 scenarios.

Saudi Public-School Teachers' GOs

The Wright map (see Figure 3) displays a ruler created from the measurements of teachers' responses to imply MO strategy versus PO strategy on the TARGET framework dimensions. As can be seen in the Wright map, the scenarios range from the most difficult to select MO strategy at the top (+3.29 logits) to the least difficult to select MO strategy at the bottom (-3.62 logits). Furthermore, teachers range from the more PO strategy selected at the top (+4 logits) to the less PO strategy selected at the bottom (-1.62 logits). As the Rasch analysis showed, there was just one group regarding Saudi teachers' GOs. The visual representation of the Wright map revealed that the more difficult the scenarios are, the less likely for Saudi teachers to select MO strategies with the students. Teachers were able to recognize MO strategies and select them when scenarios' difficulty

was low. Since the Rasch analysis did not differentiate between teachers' Goal Orientation, the pairwise comparison analysis was not provided (Linacre, 2012). Instead, the Rasch analysis provided the distractor frequencies analysis (see Figure 4). This analysis shows the frequency, percentage, and S.E. mean of teachers' selection (of MO strategies versus PO strategies) in each statement. The distractor frequencies analysis and the Wright map were used to report teachers' Goal Orientations. As the survey's strategies were developed based on the TARGET framework (Task, Authority, Recognition, Grouping, Evaluation, and Time), the results are reported using these dimensions.

Figure 4

Distractor Frequencies table from the Rasch measurement. The "Item Dimension" represents the TARGET framework dimensions that been identify on each statement, and "selection category" represents the GO of the two statements in each scenario.

Item NUMBER	DATA CODE	SCORE VALUE	DATA COUNT	%	AVERAGE MEASURE	S.E. MEAN	OUTF MNSQ	PTMEA CORR.	ITEM Dimension	Selection category
1	0	0	238	85	1.22	.06	1.1	-.22	Evaluation (normative)	Performance
	1	1	43	15	1.79	.19	1.5	.22	Evaluation (improvement)	Mastery
2	0	0	141	50	.88	.06	.9	-.45	Recognition (publicly)	Performance
	1	1	140	50	1.74	.08	1.0	.45	Task (personal Challenge)	Mastery
4	0	0	3	1	.26	1.09	1.6	-.11	Authority (no choices)	Performance
	1	1	278	99	1.32	.06	1.0	.11	Task (meaningfulness)	Mastery
5	0	0	127	45	.96	.06	1.0	-.34	Recognition (publicly)	Performance
	1	1	154	55	1.60	.08	1.1	.34	Task (various methods)	Mastery
6	0	0	30	11	.45	.15	.8	-.31	Task (emphasize memorizing)	Performance
	1	1	251	89	1.41	.06	1.0	.31	Task (emphasize understanding)	Mastery
7	0	0	25	9	.40	.18	.9	-.30	Recognition (publicly)	Performance
	1	1	256	91	1.40	.06	1.0	.30	Time Allocation (flexibility)	Mastery
8	0	0	66	23	.49	.09	.7	-.48	Grouping (competition)	Performance
	1	1	215	77	1.56	.06	.9	.48	Grouping (cooperative)	Mastery
11	0	0	178	63	1.03	.06	1.0	-.39	Recognition (extrinsic drive)	Performance
	1	1	103	37	1.79	.10	1.1	.39	Recognition (intrinsic drive)	Mastery
12	0	0	12	4	.11	.21	.6	-.27	Evaluation (improve. not possible)	Performance
	1	1	269	96	1.36	.06	1.0	.27	Evaluation (improve. possible)	Mastery
13	0	0	163	58	.95	.06	.9	-.45	Grouping (Competition)	Performance
	1	1	118	42	1.81	.09	1.1	.45	Grouping (cooperative)	Mastery
14	0	0	41	15	.43	.14	.8	-.38	Authority(no choices)	Performance
	1	1	240	85	1.46	.06	.9	.38	Authority (choices)	Mastery
15	0	0	200	71	1.22	.06	1.2	-.15	Evaluation (Publicly)	Performance
	1	1	81	29	1.53	.13	1.6	.15	Evaluation (privately)	Mastery
16	0	0	35	12	.38	.16	.8	-.37	Evaluation (normative)	Performance
	1	1	246	88	1.44	.06	.9	.37	Evaluation (individual progress)	Mastery
17	0	0	87	31	1.06	.10	1.4	-.17	Time Allocation (fixed time)	Performance
	1	1	194	69	1.42	.07	1.1	.17	Time Allocation (flexibility)	Mastery
18	0	0	100	36	.93	.08	1.0	-.29	Evaluation (normative)	Performance
	1	1	181	64	1.52	.07	1.1	.29	Evaluation (individual progress)	Mastery
19	0	0	42	15	.46	.13	.8	-.37	Evaluation (social comparison)	Performance
	1	1	239	85	1.46	.06	.9	.37	Recognition (student's improvement)	Mastery
20	0	0	15	5	.94	.25	1.5	-.09	Evaluation(ability based)	Performance
	1	1	266	95	1.33	.06	1.0	.09	Evaluation(opportunity to improv.)	Mastery

Task Dimension

In the survey, five statements reflect the task dimension. Four of them demonstrated mastery orientation strategies, and one statement demonstrated performance orientation strategies. The first mastery statement (scenario 2) contains the

strategy of involving challenges in tasks, and 50% of teachers selected it. The second mastery statement (scenario 4) involves the strategy of structuring meaningfulness tasks, and 99% of teachers selected it. The third mastery statement (scenario 5) covers the strategy of providing various methods to interact with tasks, and 55% of teachers selected it. The fourth mastery statement (scenario 6) includes the strategy of emphasizing understanding facts, and 89% of teachers selected it. In contrast, the performance statement (scenario 6) contains the strategy of emphasizing memorizing facts, and 11% of teachers selected it. Based on the visual inspection of the Wright map (see Figure 3), scenarios (5) is less than one standard deviations (SD=.95) below teachers mean, scenarios (2) is on teachers mean (M=1.31 logit), and scenario (4 and 6) are more than two standard deviations below teachers mean. Regarding their level of difficulty: scenario (4 and 6) are very easy, and scenarios (2 and 5) are moderate. Overall, in the task dimension, teachers were more likely to select strategies that are consistent with a mastery orientation.

Authority Dimension

In the survey, three statements reflect the authority dimension. One statement demonstrated mastery orientation strategy, and two statements demonstrated performance orientation strategies. The mastery statement (scenario 14) contains the strategy of offering students choices, and 85% of teachers selected it. On the other hand, the performance statements (scenarios 4 and 14) cover the strategy where choices are not provided to students, and (1% and 15%) of teachers selected them respectively. The visual inspection of the Wright map (see Figure 3), scenario (4 and 14) are more than two standard deviations below teachers mean. Looking at their level of difficulty, scenario (4

and 14) were very easy. In the authority dimension, teachers were more likely to select strategies that are consistent with a mastery orientation regardless of students' Goal Orientations.

