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Reliability And Validity Of An Arabic Translation Of Academic Self-Efficacy Scale (ase) On Students At King Faisal University

Mohammed Fahad Almohazie
Wayne State University,

RELIABILITY AND VALIDITY OF AN ARABIC TRANSLATION OF ACADEMIC SELF-EFFICACY SCALE (ASE) ON STUDENTS AT KING FAISAL UNIVERSITY

by

MOHAMMED F. AL MOHAZIE

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DEDICATION

This dissertation is dedicated to my father, Fahad and my mother, Moneera for giving me their endless love and support. For my family, my brothers and sisters, Abdullrahman, Abdullah, Adel, Nadia, and Najat. For my great wife, Razan and my beautiful kids, Layan and Fahad, who gave my life a great value. They are the source of my happiness and strength.

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CHAPTER 1 INTRODUCTION

Expectations of self-efficacy is a structure that underlies cognitive and social learning theory. Self-efficacy expectations have great importance because of its contribution in behavior modification. Bandura (1977) defined self-efficacy as a group of self-identifiers that included personal expectations about the ability to overcome difficulties in personal life and tasks successfully. Self-efficacy expectations are important for educational and psychological practice, because it affects how people are feeling and thinking. Self-efficacy expectations are dependent on a person's perception about achieving a certain behavior pattern. It relates to the emotional aspect, in terms of, depression, anxiety, low self-value and the cognitive aspect associated with pessimistic tendencies and underestimation of self-value (Schwarzer, 1994). This efficacy has an impact on the type of personal behavior, performed effort, and personal persistence in the future (Bandura, 1977). Therefore, it manifests itself through self-perception and the ability to implement certain behavior patterns successfully.

Personal expectations about self-efficacy affect the behavior in three different levels; (a) choice of task, (b) the effort for the task, and (c) perseverance in seeking to overcome the situation (Bandura, 1977). Schwarzer (1994) stated self-efficacy was an important source of motivation for the choice of attitudes, preference for certain activities, the development of behavior, and choosing the most suitable behavior. Self-efficacy expectations can display the amount of the current self-perception and self-efficiency at the same time. Also, it could be used to predict future behavior. It is important to use self-efficacy as an indicator for preventive measures and to evaluate the extent of future success (Bandura, 1988).

Schwarzer (1994) and Bandura's (1989) studies on self-efficacy expectations exhibited the possibility of behavior modification and the prediction of future academic success. Therefore, the

achievement level will increase and the probability of failure will be reduced. Bandura (1978) and Adams (1977) were conducted on patients who were suffering from a phobia of snakes, and it was found there was a high correlation between low anxiety and high self-efficacy expectations (r = 0.77).

Bandura's (1988) continuation led to similar results. It was based on patients suffering from a phobia of public places, where the correlation coefficient between high self-efficacy expectations and their ability to overcoming difficult situations was 0.70.

Academic Self-Efficacy and GPA

Bandura (1993) postulated self-efficacy beliefs have a positive impact on college student performance by raising student motivation and persistence to master academic tasks through fostering use of acquired skills and knowledge. The concept of academic self-efficacy refers to students' trust in their ability to perform academic tasks like preparing for tests and writing papers. (Zajacova, Lynch, & Espenshade, 2005). Academic self-efficacy refers to an individual's confidence in their ability to successfully perform academic tasks at a designated level (Schunk, 1991).

Academic self-efficacy has been shown to consistently predict students' grades and their persistence for retention in universities (Bandura, 1989; Lane & Lane, 2001; Poyrazli, Arbona, Nora, McPherson, & Pisecco, 2002). For example, a meta-analysis by Robbins et al. (2004) of 109 studies on the relationship between psychosocial and study skill factors (PSFs) and two college outcomes (GPA and retention) found academic self-efficacy had the highest estimated correlation with the GPA of university students (p = 0.496, 90% CI = 0.444 - 0.548) in comparison with PSFs as motivation, social support, institutional commitment, academic skills, and financial support. Robbins et al. (2004) also found academic self-efficacy had the second highest estimated true

correlation with the retention of university students next to academic skills ($p = 0.359$, 90% CI = 0.354 - 0.363).

Academic Self- Efficacy Scale (ASE)

The *Academic Self- Efficacy Scale (ASE)* is an eight-item rapid assessment instrument developed by Chemers, Hu, and Garcia (2001) to assess respondent self-efficacy regarding several academic skills related to academic achievement, such as time management, taking notes, taking tests, and general academic ability. In a longitudinal study of 256 first-year university students, they found the *ASE* was correlated with academic performance as measured by the GPA ($r = 0.34$, $p < 0.001$).

In a study of 66 undergraduate students from a university in the northwestern United States on the relationship between academic self-efficacy and academic performance, Khan (2013) found the *ASE* was positively correlated with GPA ($r = 0.49$, $p < 0.01$). A study by Baier, Markman, and Pernice-Duca (2016) using the *College Self-Efficacy Inventory* (Solberg, O-Brian, Villareal, Kennel, & Davis, 1993), a 20-item survey designed to assess student self-efficacy in several similar academic skills as the ASE (e.g., managing time effectively, taking good class notes, and doing well on exams) found academic self-efficacy was a positive predictor of intention to persist as a university student among 237 first time in any college students (FTIACS) at the beginning of the first semester ($\beta = 0.49$, $p < 0.001$) and at the end of the first semester ($\beta = 0.40$, $p < 0.001$). These studies address the strong positive impact of academic self-efficacy on university students' grades and retention.

University Students in Saudi Arabia

Saudi Arabia is one of the fastest-growing countries, where the population increased during the last 20 years around 86%. According to the 2017 annual report of statistics about Saudi Arabia,

the number of people in Saudi Arabia amounted to 32.5 million in 2017 (General Authority for Statistics, 2017). Saudi universities report large numbers of students applying every year, however, many students drop out. According to the Minister of Higher Education in the Seminar of Admission Standards in Universities of Saudi Arabia--Techniques and Developments (2015), the admission rate in Saudi universities reached 86%. Nonetheless, the annual percentage of students dropping out of universities reached 30%.

Statistics on education in Saudi Arabia suggest university student persistence for retention is an important issue to be addressed. Therefore, educators in Saudi Arabia may benefit from a rapid assessment tool such as the *ASE* that can help with predicting university student retention. Additionally, given the increasing probability of student retention through four years of college as GPA increases (Murtaugh, Burns, & Schuster, 1999), Saudi Arabian educators may also benefit from a rapid assessment tool such as the ASE that can help with predicting university GPA.

Purpose of the Study

The purpose of this study is to create an Arabic version of the *ASE* that has acceptable psychometric properties. The immediate obstacle in meeting the purpose of this study is the absence of a published Arabic version of the *ASE*. Thus, the aims of this study are to create an Arabic version of the *ASE* and determine its psychometric properties in a sample of students attending King Faisal University in Saudi Arabia.

Study Questions

The research questions are:

1. To what extent does an Arabic translation of the *Academic Self-Efficacy Scale (ASE)* match the original English version in terms of language and cultural accuracy?

2. Does an Arabic version of the *Academic Self-Efficacy Scale (ASE)* have acceptable reliability properties?
3. Does an Arabic version of the *Academic Self-Efficacy Scale (ASE)* have acceptable validity properties?
4. Are there any gender differences in the Arabic version of the *Academic Self-Efficacy Scale (ASE)*?

Study Assumptions

Assumptions in this study:

1. The content predictive and construct validity will be maintained in the Arabic translation of the *ASE*.
2. The translated Arabic instrument is linguistically appropriate for all Arab dialects. However, its cultural construction limits it application to students in Saudi Arabia only.

Study Limitations

The following limitations are acknowledged for this study:

1. This study is limited to the King Faisal University Saudi student population. Its linguistic and cultural properties enable it to be appropriate for university Saudi students at King Faisal University.
2. The sample is limited to full-time first-year university students at King Faisal University in the academic year of 2017-2018 who graduated from high school with an age between 18-25 years old. This limits the instrument to be generalized to other education levels and ages.

Definition of Key Terms and Acronyms

Academic Self-Efficacy Scale (ASE): The ASE is an eight-item rapid assessment instrument developed by Chemers et al. (2001) for the purposes of measuring a student's confidence in their ability to successfully perform several academic tasks. Academic self-efficacy in general, and the ASE in particular, have been found to consistently predict student GPA and retention (Baier et al., 2016; Chemers et al., 2001; Khan, 2013; Robbins et al., 2004).

King Faisal University (KFU): KFU is a public university that was founded in 1975 in the city of Hofuof - Al-Hassa, Eastern Region of Saudi Arabia. King Faisal University hosts a full-time student population of 38,488 in its undergraduate level main stream programs (39% male students and 61% female students, spread over 13 colleges and 75 different program) and 1,778 student enrollment in postgraduate programs in 35 different programs. In addition, 151883 students (male and female) are enrolled in distance and e-learning education programs (King Faisal University, 2017).

Importance of the Study

The importance of this study concerns the future academic performance and retention of university students in Saudi Arabia. Specifically, the importance of this study is to demonstrate the positive effects of an Arabic ASE on the overall academic performance and retention of Saudi students in terms of increased GPA, increased intention to persist, and increased graduation rates.

CHAPTER 2 LITERATURE REVIEW

Psychologists have identified certain factors that are indicative of successful academic performance. These include self-efficacy, stress coping skills and resilience (Chemers et al., 2001; Khan, 2013). Poor academic performance creates stress and is most often an indicator of difficulty adjusting to academic life and makes the possibility of dropping out of college more likely (Tinto, 1994). Bong and Skaalvik (2003) concluded that academic self-concept and academic self-efficacy have a positive correlation to student motivation, emotion, and achievement.

Research on academic self-efficacy indicated there is a relationship between academic self-efficacy and student outcomes that include persistence, intrinsic motivation, and academic achievement (Keye & Pidgeon, 2013). In the last few decades, research has focused on identifying the traits related to self-efficacy, particularly resilience, which are most closely linked to student academic performance (Keye & Pidgeon, 2013). A number of studies that have shown that academic self-efficacy could mediate the effects of gender, prior knowledge, and general cognitive skills on student outcome variables of stress, interest, and academic performance (Wang & Casteñeda-Sound, 2011).

