

## THE NEW GENERAL SELF-EFFICACY SCALE: A MATTER OF LANGUAGE

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### Abstract

General Self-Efficacy (GSE) scales are used to measure the extent to which individuals possess a general sense of mastery that is not tied to a specific situation or behavior. The present study assesses whether the language in which a GSE scale is presented yields different responses in Arabic-English bilingual female students and whether differences can be traced to emotional reactions triggered by cultural norms dictating modesty in attitudes and behavioral expression. Female students residing in the Eastern Province of the Kingdom of Saudi Arabia completed the New General Self-Efficacy (NGSE) scale and reported the valence and intensity of their reactions to each of the statements of the scale. The English version of NGSE produced higher scores than the Arabic version. Because arousal was either minimally related to NGSE scores (English version) or not related at all (Arabic version), the higher reported arousal of the English version may be due to the lower automaticity with which a second language is processed. For the English version, the higher the NGSE scores, the more positive was the emotional response to the statements of the scale, whereas for the Arabic version, the higher the NGSE scores, the less positive was the emotional response. If disapproval of the individualistic, self-focused approach of the NGSE scale is inferred from the valence of participants' reactions, the results of the present investigation are consistent with the notion that Arabic can trigger cultural codes of modesty.

**Keywords:** Self-efficacy, Female College Students, Translation.

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### 1. Introduction

#### 1.1 The New General Self-Efficacy Scale: A Matter of Language

Bandura (1997a; 1997b) defined self-efficacy as the subjective judgment of one's capabilities to initiate, manage and execute actions with the purpose of attaining desired goals. Self-efficacy beliefs are considered useful predictors of students' motivation and learning (see Bandura, 1997a; Pajares, 1997; Schunk, 1989; Zimmerman, 1995). As performance-based measures of perceived capability, scales of self-efficacy beliefs have been reported to predict common motivational outcomes, such as students' activity choices, effort, persistence, and emotional reactions (Bandura, (1997b); Pajares & Kranzler (1995); Siegel, Galassi, & Ware, (1985). For instance, if students possessing low and high self-efficacy are compared, the latter tend to undertake challenging tasks more readily, devote more effort to initiated activities, persist longer in such activities, and experience fewer adverse emotional reactions when obstacles are encountered ( Multon, Brown, & Lent, 1991; Zimmerman, 2000). Not surprisingly, self-efficacy beliefs have been credited to shape students' self-regulatory processes, such as goal setting, self-monitoring, self-evaluation, and reliance on learning strategies (Hackett & Betz, 1981; Zimmerman, Bandura, & Martinez-Pons, 1992; Zimmerman & Bandura, 1994).

Important to note is that self-efficacy measures refer to performance capabilities rather than personal qualities, such as a person's physical or psychological characteristics. Self-efficacy beliefs are multidimensional in content and may differ depending on the domain of functioning that one wishes to consider. Because self-efficacy beliefs are multi-layered, different kinds of self-efficacy scales exist (Bandura, 2006). There are general scales that measure an individual's overall sense of personal mastery, task-specific scales that measure competencies related to

particular tasks, and domain-specific scales that assess competencies within a designed domain of knowledge and practice. For instance, the New General Self-Efficacy, NGSE, scale (Chen, Gully, & Eden, 2001) is intended to measure a general sense of mastery that is not tied to a particular situation or behavior. General self-efficacy is considered a motivational trait that emerges over a person's lifetime as an aggregate of the successes and failures experienced across domains, tasks, and situations (Bandura, 1997b; Eden, 1988). As such, it is assumed to be not only more stable than task- and domain-specific forms (Eden & Zuk, 1995; Shelton, 1990), but also an effective shield against adverse life events, capable of facilitating adaptation to novel events and situations, and suitable for predicting performance across different settings (Pulakos, Arad, Donovan, & Plamondon, 2000; Stajkovic & Luthans, 1998).

Given the relevance of general self-efficacy beliefs, it is reasonable to ask whether the NGSE scale, which measures general self-efficacy as a motivational trait, can be used effectively in a culture that is different from the one from which it has emerged (i.e., the individualist ethos of the USA). To this end, consider that language is the fundamental medium through which children acquire the necessary cultural and societal knowledge to become members of their communities. As such, a language cannot be assumed to merely describe events, objects, persons, or situations in the present, past or future. It carries its culture(s), including its unique meanings, values, prescriptions, and reactions (Müller, 2007). Research in socio-linguistics and psycho-linguistics has brought to the forefront the notion that linguistic codes can activate cultural norms and values (Ochs, & Schieffelin, 2011) and, with them, a variety of emotions whose intensity depends on the extent of one's earlier exposure to such codes (as measured by age of acquisition). For instance, socialized speech practices such as childhood reprimands sanction societal disapproval of conduct and potential punishment by adult figures, whereas taboo words exemplify utterances whose use is restricted under the assumption that harm can result to the speaker, recipient(s), and/or society if spoken (see profanity and blasphemy; Jay, 2009). Interestingly, childhood reprimands and taboo words spoken in one's first language not only are experienced as possessing greater emotional resonance, but also elicit stronger autonomic responses (as indexed by skin conductance recordings) than semantically equivalent terms spoken in the second language (Anooshian & Hertel; 1994; Harris, Aycicegi, & Gleason, 2003). The stronger emotional responsiveness to words in one's first language is generally attributed to the different contexts of acquisition. Words in the speaker's first language tend to be learned in the context of early relationships, which reflect his/her first encounters with the full range of basic human emotions (Schrauf, 2000). Words in the speaker's second language are generally learned in the context of later social relationships, such as at school and at work. Thus, they are more likely to reflect the speaker's emotional control, benefit from emotional distance, and be associate with autonomy and achievement (Bond & Lai, 1986; Dewaele & Pavlenko, 2002; Ervin, 1964).