Recognition Dimension

In the survey, six statements reflect the recognition dimension. Two statements demonstrated mastery orientation strategies, and four statements demonstrated performance orientation strategies. The first mastery orientation statement (scenario 19) contains the strategy of recognize students' improvement, and 85% of teachers selected it. The second mastery orientation statement (scenario 11) involves the strategy of fostering intrinsic interest in learning, and 37% of teachers selected it. In contrast, the first performance orientation statement (scenario 11) covers the strategy of providing extrinsic rewards, and 63% of teachers selected it. The remaining three performance orientation statements (scenarios 2, 5, and 7) include the strategy of encouraging public recognition, and (50%, 45%, and 9%) of teachers selected them respectively. The visual inspection of the Wright map (see Figure 3) showed that scenarios (7 and 19) are more than two standard deviations below teachers mean, scenarios (5) is less than one standard deviations below teachers mean, scenarios (2) is on teachers mean (M=1.31 logit), and scenarios (11) is less than one standard deviation above teachers mean. Regarding their level of difficulty: scenarios (7 and 19) were very easy, scenarios (5, 2, and 11) were moderate. Generally, in the recognition dimension, teachers' Goal Orientations were mixed between mastery and performance depending on the strategies and regardless of students' Goal Orientations.

Grouping Dimension

In the survey, four statements reflect the grouping dimension. Two of them demonstrated mastery orientation strategies, and two statements demonstrated performance orientation strategies. The two mastery orientation statements (scenarios 8 and 13) cover cooperation strategies, and (77% and 42%) of teachers selected them respectively. In contrast, the two performance orientation statements (scenarios 8 and 13) contain competition strategies, and (23% and 58%) of teachers selected them respectively. The visual inspection of the Wright map (see Figure 3) display that scenario (8) are more than one standard deviation below teachers mean and scenario (13) are less than one standard deviation above teachers mean. Inspecting their level of difficulty: scenario (8) was easy, and scenario (13) was moderate. In the grouping dimension, teachers' Goal Orientations were mixed depending on the strategies themselves and notably matching students' Goal Orientations.

Evaluation Dimension

In the survey, 13 statements reflect the evaluation dimension. Six statements demonstrated mastery orientation strategies, and seven statements demonstrated performance orientation strategies. Four out of six mastery orientation statements (scenarios 1, 12, 16, and 18) cover the strategies of evaluating students for individual progress, and (15%, 96%, 88%, and 64%) of teachers selected them respectively. One mastery orientation statement (scenario 20) contains the strategy of giving students opportunities to improve their performance, and 95% of teachers selected it. Another mastery orientation statement (scenario 15) includes the private-based evaluation strategy; 29% of teachers selected it. In contrast, three performance orientation

statements (scenarios 1, 16, and 18) involve the normative-based evaluation, and (85%, 12%, and 36%) of teachers selected them respectively. Also, two performance orientation statements (scenarios 12 and 20) cover the ability-based evaluation strategies, and (4% and 5%) of teachers selected them respectively. Another performance orientation statement (scenario 15) contains the public-based evaluation strategy, and 71% of teachers selected it. Additionally, (scenario 19) presented a performance orientation statement that involves a social comparison-based evaluation strategy, and 15% of teachers selected it. The visual inspection of the Wright map (see Figure 3) revealed that scenarios (12, 20, 16, and 19) are more than two standard deviation below teachers mean, scenario (18) is less than one standard deviation below teachers mean, scenario (15) is more than one standard deviation above teachers mean, and scenario (1) is more than two standard deviation above teachers mean. Evaluation dimension has visited most of the levels of difficulty in the survey: scenarios (12, 20, 16, and 19) were very easy, scenario (18) was moderate, scenario (15) was difficult, and scenario (1) was very difficult. In the evaluation dimension, teachers' Goal Orientations were mixed between mastery and performance depending on the strategies and regardless of students' Goal Orientations.

Time Dimension

In the survey, three statements reflect the time dimension. Two statements demonstrated mastery orientation strategies, and one statement demonstrated performance orientation strategy. The two mastery orientation statements (scenarios 7 and 17) cover the strategy of optimizing time depending on students' needs, and (91% and 69%) teachers selected them respectively. In contrast, the performance orientation statement (scenario 17) involves the restriction on tasks' time strategy, and 31% of

teachers selected it. The visual inspection of the Wright map (see Figure 3) showed that scenario (7) is more than two standard deviation below teachers mean, and scenario (17) is one standard deviation below teachers mean. Looking at their level of difficulty: scenario (7) was very easy and scenario (17) was moderate. In the time dimension, overall teachers were more likely to select strategies that are consistent with a mastery orientation.

Key Findings

Table 3 summarize Saudi teachers' GOs. It shows that in the Task, Authority, and Time dimensions, above 49% of teachers selected strategies that are consistent with an MO. In the Recognition and Evaluation dimensions, teachers' GOs were mixed between MO and PO depending on the strategies and the characteristics of scenarios. In Grouping dimension, teachers' GOs were notably coincided with students' GOs.

Table 3

Summary of Saudi Teachers' Goal Orientations

TARGET dimension	Strategies	Students' Goal Orientation	Saudi Teachers' Goal Orientation
Task	Challenge	Mastery-oriented	50% Mastery-oriented
	Meaningfulness	Mastery-oriented	99% Mastery-oriented
	Develop Various Methods to Interact with Tasks	Mastery-oriented	55% Mastery-oriented
	Emphasizing Facts' Understanding	Mastery-oriented	89% Mastery-oriented
Authority	Offering students choices	Performance-oriented Mastery-oriented	85% Mastery-oriented
Recognition	Recognize Students' Improvement	Performance-oriented	85% Mastery-oriented
	Extrinsic Rewards	Performance-oriented	63% Performance-oriented

TARGET dimension	Strategies	Students' Goal Orientation	Saudi Teachers' Goal Orientation
	Public Recognition	Mastery-oriented	*48.2% Performance-oriented
Grouping	Cooperation	Mastery-oriented Performance-oriented	*64.5% Mastery-oriented
	Competitive	Performance-oriented Mastery-oriented	*47.9% Performance-oriented
Evaluation	Evaluating Students for Individual Progress	Performance-oriented Mastery-oriented	*80.7% Mastery-oriented
	Opportunities for Improvement Students' Performance	Performance-oriented	95% Mastery-oriented
	Normative-based evaluation	Mastery-oriented Performance-oriented	*65% Performance-oriented
	Ability-based evaluation	Performance-oriented	*4.5% Performance-oriented
	Public-based evaluation	Performance-oriented	71% Performance-oriented
	Social comparison-based evaluation	Performance-oriented	15% Performance-oriented
Time	Optimizing time depending on students' needs	Mastery-oriented	*81.5%Mastery-oriented