Self-Efficacy

Self-efficacy is defined by Bandura (1994) as "one's belief in their capability to produce designated levels of performance for events that affect their lives, which determines how people feel, think, motivate themselves, and behave" (p. 1). Academic self-efficacy is specific to the context of mastering academic performance and, more specifically, mastering college academic subjects (Chemers et al., 2001). The measurement of mastery is most commonly determined by the Grade Point Average (GPA) earned in academic subjects (Khan, 2013).

Robbins, Lauver, Le, Davis, Langley, and Carlstrom (2004) conducted a meta-analysis citing over 100 studies on psychosocial factors that affect college GPA and found that self-efficacy was the most important predictor of success. This was similarly found in a study by Ramos-Sanchez and Nichols (2007) in which 192 college freshmen were surveyed to determine self-efficacy levels between first-generation and non-first generation college students and the possible impact on academic performance. Sanchez and Nichols (2007) noted that when there are high levels of self-efficacy shown in students, they academically outperformed those with lower levels of self-efficacy (Sanchez & Nichols, 2007).

Student self-efficacy should be strengthened, because it is not an intrinsic behavior trait. Instead, it is an outgrowth of personal intention based on mindfulness and the ability to maintain psychological stability (Thompson, Arnkoff, & Glass, 2011). Intention was defined in Warshaw and Davis' (1985) study as "the degree to which a person has formulated conscious plans to perform or not perform some specified future direction" (p. 214). Making a conscience commitment to perform an action or not is an indicator of intention (Warshaw & Davis, 1985). The higher the level of an individual's intention, the higher expectations of that individual to try, leading to a greater likelihood of the behaviorial commitment to actually be performed.

Sources of self-efficacy. Arlino (2012) indicated that people determine efficacy based on four essential sources: (a) mastery experiences; (b) observation of others; (c) persuasion by others; and (d) affective states that perceive capability, strength, and vulnerability. Of these sources, the most important source has been mastery experiences in which the individual gained the personal resources necessary to persist through failure (Arlino, 2012). Strong efficacy expectations have been created with repeated success; however, reduction in self-efficacy has been usually due to repetition of failure (Arlino, 2012).

Equally useful in the development of self-efficacy has been the observation of the successes and failures of others. According to Bandura (1994), if one observed others being successful, this inculcated a belief that success for self was also attainable through persistence and resilience. Observations could also make the experience of failure less harmful to the psychological well-being of the individual, as it would create a way to observe another's failure and develop strategies to not make the same error (Bandura, 1994).

When efficacy information was supplied via the verbal persuasion of others, it was limited by the power of the relationship between the two individuals, the one offering persuasion, and the other receiving it (Arlino, 2012). Such social persuasion could be used effectively in an academic setting as it could help students to believe they have both the resilience to bounce back from a failure and the persistence to keep trying (Bandura, 1994).

The final source of efficacy information has stemmed from a self-feedback loop during specific tasks. Bandura (1994) indicated as an individual engages in an endeavor, there was a self-assessment loop that was created in which each person interprets self-performance based on a set of pre-determined criteria that was self-selected. This multi-leveled system would act as a predictor of success based on how an individual perceived their performance based on the task and either the social or psychological expectation of success (Bandura, 1994).

However, Bandura (1997) found that stressors within particular domains of activity could have a negative impact on the perception of self-efficacy. Through this perception, if a student felt they could control either the parameters or the construct of the task, or has adequate resources to be reasonable in the expectation of success, the possibility of higher levels of self-efficacy would be possible. The ability to predict self-efficacy would be reduced when stress factors were not controlled (Bandura, 1997).

Stress. College can be very stressful to most students. Lazarus (1966, 1993) defined stress as a state of psychological over-stimulation that results when perceived external demands exceed a person's adaptive emotional abilities. External demands can be either acute, meaning such demands occur suddenly and are limited in time frame, or external demands can be ongoing and represent a long-term strain (Honicke & Broadbent, 2015). Earnest and Dwyer (2010) defined stress as "the negative emotional or physical state that results from being exposed to a threat" (p. 2).

Academic stress has most often been related to academic performance, particularly for first-year college students who were from diverse backgrounds (Zajacova, Lynch, & Espenshade, 2005). Some students have been able to handle stress better than others. Those students who were able to effectively manage stress have developed stress coping skills. Earnest and Dwyer (2010) defined stress coping skills as "the ability to apply strategies that minimize and manage the stress response" (p. 3). There is a negative correlation between stress levels and academic performance in general (Zajacova et al., 2005.)

Theories Related to Self-Efficacy

The theory of planned behavior. The theory of planned behavior states that the more an individual believes he or she has control over resources and opportunities, along with the fewer obstacles that are anticipated; the greater is the perceived control over behavior. Two rationales are used to show the correlation between self-efficacy and behavioral control. First, the higher the levels of perceived self-efficacy, the greater the chances of a desired behavior. Second, there must be some level of actual control within a situation that corresponds to the perceptions of self-efficacy (Ajzen, 2002).

Social learning theory. Social Cognitive Theory, as proposed by Bandura (1989), stated that an individual's internal thought process might be a moderator between their knowledge and the actions they perform. Additionally, the evaluation of an individual's thought process and personal experiences occur through self-reflection. The success an individual had in achieving prior goals, along with his or her skill level and knowledge, are typically weak predictors of future attainments (Elias & Loomis, 2000).

According to Bandura (1989):

> "Social Cognitive Theory subscribes to a model of emergent interactive agency. Persons are neither autonomous agents nor simply mechanical conveyers of animating environmental influences. Rather, they make causal contribution to their own motivation and action within a system of triadic reciprocal causation" (p. 1175).

The belief that an individual holds about the result of his or her efforts and abilities would highly predict their behavior (Elias & MacDonald, 2007). An individual's perception of success in their prior performance may lead them to make adjustments in their environment, and alter their self-beliefs (Keye & Pidgeon, 2013). Future performance could thereby be modified and adjusted by this perception. This revelation led to Bandura's (1986) understanding of reciprocal determinism, eventually becoming his model of triadic reciprocal causation.

Triadic reciprocal causation. Bandura (1986) noted that reciprocal determinism has been viewed as interactions resulting in a form of triadic reciprocity, which were created by personal factors presented as environmental influences, behavior, cognition affect, and biological events. A dynamic triadic reciprocal causation system is embodied in the interaction between students' behavior, psychological and personal characteristics, and their environment, which affects their desire to remain enrolled (Bandura, 1997; Elias & Loomis, 2000). Elias and MacDonald (2007) noted that individuals were considered as both product and producer of their social system and environment.

An individual's thought process and experience is self-evaluated under the Social Cognitive Theory, via self-reflection, allowing them to evaluate, as well as alter, their environments and social systems (Bandura, 1977; 1989). Perceptions of self-efficacy are included in such self-evaluations.

There are three dimensions in which self-efficacy may vary: Level, which is how capable an individual feels performing tasks and behaviors with multiple degrees of difficulty; Strength, which is an individual's confidence in their performance judgment; and Generality, which measures the amount of control an individual feels he or she has in a wide scope of varying situations, thereby attaining self-efficacy (Bandura, 1997; Elias & Loomis, 2000).

Bandura (1997) stated the first two dimensions of self-efficacy, level and strength, determined if a behavior would be initiated, the amount of effort that would be put forth, whether the effort would continue under negative circumstances. Self-efficacy allows an individual the freedom required to choose his or her own desired path, and modify their environment as needed (Bandura, 1997).

Bandura (1997) noted that the degree of perceived self-efficacy an individual held, had a corresponding effect on that an individual's efforts, pursuits, and endurance. As a result, if an individual possessed low levels of efficacy for completing any particular job, that individual may avoid it, while in comparison, an individual with high levels of efficacy would embrace the job. Individuals with higher levels of self-efficacy showed more endurance and displayed higher levels of effort when obstacles were presented (Schunk, 1991).

Although self-efficacy is a critical influencer on behavior, there are several other variables as well. In areas where achievement is a primary measurement, such as education, critical variables include outcome expectations, skills, and perceived outcome values (Chemers et al., 2001). Self-

efficacy alone will not suffice for a lack of skills or produce competent performances (Schunk, 1991). Bandura (1997) noted an individual's efficacy beliefs were not stable and showed high levels of variance once they have been formed due to the individual constantly evaluating new information. After establishing these beliefs over extended periods however, especially when the foundation of the beliefs were based on a sufficient amount of information, the individual's efficacy beliefs were unlikely to change.

Self-efficacy for academic achievement. Zimmerman (1995) defined academic self-efficacy as "personal judgements of one's capabilities to organize and execute courses of action to attain designated types of educational performances" (p. 203). Wang and Castañeda-Sound (2008) noted self-efficacy research in academic settings focused on two main areas: investigating the relationship between college major, efficacy beliefs, and career choice and; exploring the link among efficacy beliefs, pertaining to psychological constructs (particularly self-esteem), and academic motivation and achievement.

There are links between self-efficacy for self-regulation, academic self-regulatory processes, academic achievement, and self-efficacy perceptions (Bandura, 1977, 1986, 1997; Zimmerman, 1995; Zimmerman, Bandura, & Martinez-Pons, 1992). By raising students' goals related to academic achievement, academic self-efficacy had both a direct and indirect influence on achievement, most commonly observed as grades. Hornicke and Broadbent (2015) noted by believing they were capable of satisfactorily performing academic tasks, students utilized more strategies, both cognitive and metacognitive, and endured for longer time periods than students who failed to believe they were sufficiently capable.

Bandura (1977, 1997) documented the research in support of self-efficacy's role in predicting and explaining behavior in humans. Artino (2012) summarized extensive literature on academic self-efficacy, such as:

- Individual's perceptions about their abilities and efforts are persuasive in determining academic behaviors, skill, and knowledge, while prior accomplishments are typically poor predictors of future accomplishments;
- Prior attainments or outcome expectations are lower indicators of academic self-efficacy among college undergraduates' interest and choice courses;
- Self-efficacy works well as a motivation construct in its ability to predict academic self-beliefs and performance;
- There is a correlation between self-efficacy beliefs and other self-beliefs such as motivation constructs, academic choices, changes, and achievement; and
- Broad measures of self-efficacy are weak predictors of academic performances when context is not taken into account.