* Average Percentage

Chapter Five

Discussion and Conclusion

The central question for this study asked: What is the Goal Orientation (GO) of Saudi public-school teachers? The results showed compatibility in Saudi teachers' GO, where they selected Mastery Orientation (MO) strategies with easy scenarios and Performance Orientation (PO) strategies with difficult scenarios. The scenarios' difficulty levels were interpreted based on teachers' incorporation of selecting a particular strategy (MO versus PO) in a favorable manner. To illustrate, difficult scenarios obtained a fewer selection of MO strategies than easy scenarios that were easier for Saudi teachers to agree in selecting MO strategies with them.

The results suggest that the scenarios' difficulty influences Saudi teachers' selection of MO strategies. A more plausible explanation for this result is that teachers' GO is influenced considerably by the characteristics of the scenarios. The scenarios in the survey have different characteristics, which some of them influenced teachers to select PO strategies. For example, scenario (1) holds the characteristic of dealing with a student who has a negative feeling toward the teacher's feedback. In this scenario, the majority of teachers selected the PO strategy that focused on avoiding providing feedback to the student. Teachers' GO was influenced by the characteristics of student's behavior. As such, they selected a PO strategy to project a favorable image of themselves and avoid receiving negative feelings from the student. This explanation is in line with Praetorius et al. (2014) suggestion that teachers' GOs dependent on situations, which means that teachers can change their GO based on the characteristics of the situation (Praetorius et al., 2014). To illustrate, teachers' GOs fluctuate depending on the time, behaviors, or

circumstances of the situation (Praetorius et al., 2014). In addition to what Praetorius et al. mentioned, the results of the current study showed that teachers' emotion might have some impact on their GO. It seemed that Saudi teachers were viewing each scenario as a separate situation.

As mentioned in Chapter Two, there are six highly salient dimensions (TARGET) in the classroom learning environment that teachers can control to stress an MO or PO (Ames 1992). These six dimensions are extremely related to students' intrinsic motivation and improvement when teachers constantly emphasize the MO of these dimensions in the classrooms (Epstein 1898; Ames 1992). Ames (1992) drew strategies onto the TARGET dimensions that teachers can use to operationalize the MO. This study focused on the TARGET dimensions' strategies to explore Saudi teachers' practice of the MO in their classrooms. Based on Ames (1992), teachers must implement MO all the time regardless of the situation. They are supposed to practice MO on a day-to-day basis to help boost students to be mastery-oriented. Nevertheless, the results of the current study came incompatible with Ames's assumption. Saudi teachers selected MO strategies with some scenarios but not all. It seems that Saudi teachers did not have a comprehensive grasp of the importance of selecting MO strategies with the students and may have instead relied in other strategies that they are more familiar with. In other words, they did not consider that MO strategies were the best choice with students in all the scenarios. The results -using TARGET dimensions- identified the strategies where the majority of Saudi teachers failed to practice MO, which will help to determine the developmental needs of teachers to establish a mastery-oriented classroom. The

following section presents and discusses the MO strategies that the majority of Saudi teachers failed to select to be practiced with the student in the scenarios.

MO Strategies Saudi Teachers Neglect to Practice

Task Dimension

Creating a classroom, that is conducive to challenge, is a matter of the way teachers structure their teaching methods. In other words, it is a matter of what teachers do and refrain from doing in the classroom. One of the Task dimension strategies in the study covered teachers' eagerness to offer tasks that challenge students to learn and improve. The results showed that just half of the teachers choose to provide challenging tasks to the student. Maehr and Midgley (1996) stated that teachers should design tasks that challenge students because challenge provides opportunities for growth, and that what schooling is for, giving students opportunities for growth. Dweck (2009) affirmed that provide challenging tasks in the classroom can encourage a growth mindset. Furthermore, Lepper and Hodell (1989) found that enhancing students' desire to be challenged can create an intrinsic purpose to learning. In fact, applying strategies that enhance students' desire for challenges in the classroom is essential to achieve the educational goals of Saudi Vision 2030. The MoE intended to develop a classroom environment that concentrates on increasing students' desire to be challenged in the learning context ("Education and Vision 2030," 2017). Superficially, challenging students is one of the educational goals in the MoE strategic plan. The results of the current study showed that only 50% of the Saudi teachers are on their way to achieving this goal. Thus, they need to be trained in the benefit of providing students with challenging tasks and how to appropriately designed them to meet students' needs.

Recognition Dimension

One of the Recognition dimension strategies covered the use of extrinsic motivation (i.e., PO) versus intrinsic motivation (i.e., MO) with students. The results showed that the majority of teachers selected PO strategy that emphasized the use of extrinsic rewards with students. In other words, most Saudi teachers are more likely to use rewards in motivating their students learning instead of intrinsic motivation. The result was not surprising because teachers in Saudi Arabia have been trained to use extrinsic motivation to motivate students (Educational Center for Professional Development, 2019). Gerhart et al. (2009) stated that extrinsic rewards, especially monetary, significantly increase individuals' performance. However, Arden and Harry (1990) argued that rewards could shift students' focus from the learning itself to the prizes, which will lead students to be less interested in the learning itself. Other researchers assured that extrinsic rewards could hinder students' creativity because they are distracted by extraneous factors (Collins & Amabile, 1999; Runco, 2007). On the other hand, intrinsic motivation is the central mediator that influences creativity (Shalley, Zhou, & Oldham, 2004). The Saudi Vision 2030 insists on producing creative students ("Education and Vision 2030," 2017). Thus, practicing intrinsic motivation with students is an essential aspect to meet the Saudi educational strategic plan goals in producing creative students. The result of the current study shows that only 37% of Saudi teachers are on their way to achieving this goal. It seems that the majority of Saudi teachers did not consider the benefit of practicing intrinsic motivation strategy with students because they were not being trained to practice it.

Grouping Dimension

The Grouping dimension covered the strategies of encouraging competitive (i.e., PO) versus cooperative (i.e., MO) learning skills among students. The results indicated that teachers are more likely to select strategies that are consistent with students' GO. To illustrate, when it comes to select PO strategies, the majority of teachers selected them with performance-oriented students. In an opposite accord, when students were mastery-oriented, the majority of teachers selected MO strategies with them. Interestingly, teachers' GO has changed notably due to students' GO. This result is in line with Praetorius et al. (2014) suggestion that teachers' GO is influenced considerably by certain characteristics of the situation. Regardless of the situation, teachers should provide cooperative group learning and peer interaction opportunities because these opportunities will help foster students' self-development (Ames, 1992). Johnson et al. (2014) found that students in cooperative group learning had higher knowledge acquisition, retention of material, and higher-order problem solving and reasoning abilities than students who are working solo. Furthermore, many researchers found that cooperative learning positively influences students' self-confidence (Johnson & Johnson,1994; Kalantari et al., 1999; Heydari, et al., 2013). All studies mentioned above provide evidence that cooperative learning helps develop students' critical thinking and problem-solving skills, fosters students' self-development, and improves students' confidence, which aligns with the goals of the MoE strategic plan ("Education and Vision 2030," 2017). Therefore, teachers should pursue cooperative learning strategies regardless of students' GOs.

Evaluation Dimension

The Evaluation dimension is one of the most salient features of the classroom. Accordingly, students' desire to learn and improve can be easily impaired by how teachers structure the Evaluation dimension (Conivgton & Beery, 1976). One of the strategies covered in this dimension was public-based evaluation. The majority of teachers selected public-based evaluation (i.e., PO strategy) with student instead of private-based evaluation (i.e., MO strategy). Many studies suggest that public-based evaluation can negatively affect students' motivation to learn (Butler, 1987; Crooks, 1988; Jagacinski & Nicholls, 1987). Other studies showed that public-based evaluation has an adverse impact on students' engagement in the classroom and their pursuit of challenging tasks (Boggiano, Main, & Katz, 1987; Deci & Ryan, 1985; Elliott & Dweck, 1988). Public-based evaluation can emphasize social comparison among learners (Dude, 1989; Marshal & Weintein, 1984) rather than self-development. Furthermore, it can lower students' perceptions of their competence (Ames, 1984a, 1984b). All these studies provide evidence that public-based evaluation threatens students' self-development, confidence, and desire to be challenged in the learning context, which is the opposite of what MoE wants to reach ("Education and Vision 2030," 2017). Public-based evaluation limits all these goals from the occurrence, and the majority of Saudi teachers selected this strategy. Thus, Saudi teachers should be aware of the negative effect of the public-based evaluation on students' motivation.

Conclusion

To the researcher's knowledge up to date, there is not any research that exists about Saudi teachers' GOs. The lack of research evidence regarding Saudi teachers' GOs

makes individuals assume that Saudi teachers may not have ability of fostering MO strategies in their classrooms. Thus, this study was undertaken to explore Saudi teachers' GOs using a descriptive survey design. The results of this study indicate that Saudi teachers prefer MO strategies with the student in many of the scenarios presented, which illustrates that MO is indeed part of the Saudi teachers' "toolbox" even if they are not aware of AGT and the importance of being mastery-oriented. Additionally, the study provided evidence to fill the literature gap, and filling this gap would help establish training plans that can aid the improvement of Saudi education. In a nutshell, having a meaningful understanding of Saudi teachers' current GOs would help the MoE understand teachers' training needs to promote MO practices in the classrooms. To this end, teachers will be empowered to fulfill Saudi leaders' ambitions and contribute to achieving the Saudi Vision 2030.

The results of the current study suggest that it is possible that Saudi teachers' GOs are dependent on certain characteristics of the situation. To illustrate, some situations' characteristics affect teachers thinking of selecting PO or MO strategy with each student. For example, teachers' emotions (scenario 1) and students' behaviors (scenarios 8 and 13) have influenced teachers' GOs. The exact characteristics that caused teachers to be performance-oriented with some students in specific scenarios but not in others are beyond the scope of this study. Notwithstanding, acknowledging the influence of the situation's characteristics gives a sense of the importance of educating Saudi teachers about Achievement Goals Orientation (AGO).

Gorozidis and Papaioannou (2016) stated that if teachers' GO depends on the characteristic of the situation, the best course of action would be to train teachers on how

to employ specific orientations (i.e., MO) for different professional situations they may encounter. Once Saudi teachers learn about MO strategies and their benefit for students' motivation, they will be more likely to believe that MO is the right orientation to practice in their classroom. Teachers should be aware that every strategy has its effect on students' interest in learning. In fact, Nicholls and Hazzard (1993) reported that students' thoughts of learning are generated by the social context of classrooms. As such, students will invest in learning once they have teachers who drive them by practicing the suitable strategies.

Training pre-service and in-service teachers on AGO would be extremely beneficial, as previous studies suggested that training them can help teachers to be mastery oriented (Ames, 1989; Papaioannou & Christodoulidis, 2007; Retelsdorf & Gunther, 2011). Saudi teachers should be educated about AGO to have the necessary knowledge that can help them understand the impact of each strategy (MO or PO) on their students. Some of the performance-oriented strategies may not lead to achieving the goals of the MoE strategic plan, which several studies provide evidence that these goals are important for student motive to learning and development (Boggiano, Main, & Katz, 1987; Deci & Ryan, 1985; Elliott & Dweck, 1988; Heydari, et al., 2013; Shalley, Zhou, & Oldham, 200). At the same time, through the training, teachers will be able to promote mastery-oriented classrooms and cultivate MO in their students.

Saudi teachers are limited in the scope of their abilities. To widen their perception about MO strategies and what is helpful to engage their students and enhance their motivation, they need to be educated about AGO. The demographic information displayed that 83% of Saudi teachers have not been exposed to AGO, which shows that

they do not have an awareness of the importance of some MO strategies to understand its benefit for their students. Once they understand MO and its strategies, their practices may change to be more mastery-focused. They will be more able to see the difference between every strategy and comprehend them. The main purpose of training them is to make teachers able to see the benefit of strategies that they were not able to see before and comprehend what they could not comprehend before.

Implications and Recommendations

Based on reviewing the MoE professional development programs, extrinsic motivation was found to be the most used way to encourage teachers to work harder toward fulfilling the Saudi Vision 2030. The MoE is currently working on creating a competitive environment for both teachers and students that is controlled by the MoE's supervisors. It is worth noting that PO is related to extrinsic motivation, while MO is related to intrinsic motivation. Perez (2001) stated that controlling feedback provided by administrators and the lack of choice in staff professional development pursuits may increase the possibility of encouraging teachers to adopt a PO. In fact, PO is cultivated in the nature of the Saudi culture, and now the Saudi leaders want Saudi students to establish an MO in an environment that is performance oriented in itself. For example, the MoE always provides valuable rewards to motivate both teachers and students such as the Education Excellence Award (EEA). In the EEA, all categories of the educational community are competing to win awards (e.g., Hyundai cars), while excellent teachers can win brand-new BMW cars (Al Shaalan, 2018). The MoE should focus on building a community that works through intrinsic motivation and working with others rather than only gaining prizes for oneself.