Motivation. Motivation is mainly how behavior is initiated and sustained (Bandura, 1977). Bandura (1977, 1986) noted through avoidance of unfavorable external stimuli, such as pain, and severe discomfort, motivation was often obtained. In the absence of external simulation however, many examples of motivation may be activated and maintained over long periods. An individual's ability to predict future consequences through self-reflection could provide a source of cognitive motivation. People may perform many activities, planned through careful consideration, in order to acquire benefits and avoid future obstacles. Additional cognitive motivation can be found through setting goals and self-regulating reinforcement, which are mediating influences in the development and persistence of individual motivation (Bandura, 1977).

Goal setting and motivation. According to Bandura (1977), "when individuals commit themselves to explicit goals, perceived negative discrepancies between what they do and what they seek to achieve create dissatisfactions that serve as motivational inducements for change" (p. 161). Students who set, or are given a goal by teachers, demonstrate the relationship between motivation and goal setting. When given an opportunity to determine their own goals, students experience a higher sense of self-efficacy when achieving that goal. Bandura (1988), noted students are also more likely to view a goal as a requirement to complete, which is an important characteristic for goals possess if they are to affect performance. As students engage in a task, they participate in activities in which they perceive will lead to future goal attainment (Bandura, 1988). The goals alone do not drive the motivational effects, but from how people self-evaluate their responses to their behavior. Improved self-efficacy can also be approved by providing effective feedback to students on their goal progression (Bandura 1997).

Proximity, specificity, and difficulty are the foundational properties of a goals' motivational benefits. Self-efficacy and motivation are promoted better through proximal goals than distant goals due to the ease of progress judgment for students. Similarly, specificity in performance standards of goals delivers higher levels of efficacy motivation compared to more general goals. Difficult goals offer more insight about an individual's capabilities and display more effectiveness as skills develop (Artino, 2012).

Students who exhibit a higher sense of efficacy when completing tasks related to education tend to show stronger work ethic, higher levels of participation, and endure for longer durations than students that exhibit lower levels of efficacy (Bandura, 1995). Rate of performance and expenditure of energy have both been noted by Bandura (1995) as dependable measurements of

effort in self-efficacy research. Evidence has also been presented that self-efficacy was associated with both indicators of motivation.

Support for persistence, as a result of students' perceived self-efficacy, has also been found (Bandura, 1995). Influences on the skills acquired by students has been attributed to perceived self-efficacy as well, by increasing persistence, which indicates that self-efficacy perceptions may influence student learning via cognitive and motivational mechanisms (Elias & Loomis, 2000).

Outcome expectations. Although confusion exists when considering self-efficacy and outcome expectations, they are actually different constructs. While self-efficacy represents an individual's assurance in his or her own ability to produce the behavior necessary to achieve a desired goal, outcome expectancy represents the individuals' perception of likelihood that a specific behavior would produce an expected outcome (Bandura, 1997).

Expectancy-value theories. The theory of outcome expectations was derived from expectancy-value theories. Expectancy-value theories emphasized the notion that behavior is a mutual function of an individual's presumption of acquiring a specific outcome as a function of performing a behavior, and to what extent the individual values that outcome (Artino, 2012). Bandura (1997) postulated that when faced with attaining multiple goals in a given situation, people would gauge the possibility of succeeding in attaining those goals. If an individual perceives a goal as unattainable, he or she will not be motivated to attempt that nonviable goal.

Bandura (1997) noted when one's judgment of possible accomplishments was largely dependent on expected outcomes; when self-efficacy perceptions were controlled, outcome expectations would be unrealistic and fail to directly contribute to predictive behavior. Bandura (1997) stated, "In most social, intellectual, and physical pursuits, those who judge themselves

highly efficacious will expect favorable outcomes, whereas those who expect poor performances of themselves will conjure up negative outcomes" (p. 24).

Theories of Student Retention

The completion of a degree has examined based on why students chose to leave college, with a focus on predetermining factors, as well as negative demographic variables (low-income, immigrant, and non-traditional students). However, there has been less emphasis on psychosocial variables and their impact on who intend to remain enrolled.

Tinto's theory of college student departure. Retention refers to an institution's capacity to maintain student enrollment until completion of a certified program of study. Tinto (1993) noted that almost 50% of those entering two year colleges, and more than 25% of students beginning at a four-year university, will not remain with the institution after the first year. This statistic was even more pronounced when examining diverse student populations. It is estimated that nearly 1.1 million individuals will leave a college or university without a degree (Chemers et al., 2001).

A substantial volume of research of student retention theory was related to the ability of the student to participate and assimilate both academically and socially into the community of the university. Vincent Tinto introduced one of the most widely accepted theories in the 1970s.

Tinto (1993) proposed student enrollment was closely correlated to, and determined by, the extent in which the student was integrated socially and academically into the academic and social systems of an institution. Tinto (1993) noted that when entering college, all students possess various individual ideals, psychosocial affects, and characteristics, which were adapted through community and family background characteristics (i.e. parental social status and educational level), pre-college experiences with school, social and intellectual skills, individual attributes (i.e.

gender, race, and ability), financial resources, and dispositions (i.e. intellectual and political preferences, motivations).

Initially, a student's commitment to the college or university, as well as the goal of college graduation, is most directly influenced by what they bring to the institution. Their individual entry characteristic influences the departure decision as well. Integration into the social and academic community of the college or university may become affected by the student's level of initial commitment, however. Therefore, a student who chooses to attend college based on their experiences before college, the decision to remain in college is influenced by how those pre-college experiences shaped the student's attitude and motivation, and those same attitudes and motivations how invested in the college the student will become (Tinto, 1993).

Tinto (1993) noted the unique social structure and set of values that create the external environment, which are part of the larger social and academic community that make up the institution, as well as the institution itself. External commitments modify a student's intentions, institutional commitments, and goals through their collegiate career. The academic programs of the institution are independent of these external commitments. According to Tinto (1993), external events may be a powerful, but indirect, influence on departure because of the impact these external events have on academic and social integration. As such, students may be influenced to leave the institution, even when they encounter positive academic experiences within college.

Even allowing for all the separate individual characteristics a student may have upon entry into an institution, Tinto (1993) noted that continuous experiences within the college or university were related to continuance within that institution. External events within institutional experiences have been exemplified thru interactions with staff, students, and other members of the college. Higher levels of positive interactions between the student and the community of the institution,

furthering their social and academic integration, increases the likelihood of that student persisting to completing their objective of obtaining a degree. The lower the degree of positive academic and social integration however, the more increased likelihood of the student to leave the institution (Tinto, 1993). Within the institution, student's academic and social integration were key factors when deciding to stay or leave.

Academic and social integration. Higher learning institutions consist of academic and social systems that differentiate in terms of formal and informal structures (Tinto, 1993). Colleges and universities have focused on formally educating students with faculty centric activities and utilizing the institution facilities, such as classrooms and laboratories, while the institutions social systems have focused around the human interactions that occur between staff and students; the institutional social systems most often extending beyond the realm of formal academics (Tinto, 1993). Thus, a student's perceptions of their academic experiences with the staff, including counselors, faculty, and administrators, along with their perceptions of how well the institution prepared them for their desired careers, have been measured by the students' academic integration. Tinto (1993) noted how the individual assessed the academic system had a relationship with how well he or she perceived the integration. Interactions with faculty beyond the formal class setting, such as extracurricular activities, along with additional casual contact with staff and peers, is how social integration is measured.

The ability for a student to successfully assimilate into one of the systems however, does not guarantee assimilation in the other. A student may integrate into the social system of an institution, for example, but may eventually leave due to the failure to successfully perform and integrate academically. Conversely, after successfully integrating in the academic domain, a student may decide to leave due to a failure to negotiate the complex subsystems of the social

system. This may be particularly true for students who were from backgrounds that lack social cues or were more diverse than the general student population of the college or university (Chemers et al., 2001; Elias & Macdonald, 2007).

The principles of effective retention. The first principle of Tinto's (1993) effective retention is "Effective retention programs are committed to the students they serve. They put student welfare ahead of other institutional goals" (p. 146). This principle was the obligation of all institutional employees. A high level of student commitment from staff was the foundation of the institution and would be incorporated in the day-to-day activities of each employee. Similarly, institutional commitment to students reciprocated a commitment to the institution on behalf of the students.

Tinto's (1993) second principle is "Effective retention programs are first and foremost committed to the education of all, not just some, of their students" (p. 146). Student commitment consists of more than performing the basic functions required to retain students. Commitment implies nurturing the education of all students beyond what may be expected (Chemers et al., 2001). Outstanding colleges and universities view commitment as an indispensable aspect of their mission in pursuing the final goal of student education. These institutions consistently include students in the learning process, while carefully observing successful student learning.

The final principle of effective retention is "Effective retention programs are committed to the development of supportive social and educational communities in which all students are integrated as competent members" (Tinto, 1993 p. 147). This placed the greatest emphasis on the importance of community, which was essential to Tinto's (1993) theory. Retention programs that are found to be highly effective combine both the social and academic integration of students with deliberate institutional outreach, connecting with students in various ways. Through utilizing

faculty and peer mentoring programs, community forums serving to elevate the amount of interaction among students and institutional members, and residential learning communities, Tinto (1993) noted the greater likelihood of providing the necessary structure for student self-efficacy to improve commitment to the college or university.

Institutional responses to retention. According to Chemers et al. (2001), students who complete a freshman seminar course obtain higher grades and maintain lower rates of attrition than those who did not complete such a course. Additionally, Chemers et al. (2001) noted when enlisted in a freshman-year experience course, students displayed signs of being more optimistic, felt more adjusted to academic demands, and had higher expectations of performance compared with students containing comparable traits who began in the university simultaneously, but failed to enroll in the course. Evaluations submitted by students who completed the freshman-year course showed responses that stated those students were generally more likely to remain committed to the institution and enroll towards a graduation goal.

Tinto (1993) noted seminar groups for freshman, especially those at-risk students, produced favorable results. According to Tinto (1993), "at-risk students learn best in supportive small groups that serve to provide both skills and social support to those who would otherwise be marginal to the life of the institution" (p. 184). The fundamental purpose of courses like these was to purposefully engage students in the learning process in such a manner that encouraged collaboration, which could inspire academic and social integration, as well as student learning (Tinto, 1993).