Notably, the MoE is using its old strategies in developing teachers, and it seeks to produce different results, which is creating mastery-oriented students. Abraham Lincoln (1862) once said the following:

> The dogmas of the quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, we must think anew and act anew. We must disenthrall ourselves, and then we shall save our country.

Disenthrall means that there are ideas that all people are captivated to, which they take for granted as the natural order of things. In other words, the tyranny of general consensus makes it difficult to achieve reformation and transformation. Based on the current actions, it seems that the MoE believes extrinsic motivation is the only way to achieve Saudi Vision 2030. In fact, the MoE's actions have been formed not to meet the new need of the Saudi Vision 2030 but to cope with the old educational system.

The results of the current study propose an initiative to improve Saudi educational system. The current study builds to provide evidence of Saudi teachers necessary training needs regarding MO on motivational strategies that might positively contribute to achieving the Saudi Vision 2030. The results indicate that the majority of Saudi teachers fail to recognize the benefit of boost students' desire to be challenged, use intrinsic motivation, promote more cooperative learning skills, and cultivate private-based evaluation. The teachers were relaying on PO practices that cannot lead students to have lifelong learning, such as extrinsic rewards, competitive learning skills, and public based evaluation. The study's results can serve as a roadmap for the MoE to meet the Saudi teachers' professional development needs so that they are motivating students to learn for

mastery.

To achieve the goals of the Saudi Vision 2030, the MoE needs to change its practices with teachers. The current methods that the MoE use (e.g., Education Excellence Award) may not be an effective way to achieve the new vision and sustain it. Thus, the MoE faces a real challenge in the current Saudi educational system that needs to be fundamentally reformed. In other words, the MoE needs to change what they take for granted if they want to achieve the Saudi Vision 2030. Ryan and Deci (2017) stated that the loss of intrinsic motivation happens because administrators use controlling strategies—such as rewards and evaluations—to motivate school behaviors. These extrinsic motivators can have a negative effect on teachers' and students' intrinsic motivation (Ryan & Deci, 2017). Even though a few studies have suggested that extrinsic motivation can be experienced as more internalized in collectivist societies (King, 2015; King et al., 2012), the MoE has been using extrinsic motivation strategies before Vision 2030 was launched. However, after launching the vision, the educational goals have been reformed to focus on producing creative students ("Education and Vision 2030," 2017). Therefore, training teachers on how to motivate their students intrinsically is critical to fulfilling the new Saudi educational goals of producing creative students. Teachers need to practice MO strategies in classrooms because it will contribute to empower their students as well as provide them with sustainable positive behavior over a long period. Additionally, MO will help teachers enhance their students' creativity and curiosity, making them more interested in learning and satisfying their desires toward continuous learning. Arthur Clarke, a British science writer, once stated that if children have an interest, then education happens. As such, when teachers are mastery-oriented, they will

have the ability to raise their students' interest in their lessons. Although there is evidence indicating that it is best for teachers to use MO strategies in their classroom most the time regardless of the situations (Gorozidis & Papaioannou, 2016; Ames 1992), the findings of the current study suggest that Saudi teachers did not realize the significance of choosing MO strategies with all students.

The study recommends that the MoE needs to focus on exposing teachers to AGO because it is integral to prompting teachers' mastery GO. Maehr and Midgley (1996) stated that AGO has the potential to guide educational reform efforts. Most research has studied the power of understanding AGO and its influence on pre-service teachers and schools' goal structure (Daniels et al., 2013; Retelsdorf & Gunther, 2011). Daniels et al. (2013) mentioned that it is possible to increase pre-service teachers' mastery goals during teacher education programs. When pre-service teachers are trained to be mastery-oriented, it will increase their proclivity toward mastery-oriented classrooms as well as reduce their intentions to establish performance-oriented classrooms (Daniels et al., 2013). Retelsdorf and Gunther (2011) suggested that their work on teachers' GOs and its influence on their instructional practices provided insight for educational administrators on the importance of mastery GO. They proposed that exposing teachers to AGO in teacher-education programs might be helpful for pre-service teachers to pursue mastery GO.

Regarding examining schools' goal structure in relation to teachers' GOs, Maehr and Midgley (1996) mentioned that teachers' actions are often dictated and constrained by school and district-level policies. Cho and Shim (2013) stated that teachers' GOs toward teaching is shaped by the nature of the school environment (i.e., school goal

structure) where they teach. They recommended that schools provide a mastery goal structure to enable teachers to adopt an MO toward their profession. Gorozidis and Papaioannou (2016) also focused on the educational environment and suggested that policymakers cultivate an educational workplace that is fostering mastery goal. Therefore, focusing on teachers alone is not enough to realize sustainable change in their GOs because the current study's results suggest that teachers' preference of MO strategy dependent on certain characteristics of the situation. It is worth noting that Saudi educational policy requires teachers to receive annual evaluation from the MoE's supervisors. As such, teachers can receive guidance by the MoE's supervisors on how to employ an MO in a situational manner. Therefore, this study recommends that practicing MO strategies in the classroom should be part of the annual evaluation standards to help teachers on applying and sustaining MO strategies in their classrooms.

Limitations and Delimitations

In the current study, the researcher used non-probability sampling methods because probabilistic sampling was not possible. It was difficult for the researcher to obtain a list of contact information of all teachers who teach at public schools in Riyadh due to privacy considerations. The study included only Saudi teachers in Riyadh city because they were available and convenient to study. The study's results are not generalizable to all Saudi teachers in Saudi Arabia or other locations worldwide due to low confidence in person reliability. Also, we should not overlook that that the current study's main purpose was to explore Saudi public-school teachers' GO, and exploratory research is not typically generalizable. The study used a self-report approach to collect data, and this approach has its limitations; for example, teachers may not be honest in

their responses. Several studies have shown that dishonesty in self-reported data affects the results' accuracy (Huang et al., 2012; Tourangeau & Yan, 2007). Another limitation is that the current study survey used dichotomous Rasch model, where each option represents MO or PO strategy. This design limits teachers' selection by forcing them to choose between two options they may dislike. In other words, teachers might believe in different strategies than the options presented to them.

Due to that, the MoE is the gatekeeper of all Saudi public-schools, the current study delimited to Saudi teachers who work at Saudi public-schools in Riyadh city. In addition, the present study focused on exploring Saudi teachers' GOs in regards to mastery-goal orientation and performance-goal orientation; thus, it delimited to these two-goal orientations and disregarded the other goal orientations (i.e., avoidance-mastery goal orientation and avoidance-performance goal orientation). The study focused on mastery GO because it is one of the foundations that will help teachers achieve the goals of the MoE strategic plan, as mentioned in Chapter One. The performance GO was included because it is the current actions that the MoE is taking to achieve its strategic plan goals. Therefore, the study was conducted to provide evidence and convince the MoE of the need to teach AGO in teacher preparation programs and teachers' professional development.

Future Research

The study explored Saudi teachers' GO and identified the areas where Saudi teachers fail to practice MO strategies based on a quantitative investigation of teachers' selection of MO various PO strategies. As there is no previous study about Saudi teachers GO, the current study is a baseline that future research can build on it. Therefore, it offers

several opportunities for future studies to investigate teachers' self-reflection on their personal GO (i.e., mastery goal orientation, performance goal orientation, avoidance-mastery goal orientation, and avoidance-performance goal orientation) across different disciplines. Understanding teachers' personal GO might help design appropriate future training programs that cover teachers' professional development needs.

As mentioned in Chapter Two, AGO is one of the most important theories of motivation in education. Butler (2007) described teachers' AGO as how teachers approach their profession and determine success in various tasks and goals within the field. He mentioned that AGO is very useful in understanding teachers' motivation for schoolwork. In fact, teachers' GOs for teaching have been recognized as an essential aspect of teachers' motivation (Butler, 2007). They are more likely to generate useful evidence to enhance the quality of student learning (Cho &Shim, 2013). Considering this, possible further research is a study that draws reasons why AGO is not part of pre-service teacher preparation programs in Saudi universities. Additionally, future research should study effective strategies for utilizing AGT in both teacher preparation and professional development programs. Moreover, future research needs to explore the MoE supervisors' GO to ensure that they are able to help teachers on applying and sustaining MO strategies in their classrooms.

Saudi education is a gender-segregated education, which involves assigning single-gender teachers and staff at each public school (Baki, 2004). This context required future research to study the difference between Saudi male and female teachers regarding their GOs. According to Midgley et al. (2001), factors such as participants' gender and age are likely to influence individuals' GO. Furthermore, each learning stage required

using appropriate motivational strategies based on students' stages of development. Thus, this is an opportunity to investigate Saudi teachers' GOs across grades too.

Praetorius et al. (2014) study suggests that teachers' GO depends on certain characteristics of the situation. The results of the present study showed that teachers' feelings might have some impact on their GO. This result provides opportunities to investigate the influence of teachers' emotions toward students on their GOs. Furthermore, the present study found that teachers are more likely to practice strategies that are consistent with students' GO, which opens the door to future studies to examine the relationship between teachers' GO and students GO and how teachers' perspective of students can impact teachers' GO. In addition, another future research could explore the factors that influence the changes and stability of teachers' GO.

Finally, researchers could modify the current study survey by adding more scenarios (items) representing difficult situations in the learning context. Based on the current study's result, adding more difficult scenarios will help increase the person reliability and find a separation between teachers regarding their GOs. After this modification of the survey, researchers may conduct a study involving all Saudi teachers to provide generalizable findings. Additionally, conducting a qualitative study to gather more detailed information on other MO or PO strategies that Saudi teachers may use with the students in the scenarios different than what been provided in the survey.

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Appendix A

Survey

Section one:

In this section, you will read 20 scenarios. Imagine that you are teaching these students in the following scenarios. Choose the best practices from your perspective that should be applied to each student. In some scenarios, it is possible that you see both answers are right, and you want to choose both of them. In this case, you should select the most important practice from your perspective for each scenario presented.

1. Ohood loves to receive favorable judgment from her teachers and others around her. She submitted the first assignment in your class, and you gave her poor feedback on her assignment. After the feedback, she hates you and your subject because the feedback makes her feel that she is not smart in your class.
    - I should stop giving Ohood feedback and just provide her with the assignment grade.
    - I should keep providing Ohood with feedback along with assignment grade.
2. Bothena believes that intelligence can be nurtured and developed through hard work. She spends more than 6 hours a day to do her homework and prepare for the next day in school. Also, she is always using external resources to better understand all the topics raised in your class.
    - I should use Bothena as an ideal model for all students by asking her to answer questions in front of her classmates.
    - I should give Bothena more challenging problems to think about when she finished the assigned problems in my class.

3. Lilah has just about to give up on schooling because she feels that she simply does not have the ability to succeed at school. She thinks that she is not intelligent, and she just doesn't want to continue to struggle with academic work that she feels she can't handle.
    - I should explain to Lilah the importance of learning and its benefits for her.
    - I should stick to easy tasks to motivate Lilah to continue learning.
4. Rashed always asks how the Knowledge you presented would be used in the real world. He wants to implement what he has learned from your classroom in the real world. He always focuses on the value and utility of what he is learning.
    - I should provide Rashed with meaningful activities that can be applied in his everyday life.
    - I should require Rashed to focus only on the school textbook activities.
5. Jasmin wants to practice lessons in school just for the sake of becoming more highly skilled. She has a desire to become competent in every task you provide. She always keeps working on the tasks, even if she gets poor feedback from you.
    - I should encourage Jasmin to spend more time thinking about concepts from different perspectives to encourage her to improve more.
    - I should point out Jasmin as a model for other students to encourage her to improve more.
6. Ahmad has a positive attitude towards learning. He is always focusing on you while teaching and wants to absorb information as he learns. He always ready to welcome new information from you and looking for many different kinds of learning strategies.

- "Memorizing facts and scientific terms” is the best strategy that should be used with Ahmad.
- "Understanding facts and scientific terms" is the best strategy that should be used with Ahmad.

7. Omar always tries to understand the material you provide for the purpose of improving himself and getting better. He is willing to do all the work to create a better life for himself. He strives to learn more information from you as much as possible.
    - I should give Omar more time to explore and understand new ideas.
    - I should compare Omar with other students to drive him to explore new ideas.
8. Nasser always enjoys challenging himself through performing difficult tasks. He always participates when you provide the class challenging tasks. Once he solves these kinds of tasks, you can see an expression of happiness on his face.
    - For the benefit of Nasser, I should encourage him to compete with other students in the class.
    - For the benefit of Nasser, I should encourage him to collaborate with other students in the class.
9. Sara always wants to be the best student on your class. She has a goal to succeed in all her classes. Therefore, she focuses on learning to demonstrate her ability in front of you and her classmate, and shows everyone around her that she is a smart student.

- To motivate Sara on learning, I should reward her verbally or materially for doing good work in my class.
- To motivate Sara on learning, I should not laud her in front of her classmates.