CHAPTER 3 METHODOLDGY

The primary aims of this study are to translate the *Academic Self-Efficacy Scale (ASE)* into Arabic, and to determine the psychometric properties the Arabic version of the *ASE* in a sample of students attending King Faisal University in Saudi Arabia.

Study Population

According to Deanship of Admission and Registration at the King Faisal University, 7,010 full-time students (male and female) were accepted into 13 colleges in the academic year 2017/2018. Table 1 contains the number and percentage of the study population at King Faisal University across 13 colleges; Table 2 provides a breakdown of the study population at King Faisal University by gender in terms of the number and percentage of male and female students (Deanship of Admission and Registration, 2017).

Table 1. *Study Population across King Faisal University Colleges*

College	# of Students	Percentage
College of Agriculture Sciences & Food	668	10%
College of Veterinary Medicine	211	3%
College of Education	477	7%
College of Business Administration	908	13%
College of Medicine	287	4%
College of Science	1,143	16%
College of Computer Sciences & Information Technology	379	5%
College of Clinical Pharmacy	123	2%
College of Engineering	439	6%
College of Arts	2,013	29%
College of Law	210	3%
College of Dentistry	33	0%
College of Applied Medical Sciences	119	2%
Total N = 13	*7,010*	*100%*

Note: Population from King Faisal University academic year 2017/2018. Adapted from Deanship of Admission and Registration, 2017. Statistics students enrolled for 2017, Unpublished reports. King Faisal University, Saudi Arabia, p. (2).

Table 2. *Study Population across Gender*

Gender	# of Students	Percentage
Male	2,838	40.5%
Female	4,172	59.5%
Total	*7,010*	*100%*

Note: See Table 1.

Study Sample

Prior to recruiting students to serve as research participants in this study, Human Subjects Approval to conduct research with human participants was obtained from the Wayne State University Institutional Review Board via an expedited review for behavioral research study, and from King Faisal University Research Ethics Committee (see Appendix A). The study sample was randomly selected from 7,010 first-year university Saudi students from 13 diverse Colleges of King Faisal University- Al-Hassa, Kingdom of Saudi Arabia. The target study sample size was 701 students, representing 10% of the study population.

The following steps were followed for selection of participants. First, lists of first-year university Saudi students were obtained from Deanship of Admission and Registration at the King Faisal University distributed according to their colleges and their gender. Second, to insure that the sample was representative of the real population, the researcher determined the study sample according to the percentage admissions of each college. Given the study population makeup of 40.5% male sand 59.5% female students (as shown in Table 2), the researcher randomly selected 40.5% male and 59.5% female Saudi students from each college via Microsoft Excel software (i.e., of the total target study sample of 701 students, 284 male and 417 female students were selected for participation).

Instrument Development

This study is based on the *Academic Self-Efficacy Scale (ASE)*, an eight-item rapid assessment instrument developed by Chemers et al. (2001) for the purposes of measuring a

student's confidence in their ability to successfully perform several academic tasks. Each item on the *ASE* is scored along a seven-point Likert scale, where 1 = Very Untrue and 7 = Very True (see Appendix C). To meet the study aims, the original ASE needed to be translated into the Arabic language. A request was sent to the copyright owner of the *ASE*, Martin Chemers, to use and modify the *ASE* for this study; permission was granted (see Appendix B).

Preparation of the Arabic version of the *ASE* began with the researcher translating the original *ASE* from English (the original language of the scale) into Arabic (the native language in Saudi Arabia). Translation included a non-literal translation of the scale followed by creation of a primary Arabic version of the *ASE*. Next, in order to ensure concordance of concepts and words from the Arabic translation to English, the primary Arabic version of the *ASE* was translated back into English by a Saudi doctoral student who specialized in Educational Evaluation and Research at Wayne State University. Next, five experts in the field of Educational Measurement and Evaluation and proficient in both languages were invited to review and comment on both the original English *ASE* and the primary Arabic translation (see Appendix D). Expert completed a questionnaire designed to gather their comments about matching concepts and cultural appropriateness (see Appendix E). Finally, the appropriateness of the Arabic *ASE* was evaluated by calculating the percentage of agreements among the five experts on the instrument's items by using one/two scale for each item on the *ASE*.

The experts recommended that item 7 of the original *ASE* ("I find my University academic work interesting and absorbing") should be split into two items because it asked students to rate self-efficacy of their academic work in terms of interesting and absorbing. The experts' comments and suggestions were incorporated into the final translated instrument. The final Arabic version of

the *ASE* is a nine-item scale scored along the same seven-point Likert scale as the original *ASE*, where 1 = Very Untrue and 7 = Very True (see Appendix F).

Administration Procedures

The following administrative protocols were invoked:

1. The formal approval from the Deanship of Postgraduate Studies and Scientific Research to commence the study was obtained.
2. The study sample of first-year university Saudi students was randomly selected from 13 different colleges according to their college and gender.
3. The final Arabic version of the *ASE* was sent to the Deanship of Admission and Registration at the King Faisal University in Saudi Arabia who in turn sent it to the study sample via the students' university official e-mail at the beginning of first semester 2017-2018.

Data Analysis

The data analysis procedures to be used in this study were selected to answer study research questions 2-4 (research question 1 concerned the use of the five experts to evaluate the extent to which the Arabic *ASE* matches the original English version of the *ASE* in terms of language and culture). Research question 2 pertains to the reliability of the Arabic *ASE*, and research question 3 pertains to the validity of the Arabic *ASE*, and research question 4 pertains to possible gender differences on the Arabic *ASE*. According to Winter (2000), "reliability and validity are tools of an essentially positivist epistemology" (p. 7). Reliability and validity are discussed by Bernard and Bernard (2012), Fraenkel and Wallen (2006), and Nunnally, Bernstein, and Berge (1967). Their recommendations contributed to the data analytic procedures utilized in the study. All data analysis was conducted via SPSS ver. 25. Descriptive statistics**.** Descriptive statistics (means, standard

deviation) of the Arabic *ASE* items, and total scale for the total sample and broken down by gender will be computed.

Reliability. The concept of reliability refers to the stability, consistency, and reproducibility of a measurement device (Kerlinger & Lee, 2000). Although there are other definitions of reliability, each with their own approach analysis, regarding measurement devices such as the *ASE* which measure human attitudes and perceptions, reliability refers to the consistency of the scores obtained—it represents how consistent the scores are for each individual from time to time (Anastasi, 1988; Fraenkel & Wallen, 2006). Instrument reliability as defined by Sawilowsky (2002) is "the consistency that a test measures whatever it measures" (p. 197). Reliability of the Arabic *ASE* was evaluated in this study via Cronbach's alpha, a measure of internal consistency (Cronbach, 1951; Cronbach & Meehl, 1955; Hinkin, 1998). Specifically, Cronbach's coefficient alpha test of internal consistency was conducted on the nine survey items of the Arabic *ASE* to evaluate the reliability of the survey instrument using alpha values ≥ 0.7 as statistical evidence of reliability (Cronbach & Meehl, 1955; Hinkin, 1998).

Validity. Explaining validity's place within quantitative research, Joppe (2000) stated:

> Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull's eye" of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others. (p. 1)

Wainer and Braun (1998) defined construct validity in quantitative research as the initial determining concept, notion, question or hypothesis of which data is to be gathered and how it is collected.

Construct validity of the Arabic *ASE* will be assessed via Exploratory Factor Analysis (EFA). EFA is a statistical method for data reduction that seeks to account for as much variance

as possible in a set of survey items with a smaller set of components or common factors (Hayton, Allen, & Scarpello, 2004). EFA is appropriate for scale development because it allows the researcher to explore the main components from a set of survey items to support or generate a theory (Williams, Onsman, & Brown, 2010). Various extraction methods are used to extract the components or common factors from a set of survey items, and Principal Components Analysis (PCA) is commonly used in the published literature. PCA was used in this study for factor extraction from the nine items of the Arabic *ASE*. Three criteria were used to assist in determining factor extraction:

1. Kaiser's criteria of an eigenvalue > 1 (Kaiser, 1960).
2. The scree test, which is based on examining a plot of the eigenvalues for breaks and discontinuity (Cattell, 1966).
3. Examination of explained variance where the number of factors extracted should be stopped when approximately 50-60% of the variance is explained (Williams et al., 2010).

Gender differences. To answer research question 4 concerning gender differences in student scores of the Arabic *ASE*, both an independent samples *t* test and a Mann-Whitney *U* test were conducted to compare the Arabic *ASE* total score for males with the total scores for females. Although both the independent samples *t* test and the Mann-Whitney *U* test compare scores between two independent groups, the independent samples *t* test is appropriate for normally distributed data, whereas the Mann-Whitney *U* test is appropriate for data that are not normally distributed. Gender differences using the independent samples *t* test and a Mann-Whitney *U* test will be tested with alpha set at 0.05.

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CHAPTER 4 RESULTS

Introduction

The psychometric properties of an Arabic translation of the *Academic Self-Efficacy Scale (ASE)* administered to a sample of first-year university Saudi students from King Faisal University-Al-Hassa, Kingdom of Saudi Arabia were examined in this study

Demographic Characteristics of the Sample

Table 3 presents the demographic characteristics of the sample in terms of distribution across the 13 colleges of King Faisal University, and Table 4 presented the demographic characteristics of the sample in terms of gender. As shown in Table 3, the study sample was comprised of N = 627 full-time first-year university Saudi students aged 18-25. Sample distribution across the 13 colleges found college sample sizes ranged from n = 181 to n = 2. Specifically, the largest number of students were selected from the College of Arts (n = 181, 29%), College of Science (n = 103, 16.4%), and College of Business Administration (n = 84, 13.4%). The smallest number of students were selected from the College of Clinical Pharmacy (n = 10, 1.6%), College of Applied Medical Sciences (n = 9, 1.4%), and College of Dentistry (n = 2, 0.3%). As shown in Table 4, the study sample of N = 627 students was comprised of 37.5% males (n = 235) and 61.2% females (n = 384); 1.3% of the study sample (n = 8) did not provide information on their gender.