10. Rakan thinks that he shouldn't show others that he needs to work hard in his assignments. Rakan wants others to believe that he can get an A in his classes with less effort. He thinks that he should be intelligent by nature and he does not need to make more effort in studying.
    - I should accept Rakan's mistakes while participating in classroom activities.
    - I should hold Rakan accountable for his mistakes while participating in classroom activities.
11. Lena is a very diligent in you class, and she spends a lot of her time and effort working on your class. She wants to get an A on all the exams in your subject. Lena does this because her parents give her SR100 every time she gets an A in your class.
    - I should tell Lena a lot about the importance of making the honor roll or being recognized by the Ministry of Education for her efforts.
    - I should encourage Lena to stop focusing on any prize or honor roll and just focus on the learning itself.
12. Joseph believes that intelligence is a stable characteristic and inherited. He can be either intelligent or not. Thus, he doesn't want to waste his time on learning because he thinks that he is not intelligent by nature.

- It is possible to teach Joseph like other students, and I can make a difference in Joseph's learning.
- There is little that I can do to ensure that Joseph makes significant progress in my class.

13. Jaber has a goal to be the best in your class. Therefore, he is focusing on learning to impress you and his friends. He strives to look smarter than anyone in the class.
    - I should make sure that Jaber focuses on showing others that he is working better than them because that will make him work harder.
    - I should make sure that the activities and homework Jaber does really makes him think about his work and not others students' work.
14. Rayan is an extremely competitive student. He likes to show everyone how smart he is; he is also very concerned about not appearing "stupid" by making mistakes in front of his classmates in your class.
    - During class, I should often provide several different activities so that Rayan and his classmates can choose among them and learn.
    - During class, I should often provide a single activity so that Rayan and his classmates can exactly learn the same content.
15. Roaa seeks to prove her abilities. However, she usually gives up when she faces difficult activities from you, she even sometimes tries to avoid the activities that is beyond her ability.
    - I should evaluate Roaa and provide her with my feedback privately.
    - I should laud Roaa and evaluate her in front of her classmate when she does her assignments correctly.

16. Mohammed has a long-term goal to be an inventor. Therefore, he is focusing to learn from you to obtain knowledge, experiences, skills, and competencies that he thinks will help him reach his goal.
    - I should encourage Mohammed to only focus on getting high grades.
    - I should encourage Mohammed to focus on getting more knowledge in my class.
17. Haddel loves school. She enjoys any educational task presented to her from you, and she approaches each activity from you with an extraordinarily positive attitude.
    - I should always allow Haddel to continue working on a task even if she exceeded the amount of time allotted for it.
    - I should always stop Haddel from working on a task if she exceeded the time allocated to the task.
18. Nofe just got a low grade on your test. She considers cheating on the next test to avoid failing in your class.
    - I should always tell Nofe to enjoy learning and don't focus on grades.
    - I should encourage Nofe to focus on getting high grades.
19. Fahad hates reading. Most of his teachers say that Fahad is "not motivated" when it comes to reading.
    - I should laud the achievement of Fahad's classmates and encourage him to be like them.
    - I should focus on Fahad's reading ability and try to improve it as much as possible

20. Sahar always shows you that she wants to work harder in your class. However, she always fails on your subject's exams. After each exam, she talks to you about how she wants to improve her grades. But she never improved and continued to perform poorly in your subject's exams. Sahar shows you that she is trying her best, but because of her low grades, you know she does not have the necessary skills to succeed in your course.

    - I will give Sahar another chance to redo her exams when she asks.
    - I will never give Sahar another chance to redo her exams when she asks.

Section Two:

Specify your gender:

- Male
- Female

Educational stage/level You are teaching:

- Elementary
- Middle
- High

Teacher's career path:

- Assistant Teacher
- Practitioner Teacher
- Advanced Teacher

- Expert Teacher
- Teacher but not employed

What major do you teach? ……

How long have you been teaching?

- 1-5
- 6-10
- 11-15
- 16-21
- More than 21

Specify your age group:

- 22-29
- 30-39
- 40-50
- More than 50

Did you ever attend professional development workshops outside the country?

- Yes
- No

Often motivational theories guide our philosophy of education to increase the level of student interaction within classrooms, which of the following theories you have exposed to within your teacher preparation programs or professional development workshops:

- Achievement Goal Theory
- Self-Determination Theory
- Goals Theory
- Intelligent Theory
- None of the Above

Appendix B

Permission Letter from the MoE

المملكة العربية السعودية
وزارة التعليم
٢٨٠
الإدارة العامة للتعليم بمنطقة الرياض
إدارة التخطيط و التطوير

وزارة التعليم
Ministry of Education

الرقم : ١٦١١١
التاريخ : ٨ / ٣ / ١٤٤٢هـ
المرفقات :

" تسهيل مهمة باحث "

اسم الباحث	أفنان بنت محمد بن عبدالله الرشيد		
السجل المدني	١ ٠ ٨ ٢ ٣ ٥ ٦ ٥ ٧ ٥	العام الدراسي	١٤٤٢هـ
الجامعة	جامعة توليدو/ الولايات المتحدة الأمريكية	الكلية	التربية
الدرجة العلمية	الدكتوراه	التخصص	علم النفس التربوي
الغرض من الدراسة	الحصول على الدرجة العلمية	عينة الدراسة	معلم ، معلمة المرحلة: (ب -م -ث)
عنوان الدراسة	استكشاف توجهات المعلمين والمعلمات السعوديين نحو الأهداف: مناشدة إلى توجه الإتقان نحو الهدف كرؤية لمستقبل أفضل .		
فترة التطبيق	خلال الفصل الدراسي الأول لعام ١٤٤٢هـ		
رابط أداة الدراسة	https://cutt.us/Uzlme	الباركود QR Code	
للتواصل مع الباحث	عند الحاجة يتم التواصل مع الباحث من خلال بياناته في رابط الأداة .		

المكرم/ة قائد/ة : مدرسة _____ (جميع المراحل) وفقه/ا الله

السلام عليكم ورحمة الله وبركاته ، ، ، ويعد:

إشارة إلى قرار سعادة مدير عام التعليم بمنطقة الرياض رقم ٣٨٩٢٠٧٩٣ وتاريخ ١٤٣٨/٦/٢٣هـ بشأن تفويض الصلاحية لإدارة التخطيط والتطوير لتسهيل مهمة الباحثين والباحثات، وحيث تقدم إلينا الباحث/ة (الموضحة بياناته/ ـا أعلاه) بطلب تطبيق أداة البحث على عينة الدراسة في نطاق الإدارة العامة للتعليم بمنطقة الرياض، ونظراً لاكتمال الأوراق المطلوبة ، **تأمل تسهيل مهمته/ ـا**, مع ملاحظة أن الباحث/ة يتحمل كامل المسؤولية المتعلقة بمختلف جوانب البحث، ولا يعني سماح الإدارة العامة للتعليم موافقتها بالضرورة على مشكلة البحث أو على الطرق والأساليب المستخدمة في دراستها ومعالجتها، أو على نتائج الدراسة .