Table 3. *Study Sample across King Faisal University Colleges*

College	# of Students	Percentage
College of Agriculture Sciences & Food	54	9%
College of Veterinary Medicine	15	2.4%
College of Education	46	7.3%
College of Business Administration	84	13.4%
College of Medicine	23	3.7%
College of Science	103	16.4%
College of Computer Sciences & Information Technology	31	4.9%
College of Clinical Pharmacy	10	1.6%
College of Engineering	36	5.7%
College of Arts	181	29%
College of Law	18	3%
College of Dentistry	2	0.3%
College of Applied Medical Sciences	9	1.4%
Total N = 13	*627*	*100%*

Note. Students in the sample were freshman, 18-25 years of age.

Table 4. *Study Sample across Gender*

Gender	# of Students	Percentage
Male	235	37.5%
Female	384	61.2%
No Response	8	1.3%
Total	*627*	*100%*

Note. Students in the sample were freshman, 18-25 years of age.

Reliability

The reliability of the Arabic *ASE* was evaluated statistically by testing the internal consistency reliability of the Arabic *ASE*. Presented in Table 5 are the results of Cronbach's coefficient alpha, along with the descriptive statistics of the Arabic *ASE* for all students. Presented in Table 6 are the same results for male students, and in Table 7 for female students. As shown in Table 5, alpha for the 9 items that measured the Arabic *ASE* across all students was very high ($\alpha = 0.925$). As noted in Tables 6 and 7 show Cronbach's alpha for the Arabica *ASE* was also high for both males ($\alpha = 0.935$) and females ($\alpha = 0.918$). These results indicate strong internal consistency among the nine items of the Arabic *ASE*.

Additional analyses indicated Cronbach's alpha will not increase if any of the items are dropped. Presented in Tables 5-7 are the corrected item-total correlation for items (i.e., the correlation between item and the sum score of the other items). As shown, the corrected item-total correlation is high for all items in all students, in males, and in females (r = 0.627-0.793), suggesting each item's score is internally consistent with the other items and therefore do not need to be dropped (de Vaus, 2014). The descriptive statistics of the Arabic *ASE* are also presented in Tables 5-7. As shown, in the full sample, the mean (SD) for the mean of the nine items = 5.38 (1.14), and the mean (SD) of the sum of the nine items = 48.35 (10.37); the means of each of the nine items range from 5.08-5.62. In males, the mean (SD) for the mean and sum of the nine items = 5.22 (1.21) and 46.92 (10.83), respectively. In females, the mean (SD) for the mean and sum of the nine items = 5.50 (1.08) and 49.43 (9.76), respectively.

Table 5. *Reliability of the Arabic Academic Self-Efficacy Scale (ASE) in All Students*

Arabic *ASE* Survey Items	Mean[1]	SD[2]	α[3]	r[4]
Full Scale Mean (Mean of the 9 items)	5.38	1.14	0.925	
Full Scale Sum (Sum of the 9 items)	48.35	10.37	0.925	
I know how to schedule my time to accomplish my tasks.	5.40	1.40	0.914^	0.771
I know how to take notes.	5.46	1.38	0.917^	0.724
I know how to study to perform well on tests.	5.43	1.42	0.915^	0.763
I am good at research and writing papers.	5.18	1.54	0.920^	0.683
I am a very good student.	5.45	1.39	0.917^	0.728
I usually do very well in school and at academic tasks.	5.35	1.41	0.915^	0.766
I understand my academic tasks.	5.42	1.36	0.915^	0.758
I find my university academic work is interesting.	5.08	1.63	0.923^	0.657
I am very capable of succeeding at the university.	5.62	1.38	0.916^	0.740

Note. [1]Mean of items within scale where each item measured on a 7-point Likert scale, 1 = very untrue, 7 = very true. [2]Standard deviation. [3]Cronbach's alpha reliability measure of internal consistency. ^Cronbach's alpha reliability measure of internal consistency if item deleted. [4]Corrected item-total correlation.

Table 6. *Reliability of the Arabic Academic Self-Efficacy Scale (ASE) in Male Students*

Arabic *ASE* Survey Items	Mean[1]	SD[2]	α[3]	*r*[4]
Full Scale Mean (Mean of the 9 items)	5.22	1.21	0.935	
Full Scale Sum (Sum of the 9 items)	46.92	10.83	0.935	
I know how to schedule my time to accomplish my tasks.	5.22	1.47	0.925^	0.786
I know how to take notes.	5.19	1.46	0.928^	0.747
I know how to study to perform well on tests.	5.27	1.47	0.927^	0.758
I am good at research and writing papers.	5.07	1.56	0.929^	0.726
I am a very good student.	5.26	1.38	0.927^	0.767
I usually do very well in school and at academic tasks.	5.23	1.42	0.925^	0.793
I understand my academic tasks.	5.21	1.46	0.926^	0.779
I find my university academic work is interesting.	4.94	1.66	0.931^	0.698
I am very capable of succeeding at the university.	5.39	1.43	0.927^	0.758

Note. See Table 5.

Table 7. *Reliability of the Arabic Academic Self-Efficacy Scale (ASE) in Female Students*

Arabic *ASE* Survey Items	Mean[1]	SD[2]	α[3]	*r*[4]
Full Scale Mean (Mean of the 9 items)	5.50	1.08	0.918	
Full Scale Sum (Sum of the 9 items)	49.43	9.76	0.918	
I know how to schedule my time to accomplish my tasks.	5.52	1.34	0.905^	0.757
I know how to take notes.	5.64	1.27	0.909^	0.701
I know how to study to perform well on tests.	5.55	1.37	0.905^	0.765
I am good at research and writing papers.	5.29	1.49	0.913^	0.651
I am a very good student.	5.58	1.39	0.909^	0.702
I usually do very well in school and at academic tasks.	5.42	1.40	0.905^	0.755
I understand my academic tasks.	5.55	1.30	0.906^	0.742
I find my university academic work is interesting.	5.18	1.62	0.916^	0.627
I am very capable of succeeding at the university.	5.77	1.32	0.908^	0.722

Note. See Table 5.

Validity

The construct validity of the Arabic *ASE* was evaluated statistically by Exploratory Factor Analysis (EFA) using Principal Components Analysis (PCA) for factor extraction. Kaiser's criteria of an eigenvalue > 1 (Kaiser, 1960), the scree plot (Cattell, 1966), and examination of explained variance (Williams et al., 2010) were used to assist in determining factor extraction. The theory of the Arabic *ASE* is that one factor should be represented by the set of nine survey items that comprise the Arabic *ASE*. EFA results for the full study sample, males in the study sample, and females in the study sample are shown in Tables 8, 9, and 10, respectively. Additionally, results

of the scree plot for the full study sample, males in the study sample, and females in the study samples are plotted in Figures 1, 2, and 3, respectively. As shown in Tables 8-10, only one component (factor) has an eigenvalue > 1, and approximately 60% of the variance is explained by the one component. The values of variance explained, from 61 – 66%, is generally considered very high for the sample size and type of instrument (Williams et al., 2010). Additionally, results of the scree plots shown in Figures 1-3 found a large break in the eigenvalue after the first component was extracted. These results support the construct validity of the Arabic *ASE*.

Table 8. *Validity of the Arabic Academic Self-Efficacy Scale (ASE) in All Students*

	Component[1]		
Arabic *ASE* Survey Items	1	2	3
Eigenvalue	5.685	0.586	0.574
% of Variance	63.164	6.511	6.377
I know how to schedule my time to accomplish my tasks.	0.827	0.069	-0.139
I know how to take notes.	0.788	0.067	-0.379
I know how to study to perform well on tests.	0.820	0.053	-0.298
I am good at research and writing papers.	0.750	0.252	-0.191
I am a very good student.	0.795	-0.425	0.039
I usually do very well in school and at academic tasks.	0.825	-0.296	0.101
I understand my academic tasks.	0.816	-0.112	0.221
I find my university academic work is interesting.	0.726	0.478	0.369
I am very capable of succeeding at the university.	0.800	-0.021	0.299

Note. Exploratory factor analysis (EFA) results with principal component analysis as the extraction method with three components extracted. [1]Scores above the dashed line are the eigenvalue and % of variance for each extracted component; scores below the dashed line are factor loadings.

Figure 1. Scree plot of EFA of the Arabic *ASE* in all students.

Table 9. *Validity of the Arabic Academic Self-Efficacy Scale (ASE) in Male Students*

Arabic *ASE* Survey Items		Component[1] 1	2	3
	Eigenvalue	5.947	0.612	0.533
	% of Variance	66.079	6.805	5.920
I know how to schedule my time to accomplish my tasks.		0.836	-0.098	0.278
I know how to take notes.		0.805	-0.329	0.279
I know how to study to perform well on tests.		0.814	-0.156	0.238
I am good at research and writing papers.		0.786	0.046	-0.233
I am a very good student.		0.824	-0.265	-0.207
I usually do very well in school and at academic tasks.		0.846	-0.118	-0.265
I understand my academic tasks.		0.830	0.130	-0.331
I find my university academic work is interesting.		0.760	0.520	0.204
I am very capable of succeeding at the university.		0.811	0.311	0.058

Note. See Table 8.

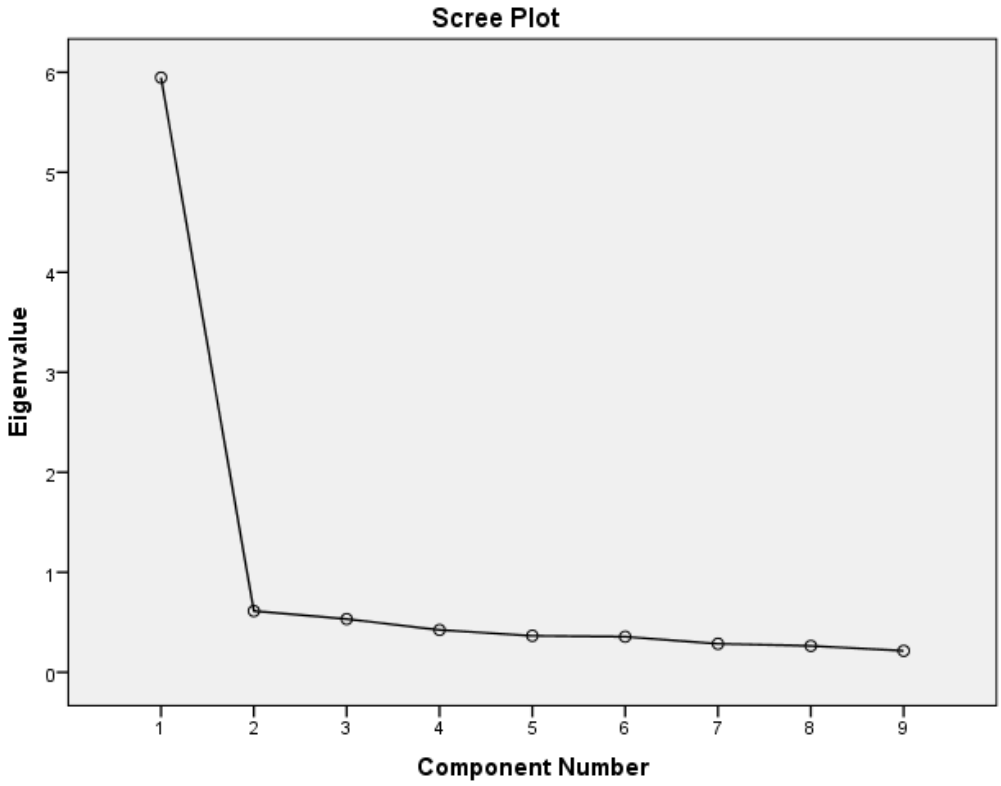

Figure 2. Scree plot of EFA of the Arabic *ASE* in male students.

Table 10. *Validity of the Arabic Academic Self-Efficacy Scale (ASE) in Female Students*

Arabic *ASE* Survey Items		Component[1] 1	2	3
	Eigenvalue	5.498	0.664	0.564
	% of Variance	61.086	7.374	6.263
I know how to schedule my time to accomplish my tasks.		0.818	0.030	-0.004
I know how to take notes.		0.770	0.156	-0.147
I know how to study to perform well on tests.		0.824	0.130	-0.256
I am good at research and writing papers.		0.723	0.453	-0.259
I am a very good student.		0.775	-0.418	-0.088
I usually do very well in school and at academic tasks.		0.817	-0.212	-0.107
I understand my academic tasks.		0.806	-0.148	0.102
I find my university academic work is interesting.		0.701	0.336	0.566
I am very capable of succeeding at the university.		0.790	-0.250	0.243

Note. See Table 8.

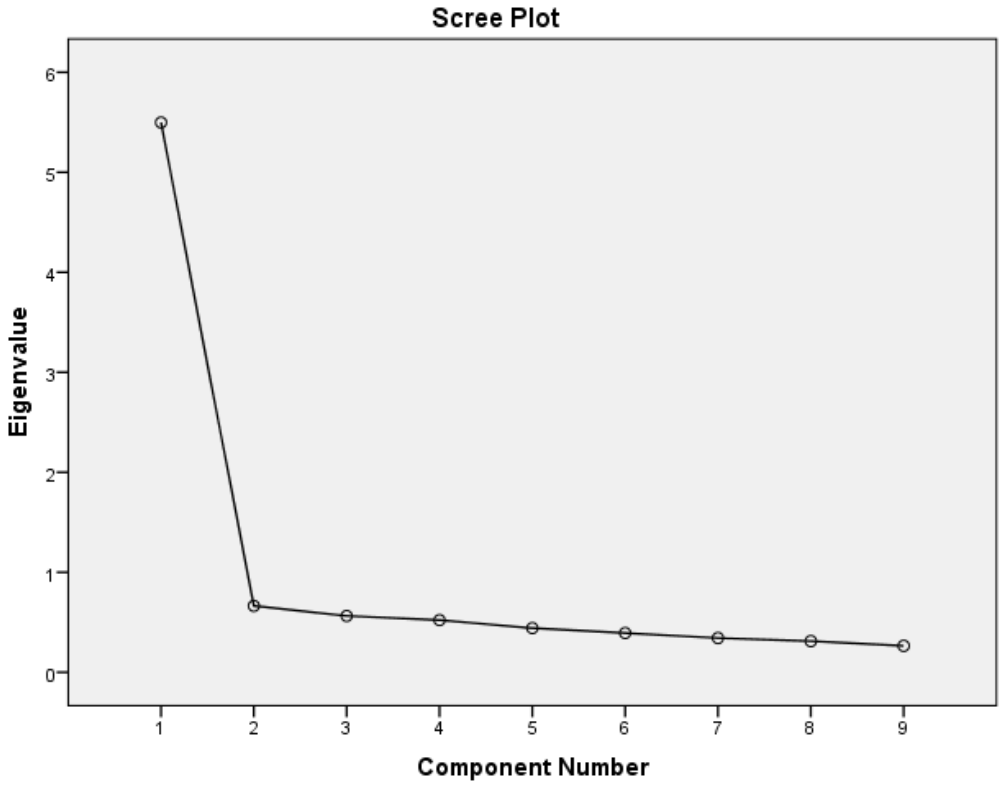

Figure 3. Scree plot of EFA of the Arabic *ASE* in female students.

Gender Differences

Gender differences in the Arabic *ASE* were tested using the independent samples *t*-test (see Table 11) and the Mann-Whitney *U* test (see Table 12). Both tests were used to control for any violations of normality in the Arabic *ASE* full scale or item scores. Both tables present analysis of gender differences for the full scale mean score and total score of the Arabic *ASE* (top section) and analysis of the gender differences of each of the nine items of the Arabic *ASE* (bottom section). As shown in Tables 11 and 12, results of the independent samples *t*-test and the Mann-Whitney *U* test found females compared to males had significantly higher full scale score ($p < 0.01$). Results also found females compared to males had significantly higher scores on items 1, 2, 3, 5, 7, and 9 ($p < 0.05$).

Table 11. *Independent Samples t-Test for Gender Differences in the Arabic ASE*

Source	Gender	n	Mean[1]	SEM[2]	Difference[3]	*df*	*t*	*p*[4]
Full Scale Mean	Male	231	5.22	0.08	0.28	609	3.010	**0.003**
	Female	380	5.50	0.06				
Full Scale Total	Male	231	46.92	0.71	2.51	609	2.960	**0.003**
	Female	380	49.43	0.50				
Item 1	Male	231	5.22	0.10	0.30	606	2.614	**0.009**
	Female	377	5.52	0.07				
Item 2	Male	230	5.19	0.10	0.46	608	4.070	**<0.001**
	Female	380	5.64	0.07				
Item 3	Male	231	5.27	0.10	0.28	609	2.362	**0.019**
	Female	380	5.55	0.07				
Item 4	Male	231	5.07	0.10	0.22	609	1.757	0.079
	Female	380	5.29	0.08				
Item 5	Male	231	5.26	0.09	0.32	608	2.776	**0.006**
	Female	379	5.58	0.07				
Item 6	Male	231	5.23	0.09	0.19	609	1.595	0.111
	Female	380	5.42	0.07				
Item 7	Male	231	5.21	0.10	0.34	609	2.977	**0.003**
	Female	380	5.55	0.07				
Item 8	Male	231	4.94	0.11	0.24	609	1.771	0.077
	Female	380	5.18	0.08				
Item 9	Male	231	5.39	0.09	0.38	608	3.374	**0.001**
	Female	379	5.77	0.07				

Note. [1]Mean of items within scale where each item measured on a 7-point Likert scale, 1 = very untrue, 7 = very true; full scale = mean full scale score. [2]Standard error of the mean. [3]Difference in mean between males and females. [4]*p* values in bold are significant at $p < 0.05$.

Table 12. *Mann-Whitney U Test for Gender Differences in the Arabic ASE*

Source	Gender	n	Mean Rank[1]	Sum of Ranks	*U*	*Z*	*P*[2]
Full Scale Mean	Male	231	276.31	63828	37032	3.244	**0.001**
	Female	380	323.89	123078			
Full Scale Total	Male	231	276.57	63888	37092	3.216	**0.001**
	Female	380	323.89	123078			
Item 1	Male	231	282.88	65346	38550	2.454	**0.014**
	Female	377	317.75	119790			
Item 2	Male	230	269.82	62059	35494	4.024	**<0.001**
	Female	380	327.10	124297			
Item 3	Male	231	284.49	65717	38921	2.432	**0.015**
	Female	380	319.08	121250			
Item 4	Male	231	290.52	67111	40315	1.731	0.083
	Female	380	315.41	119856			
Item 5	Male	231	276.22	63808	37012	3.305	**0.001**
	Female	379	323.34	122548			
Item 6	Male	231	291.29	67289	40493	1.652	0.099
	Female	380	314.94	119678			
Item 7	Male	231	279.81	64636	37840	2.973	**0.003**
	Female	380	321.92	122330			
Item 8	Male	231	289.60	66898	40102	1.831	0.067
	Female	380	315.97	120069			
Item 9	Male	231	272.78	63013	36217	3.744	**<0.001**
	Female	379	325.44	123343			

Note. [1]Mean rank of items within scale where each item measured on a 7-point Likert scale, 1 = very untrue, 7 = very true; full scale = sum full scale score. [2]*p* values in bold are significant at $p < 0.05$.

CHAPTER 5 DISCUSSION

The aim of this research study was to develop an Arabic version of the *Academic Self-Efficacy Scale (ASE)* and to test its reliability and validity in a sample of freshmen Arabic-speaking Saudi university students. Additionally, this study aimed to examine gender differences in the Arabic *ASE*.

Study Summary

To meet the study aims, four research questions were posed. The first research question was to what extent does an Arabic translation of the *Academic Self-Efficacy Scale (ASE)* match the original English version in terms of language and cultural accuracy? To answer this research question, the *Academic Self-Efficacy Scale (ASE)*, an eight-item rapid assessment instrument developed by Chemers et al. (2001) for the purposes of measuring a student's confidence in their ability to successfully perform several academic tasks was translated into Arabic by me, and then translated back into English by a Saudi doctoral student in Education Evaluation and Research. A panel of five English- and Arabic-speaking experts in the field of Education Evaluation and Research reviewed and commented on the language and cultural accuracy of the Arabic translation and determined that a revision was necessary. This led to the creation of the nine-item Arabic *ASE*, a rapid assessment instrument designed to measure academic self-efficacy in Arabic-speaking students.