العزيز

شاكرين ومقدرين جهودكم وتقبلوا تحياتنا .. والله الموفق ، ، ،

مدير إدارة التخطيط والتطوير
١٤٤٢
محمد بن إبراهيم الريدي

Appendix C

IRB Letter

The University of Toledo
Human Research Protection Program
Social, Behavioral and Educational IRB
Center for Creative Education – Suite 2102
3000 Arlington Avenue, Toledo, Ohio 43614
Phone: 419-383-6796 Fax: 419-383-3248
(FWA00010686)

IRB Exemption Granted Notification

To: Vicki Dagostino-Kalniz

Social & Philosophical Foundations

From: Social, Behavioral and Educational IRB

IRB Number: 300847

Title: Exploring Saudi Teachers' Goal Orientation: Appeal for Mastery Goal Orientation as a Vision for a Better Future

Event Review Type: Exempt

Signed Tuesday, December 8, 2020 8:02:38 AM ET by Case, Patricia F.

The above named project was reviewed and determined to meet criteria for exempt research under the following category or categories:

Category 2

by the designee of the University's Social, Behavioral and Educational IRB. Exemption has been granted as of 12/07/2020. The full board will acknowledge this at its next convened meeting.

You are free to conduct your study without further reporting to the Social, Behavioral and Educational IRB unless major revisions make your research no longer eligible for the exemption approval or unless you need to make personnel changes. If you are unsure of whether any proposed changes would require IRB approval, please contact the IRB office. Upon completion of your study, you are required to submit a final report form to the Social, Behavioral and Educational IRB office.

Documents reviewed and approved as part of this protocol application submission:

- Afnan's COI form.pdf (Conflict of Interest Disclosure)
- Dr. Dagostino's COI form.pdf (Conflict of Interest Disclosure)
- Dr. Dagostino's COI form.pdf (Conflict of Interest Disclosure)
- Approval for translation of 3 documents (1).pdf (Consent - Informed Consent Form)
- IC Arabic Saudi Teachersa^__ Practices_Waiver_of_Written_Consent_Exempt Research.docx (Consent - Informed Consent Form)
- IC English Saudi Teachersa^__ Practices_Waiver_of_Written_Consent_Exempt Research.doc (Consent - Informed Consent Form)
- Literature Review (the proposal paper) (Literature Review/Search)
- Approval for translation of 3 documents.pdf (Recruitment Materials)
- Cover Letter For Survey Recruitment - English-Arabic.docx (Recruitment Materials)
- Approval for translation of 3 documents.pdf (Site Permission Letter)
- Arabic (Original) Letter Facilitating A Researcher Task.pdf (Site Permission Letter)

The University of Toledo
Human Research Protection Program
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3000 Arlington Avenue, Toledo, Ohio 43614
Phone: 419-383-6796 Fax: 419-383-3248
(FWA00010686)

- English (Translated) Letter Facilitating A Researcher Task.pdf (Site Permission Letter)
- Survey (Surveys/Questionnaires/Interview Script)
- Survey (Surveys/Questionnaires/Interview Script)

Only the most recent IRB approved form(s) listed above may be used when enrolling participants into research.

Appendix D

The Informed Consent Form

Department of Educational Foundations and Leadership
Judith Herb College of Education
Gillham Hall 5000, Mail Stop 921
2801 W. Bancroft St.
Toledo, Ohio 43606-3390
Phone # 419.530.4306
Fax # 419.530.8447

ADULT RESEARCH SUBJECT - Informed Consent Form
(Saudi Teachers' Goal Orientations)

Principal Investigator *Dr. Victoria Dagostino-Kalniz, department of Educational Psychology at the University of Toledo.*

Purpose: You are invited to participate in a research project entitled *Exploring Saudi Teachers' Goal Orientation: Appeal for Mastery Goal Orientation as a Vision for a Better Future, which* is being conducted at the University of Toledo. The purpose of this study is *to explore Saudi teachers' self-reported Goal Orientations.*

Description of Procedures: The study's survey contains two sections. The first section will present 20 scenarios, and each scenario has two statements. You will be asked to select the most favorable strategy that could help the student in each scenario. The second section of the survey will capture your demographic information to better describe the sample. The survey should take no longer than 10-20 minutes to be completed. Thank you for your willingness to share this information! It will help me to understand Saudi teachers' Goal Orientations.

Potential Risks: *There are low risks at this time to participate in this study. Your response is anonymous and no one will have access to the data other than myself and Dr. Victoria Dagostino-Kalniz. The researchers will not be able to identify any participants' names and link them to their responses.*

Potential Benefits: As a participant in this research study, there will be no direct benefit for you; however, information from this study may benefit other people now or in the future by learning about the results of this research.

Confidentiality: *The researchers will make every effort to prevent anyone who is not on the research team from knowing that you provided this information, or what that information is. Although we will make every effort to protect your confidentiality, there is a low risk that this might be breached. The researchers will set up the survey to not collect the user's IP Address by enabling Anonymize Responses (i.e., hyperlink) in the Survey Options.*

Voluntary Participation: The anonymous data collected from you will be used for future research purposes. As a reminder, your participation in this research is voluntary. Your refusal to participate in this study will involve no penalty or loss of benefits to which you are otherwise entitled and will not affect your relationship with your school or your district. You may discontinue participation at any time without any penalty or loss of benefits.

Contact Information: Before you decide to accept this invitation to take part in this study, you may ask any questions that you might have. If you have any questions at any time before, during or after your participation you should contact me Afnan Alrshed, Email: Afnan.Alrshed@rockets.utoledo.edu , phone: 620-757-6145 or +966546344900. Or contact *Victoria Dagostino-Kalniz, Email vicki.dagostino-kalniz@utoledo.edu, phone: 419-530-4306*. If you have questions beyond those answered by the research team or your rights as a research subject or research-related injuries, the Chairperson of the SBE Institutional Review Board may be contacted through the Human Research Protection Program on the main campus of the University of Toledo at (419) 530-6167.

CONSENT SECTION – Please read carefully

You are making a decision whether or not to participate in this research study. By participating you indicate that you have read the information provided above, you have had all your questions answered, and you have decided to take part in this research. You may take as much time as necessary to think it over. Your participation confirms that you are at least 18 years old.

- Yes, I consent
- No, I don't consent

Q1. Are you a Teacher?

- Yes
- No

Q2. Are you teaching in a Riyadh city?

- Yes
- No

Q3. Are you teaching in a public school?

- Yes
- No