The three remaining study research questions were answered using the Arabic *ASE* in a sample of 627 first-year university Arabic-speaking students recruited from 13 colleges of King Faisal University in Saudi Arabia. The study sample was comprised of 61.2% females (n = 384) and 37.5% males (n = 235). The Arabic *ASE* was completed during the first semester of the 2017-2018 academic year.

The second research question was does the Arabic *ASE* have acceptable reliability properties? Cronbach's alpha, a measure of internal consistency, indicated the Arabic *ASE* showed high internal consistency with $\alpha = 0.925$ in all students. Cronbach's alpha for the Arabic *ASE* was also high across males ($\alpha = 0.935$) and females ($\alpha = 0.918$). Cronbach's alpha of the Arabic *ASE* is consistent with the Cronbach's alpha of 0.81 found by Chemers et al. (2001) in the *Academic Self-Efficacy Scale (ASE)*. These findings suggest the Arabic *ASE* can provide reliable and internally consistent measurements of academic self-efficacy for Arabic-speaking students.

The third research question was does the Arabic *ASE* have acceptable validity properties? Test of construct validity using Exploratory Factor Analysis (EFA) with Principal Component Analysis (PCA) factor extraction found one factor was the best solution for the Arabic *ASE* using Kaiser's criteria of an eigenvalue > 1, the scree plot, and examination of explained variance. The EFA results support the unidimensional theory of the Arabic *ASE* and suggest it can provide valid measurements of the construct academic self-efficacy for Arabic-speaking students.

The fourth research question was are there any gender differences in the Arabic *ASE*? Tests of gender differences on the Arabic *ASE* using independent samples *t*-test and Mann-Whitney *U*-test found males had significantly lower scores than females on the full scale Arabic *ASE* (mean score for males = 5.22, mean score for females = 5.50). Analysis also found males had significantly lower scores than females on six of the nine items of the Arabic *ASE*: Item 1 ("I know how to schedule my time to accomplish my task", mean score for males = 5.22, mean score for females = 5.52), Item 2 ("I know how to take notes", mean score for males = 5.19, mean score for females = 5.64), Item 3 ("I know how to study to perform well on tests", mean score for males = 5.27, mean score for females = 5.55), Item 5 ("I am a very good student", mean score for males = 5.26, mean score for females = 5.58), Item 7 ("I understand my academic tasks", mean score for males = 5.21,

mean score for females = 5.55), and Item 9 ("I am very capable of succeeding at the university", mean score for males = 5.39, mean score for females = 5.77). There were no gender differences, following three items of the Arabic *ASE*: Item 4 ("I am good at research and writing papers", mean score for males = 5.07, mean score for females = 5.29), Item 6 ("I usually do very well in school and at academic tasks", mean score for males = 5.23, mean score for females = 5.42), and Item 8 ("I find my university academic work is interesting", mean score for males = 4.94, mean score for females = 5.18).

Limitations of the Study

The first study limitation concerns the use of student research participants from just one institution (King Faisal University). Thus, the study sample was not representative of Arabic-speaking university students studying at other universities throughout the world. The second limitation concerns the demographic characteristics of the study sample which was limited to full-time first-year university Saudi students between the ages of 18-25 years old. Thus, the study sample was not representative of university students at other stages of their education and who are older than 25 years old.

Implications for Future Research and Practice

Study results confirm that the Arabic *ASE* is a reliable and valid measure for estimating academic self-efficacy in Arabic-speaking Saudi university students. These results have important implications for researchers and practitioners interested in examining the impact of academic self-efficacy on the academic performance and retention in Saudi university student. Specifically, given the challenges in Saudi students to remain in university and obtain high academic performance, the importance of this study is to demonstrate the positive effects of an Arabic *ASE* on the overall academic performance and retention of Saudi students in terms of increased GPA, increased

intention to persist, and increased graduation rates. In US university students, academic self-efficacy has been shown to consistently predict student grades and persistence to remain in school (Baier et al., 2016; Bandura, 1989; Lane & Lane, 2001; Poyrazli et al., 2002; Robbins et al. 2004).

In first year students in particular, academic self-efficacy has been found to predict student retention (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013). Research with the *Academic Self-Efficacy Scale (ASE)* in particular has found positive correlations between the *ASE* and university GPA in US students (Chemers et al., 2001; Khan, 2013). Thus, future research with Arabic-speaking students from other countries is recommended. For example, Abd-Elmotaleb and Saha (2013) found academic self-efficacy was a positive predictor of university GPA in sample of undergraduate students at the University of Assiut in Egypt. Positive results in future research using the Arabic *ASE* between academic self-efficacy and academic performance and retention suggests university administrators and instructors should focus on instilling self-efficacy in students via seminars or workshops (Kitsantas, Winsler, & Huie, 2008).

Study results found gender differences in scores on the Arabic *ASE* with females scoring higher than males on the full scale score and on six of the nine items of the Arabic *ASE*. Thus, this study also has implications for researchers and practitioners interested in examining gender differences in academic self-efficacy among Arabic-speaking Saudi university students which may suggest differences in learning style preferences among genders. Future research should also examine the relationship between scores on the Arabic *ASE* and university GPA and retention across gender. For example, research by Buchanan and Selmon (2008) found gender differences in the general self-efficacy of university students in the Middle South of the US. Research by Vantieghem and Van Houtte (2015) found gender role conformity impacted academic self-efficacy scores in primary education students.

APPENDIX A: IRB-HIC EXPEDITED APPROVAL

WAYNE STATE UNIVERSITY

IRB Administration Office
87 East Canfield, Second Floor
Detroit, Michigan 48201
Phone: (313) 577-1628
FAX: (313) 993-7122
http://irb.wayne.edu

NOTICE OF EXPEDITED APPROVAL

To: Mohammed Al Mohazie
College of Education

From: Dr. Deborah Ellis or designee For S. Millis, Ph.D./BC
Chairperson, Behavioral Institutional Review Board (B3)

Date: November 21, 2017

RE: IRB #: 102317B3E

Protocol Title: Reliability and Validity of an Arabic Translation of Academic Self-Efficacy Scale (ASE) on Students at King Faisal University

Funding Source:

Protocol #: 1710000886

Expiration Date: November 20, 2020

Risk Level / Category: Research not involving greater than minimal risk

The above-referenced protocol and items listed below (if applicable) were **APPROVED** following *Expedited Review* Category (#7)* by the Chairperson/designee *for* the Wayne State University Institutional Review Board (B3) for the period of 11/21/2017 through 11/20/2020. This approval does not replace any departmental or other approvals that may be required.

- Revised Protocol Summary Form (revision received in the IRB Office 10/25/2017)
- Research Protocol (received in the IRB Office 10/05/2017)
- Medical records are not being accessed therefore HIPAA does not apply.
- A waiver of written documentation of consent has been granted according to 45CFR 46 117(c) and justification provided by the Principal Investigator in the Protocol Summary Form. This waiver satisfies: 1) risk is no more than minimal, 2) That the research involved no procedures for which written consent is normally required outside the research context 3) The consent process is appropriate, 4) An information sheet disclosing the required and appropriate additional elements of consent disclosure will be provided to participants.
- Research Information Sheet - English and Arabic Versions (revision dated 11/15/2017)
- Recruitment Flyer
- Data Collection Tools (1): (I) English and Arabic version of the ASE scale
- Please note: This submission was reviewed under the IRB Administration Office Flexible Review and Oversight Policy, therefore the expiration date is 11/20/2020.

* Federal regulations require that all research be reviewed at least annually. You *may* receive a *"Continuation Renewal Reminder"* approximately two months prior to the expiration date, however, it is the Principal Investigator's responsibility to obtain review and continued approval *before* the expiration date. Data collected during a period of lapsed approval is unapproved research and can never be reported or published as research data.

* All changes or amendments to the above-referenced protocol require review and approval by the IRB **BEFORE** implementation.

* Adverse Reactions/Unexpected Events (AR/UE) must be submitted on the appropriate form within the timeframe specified in the IRB Administration Office Policy (http://www.irb.wayne.edu/policies-human-research.php).

NOTE:

1. Upon notification of an impending regulatory site visit, hold notification, and/or external audit the IRB Administration Office must be contacted immediately
2. Forms should be downloaded from the IRB website at **each** use

King Faisal University
Deanship of Scientific Research
Research Ethics Committee (REC)

جامعة الملك فيصل
عمادة البحث العلمي
لجنة أخلاقيات البحث العلمي

Memorandum

Research Proposal Review

REC REF NUMBER	KFU-REC/2017 - 06 - 01	
INSTITUTION	WAYNE STATE UNIVERSITY	
PROJECT TITLE	RELIAPILITY AND VALIDITY OF AN ARABIC TRANSLATION OF *ACADEMIC SELF-EFFICACY SCALE* (ASE) ON STUDENTS AT KING FAISAL UNIVERSITY	
PRINCIBAL INVESTIGATOR	Mohammed Al mohazie	
SUPERVISOR	Shlomo Sawilowsky, Ph. D.	
APPROVAL DATE	G 06/01/2017	H 09/06/1438

Dear Mohammed Al mohazie

You are hereby informed that the Research Ethics Committee (REC) at King Faisal University has approved your subject proposal. Following a thorough review by the REC of the ethical aspects of the proposal, your research has been approved for one year from the approval date, under the following conditions:

1. **Approval Duration:** Twelve (12) months from the approval date.
2. **Amendments to the approved project:** Changes to any aspect of the project require resubmission of Request for Amendment to the Research Ethics Committee (REC).
3. **Future Correspondence:** Please quote reference number and project title above in any further correspondence.
4. **Safety:** the safety and well-being of all participants must be protected in accordance with the relevant research ethics guidelines of King Faisal University and the National Committee of Medical & Bioethics. Where required, **signed consent form** must be obtained from all participants.
5. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by the Research Ethics Committee (REC) at any time.
6. **Retention and storage of data:** The Principal Investigator is responsible for the storage, retention, and security of original data pertaining to the project for a minimum period of five years.

Please be aware that **this memorandum constitutes ethical approval only**. If the research project is to be conducted at another site or under auspices of another organization, approval must be obtained from the appropriate respective authorities before the project may commence.

Dr. Abdullah M Alzahrani

Dean Scientific Research
Vice Chair of Research Ethics Committee (REC)

APPENDIX B: PERMISSION TO USE *ACADEMIC SELF-EFFICACY SCALE (ASE)*

Re: Permission to use "ACADEMIC SELF- EFFICACY SCALE (ASE)."

Martin Chemers

Thu 3/31/2016 4:22 PM

To:Almeedo F <meedo51@hotmail.com>;

Permission granted.

On Mar 31, 2016, at 10:38 AM, Almeedo F wrote:

Hello, professor. Martin M. Chemers
I am Mohahmmed Almohazie a Ph.D. Candidate at Wayne State University , Detroit, MI, U.S. In fact, I am working on my dissertation entitled "RELIABILITY AND VALIDITY OF THE ARABIC TRANSLATION OF THE ACADEMIC SELF- EFFICACY SCALE (ASE)." I would like your permission to use The ACADEMIC SELF- EFFICACY SCALE that you developed in your research entitled "Academic self-efficacy and first-year college student performance and adjustment, (2001)." in my dissertation excerpts from the following:
Translation of ASE scale to the Arabic language and using the translated version in my study. With an emphasis to save your ASE scale Copyright and do not use scale for any purposes except of scientific research for my study.

Thank you very much.
Sincerely,

Mohammed Al-mohazie
A Ph.D. Candidate - Education Evaluation & Research
Wayne State University - Detroit, Michigan. U.S
Phone No. 0117349851174
Email: meedo51@hotmail.com, FL5248@wayne.edu

APPENDIX C: ORIGINAL *ACADEMIC SELF-EFFICACY SCALE (ASE)*

CODE BOOK OF SCALES USED: CHEMERS, HU, GARCIA, 2001

Chemers, M.M., Hu, L.T., and Garcia, B., Academic Self-Efficacy and First Year College Student Performance and Adjustment. Journal of Educ. Psychology 2001, Vol. 93, No. 1, 55-64

Please acknowledge, using proper citation.

ACADEMIC SELF-EFFICACY SCALE (ASE)

:_____ :_____ :_____ :_____ :_____ :_____ :_____

1 2 3 4 5 6 7

Very Untrue — Very True

1. I know how to schedule my time to accomplish my tasks.
2. I know how to take notes.
3. I know how to study to perform well on tests.
4. I am good at research and writing papers.
5. I am a very good student.
6. I usually do very well in school and at academic tasks.
7. I find my university academic work interesting and absorbing.
8. I am very capable of succeeding at the university.

APPENDIX D: INVITATION TO REVIEW ARABIC VERSION OF *ASE*

Dear (Reviewer title and last name),

The researcher, Mohammed Al mohazie, is conducting a study titled "Reliability and Validity of the Arabic Translation of the Academic Self-Efficacy Scale (ASE) As A predicator of First-Year College Students' Success at King Faisal University in Saudi Arabia". This study is being conducted by the researcher from the College of Education at Wayne State University to fulfillment the requirements for the degree of Doctor of Philosophy, major Educational Evaluation and Research. Because of your great scientific knowledge and field experiences about of Educational Measurement and Evaluation in Saudi Arabia University, it is the researcher's pleasure to invite you to review the Arabic version and the original version of the Academic Self-Efficacy Scale (ASE) and obtain your comments about match concepts and culture appropriateness. If you agree to review the instrument materials, please fill out the attached questioner that contains one/two scale for each item on the instrument, where one refers to the appropriateness of use and two refers to the inappropriateness of use.

I would like to thank you for reviewing the Arabic Translation version of the Academic Self-Efficacy Scale (ASE), and I welcome any comments and that you might have to improve this version of instrument.

Sincerely,

Mohammed Al mohazie

APPENDIX E: EXPERT'S QUESTIONNAIRE

الترجمة العربية الأولية من مقياس الكفاءة الأكاديمية الذاتية (للمحكمين)

The primary Arabic Translation version of the Academic Self-Efficacy Scale (ASE) م	
Comments	2 1 Items
	١- أنا قادر على جدولة وتنظيم وقتي لكي أنجز مهامي وواجباتي الأكاديمية.
	٢- أعرف كيف أدون ملاحظات
	٣- أعرف كيف أحضر بشكل جيد للامتحانات.
	٤- أنا امتلك القدرة على البحث وكتابة الأوراق العلمية.
	٥- أنا طالب ممتاز جدا.
	٦- دائما أدائي ممتاز في الجامعة وفي المهمات الأكاديمية.
	٧- أنا مستوعب لمهامي ومستمتع جدا بدراستي الجامعية.
	٨- أنا قادر بشكل قوي جدا على النجاح في المرحلة الجامعة.

الباحث / محمد بن قيد الفيزعي

APPENDIX F: ARABIC VERSION OF *ACADEMIC SELF-EFFICACY SCALE (ASE)*

CODE BOOK OF SCALES USED. CHEMERS, HU, GARCIA, 2001

Chemers, M M., Hu, L.T., and Garcia, B., Academic Self-Efficacy and First Year College Student Performance and Adjustment. Journal of Educ Psychology 2001, Vol 93, No. 1, 55-64

Please acknowledge, using proper citation.

النسخة العربية من مقياس الكفاءة الذاتية الأكاديمية (ASE)

- أخي الطالب/ الطالبة، أختر الإجابة الملائمة لك على المقياس بوضع إشارة ☑ أمام الإجابة المختارة، حيث تتراوح درجة الموافقة من (١) أعارض بشدة، وحتى (٧) أوافق بشدة.

١	٢	٣	٤	٥	٦	٧
أعارض بشدة						أوافق بشدة

	أعارض بشدة ١	٢	٣	٤	٥	٦	أوافق بشدة ٧
١- لدي القدرة على جدولة وتنظيم وقتي لإنجاز مهامي وواجباتي الأكاديمية.	☐	☐	☐	☐	☐	☐	☐
٢- لدي القدرة على تدوين الملاحظات.	☐	☐	☐	☐	☐	☐	☐
٣- لدي القدرة للتحضير للاختبارات بشكل جيد.	☐	☐	☐	☐	☐	☐	☐
٤- لدي القدرة على البحث وكتابة الأوراق العلمي.	☐	☐	☐	☐	☐	☐	☐
٥- أنا طالب متفوق.	☐	☐	☐	☐	☐	☐	☐
٦- أدائي متميز في المهمات الأكاديمية.	☐	☐	☐	☐	☐	☐	☐
٧- أستوعب مهامي الأكاديمية بشكل جيد.	☐	☐	☐	☐	☐	☐	☐
٨- أجد في الدراسة الجامعية المتعة والإثارة.	☐	☐	☐	☐	☐	☐	☐
٩- لدي الثقة والقدرة على النجاح في المرحلة الجامعية.	☐	☐	☐	☐	☐	☐	☐

شاكراً ومقدراً مشاركتكم.
ترجمة الباحث / محمد بن فهد المهيزعي

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ABSTRACT

RELIABILITY AND VALIDITY OF AN ARABIC TRANSLATION OF ACADEMIC SELF-EFFICACY SCALE (ASE) ON STUDENTS AT KING FAISAL UNIVERSITY

by

MOHAMMED F. AL MOHAZIE

May 2018

Advisor: Dr. Shlomo Sawilowsky

Major: Evaluation and Research

Degree: Doctor of Philosophy

Academic self-efficacy refers to a student's confidence in successfully performing academic tasks at a designated level. Empirical research in US students suggests academic self-efficacy is a positive predictor of university student academic performance and retention, two outcomes that need to be increased in Saudi students. Given the potential predictive ability of academic self-efficacy on student academic performance and retention, a reliable and valid measure of academic self-efficacy appropriate for Arabic-speaking Saudi students is needed. This dissertation set out to create an Arabic translation of the eight-item *Academic Self-Efficacy Scale (ASE)* developed by Chemers, Hu, and Garcia (2001). Using comments from a panel of Educational Measurement and Evaluation experts, the nine-item Arabic *ASE* was created. Tests of reliability and validity of the Arabic *ASE* in a sample of 627 freshman Arabic-speaking Saudi university students (37.5% males, 61.2% females) found the Arabic *ASE* demonstrated high internal consistency reliability and acceptable construct validity due to its factor structure. Examination of gender differences found males had significantly lower scores than females on the full scale Arabic *ASE*, and on six of the nine items of the Arabic *ASE*.

Study results confirm that the Arabic *ASE* is a reliable and valid measure for estimating academic self-efficacy in Arabic-speaking Saudi university students. This study has implications for researchers and practitioners interested in examining the impact of academic self-efficacy on the academic performance and retention in Saudi university student. This study also has implications for researchers and practitioners interested in examining gender differences in academic self-efficacy among Saudi university students which may suggest differences in learning style preferences among genders. Future research with Arabic-speaking students from other countries is recommended. Future research should also examine the relationship between scores on the Arabic *ASE* and university GPA and retention across gender.

AUTOBIOGRAPHICAL STATEMENT

Mohammed F. Al mohazie

I finished my bachelor's degree in Education with honors, with a GPA of 4.73 out of 5 from Teachers College, King Faisal University, Al -Hasa, Saudi Arabia in 1998. Then I began working as a teacher in the public schools for 10 years. I enjoyed helping my students develop their skills and abilities in their educational journey. Then worked for one year as an Educational supervisor in the educational technology center at the Ministry of Education in 2004. I really enjoyed teaching students and supervising teachers but I wished to continue my education and I returned back to school to pursue my master's degree in adult education and continuing learning from at King Saud University in Riyadh, Saudi Arabia.

I completed my master's degree thesis over a period of four years and I utilized a research sample of 1054 employees from the Saudi Aramco company. The title of my master's thesis was "The Effectiveness of the E-training Programs Provided by the Saudi Aramco Company Through the Trainees' points of View". Finishing my master's thesis developed my skills in educational research and to acquire the depth of knowledge. After earning my master's degree in 2009, I moved to work as a Lecturer, Department of Education and Psychology - College of Education - King Faisal University, Al -Hasa, Saudi Arabia.

In 2012, I was given a scholarship from King Faisal University to pursue my Ph.D. in the USA. The faculty at the university wants me to help develop the Education Department and improve the university's research services by applying my knowledge and experiences after I receive my Ph.D. I decided to pursue my Ph.D. in education evaluation and research development because I am interested in improving the quality of Standard Educational Tests in Saudi Arabia.