Evidence that different languages are linked to the bilingual speaker's intensity of the emotions felt is just one of the epiphenomena that reflect the capability of human language to activate experience-driven cultural mind-sets Oyserman, et al., (2002), including diverse cultural codes of proper behavior, since "almost any utterance in any language carries with it a set of assumptions, feelings, and values" (Phillips 1960, p. 291). For instance, if a language such as Arabic brings to mind the construct of interdependent human beings, whereas English brings to mind the notion of the independent self, cultural differences in the display of emotions are likely to be observed (Markus & Kitayama, 1991). Specifically, bilingual speakers may be more likely to express emotions freely in English than in Arabic because English makes relevant the construct of independent self and with it the notion that one's own goals and desires are the priority (Dewaele & Qaddourah, 2015; Pavlenko, 2004). Furthermore, consider the choice of the first-person singular pronoun "I" in Arabic, which is often accompanied by a statement in

which the speaker seeks forgiveness for using such a pronoun because it implies arrogance in a collectivistic culture where the self is considered interdependent rather than independent (Guta, 2011; Na & Choi, 2009). If Arabic makes relevant the construct of modesty, which is enshrined in the Quran, and its prescriptive customs, principles and teachings ranging from suitable conduct (e.g., dress codes) to desirable disposition (al-Hashimi, 1996; Syed, 2010), further constraints on the expression of the individualistic self may emerge.

## 2. The Present Study

Cross-cultural researchers have often claimed that individualism and collectivism are associated with different cultural mind-sets, whereby the essential values of individualism are reported to be individual freedom, uniqueness, personal fulfillment, autonomy, and separation, whereas those of collectivism are group membership, loyalty, and cohesion (Triandis, 1995). Consequently, individuals subscribing to the individualistic mind-set see human behavior as determined by internal factors (i.e., personal attributes and dispositions, including thoughts and emotions), whereas individuals subscribing to the collectivistic mind-set see situational factors (including norms, roles, and obligations) as the main causes of behavior (Fiske, et al., 1998). The present research acknowledges that such contrasting cultural mind-sets are likely to have significant implications on how individuals respond to psychological instruments that rely on introspection (i.e., self-reports such as self-efficacy scales; (Heine, et al., 1999; Oyserman, et al., 2002). Specifically, the research asks whether the language in which a general self-efficacy scale is presented (e.g., Arabic versus English) can activate a distinctive mind-set, and thus shape participants' responses accordingly. Consider, for instance, the NGSE scale (Chen, et al., 2001), which measures one's belief in a general sense of mastery that is not intended to reflect any particular skill, behavior or situation. This instrument includes eight statements, each one containing the pronoun "I", to which a person has to respond by indicating his/her agreement on a 5-point Likert scale from "strongly disagree" to "strongly agree". Previous research using an earlier version of the General Self-Esteem (GSE) scale (Schwarzer & Jerusalem, 1995) provided mixed evidence of differences in the self-efficacy scores of respondents from individualistic and collectivistic cultures. Specifically, Scholz, et al., (2002) found lower score for Japanese participants, but not for participants from other collectivistic cultures, whereas Wu, (2009) found no relationship between self-efficacy and degree of individualism and collectivism in the same data. Yet, information regarding cultural affiliation was not obtained directly from participants, but was inferred from their national affiliation (Suh, et al., 1998). Furthermore, the GSE scale was administered in the primary language of the respondents, thereby preventing the examination of the extent to which languages can activate distinctive cultural mind-sets in the same respondents.

Bandura, (2001) neither equates self-efficacy with individualism, nor sets it against collectivism. Bandura argues that, "personal efficacy is valued, not because of reverence for individualism, but because a strong sense of efficacy is vital for successful functioning regardless of whether it is achieved individually or by group members working together (p.16)". Thus, although the construct of self-efficacy and individualism are not to be considered isomorphic, the instruments used to study the construct may shape the information gathered about it. Of course, individuals from collectivistic cultures are aware and capable of describing their internal attributes (Suh, et al., 1998). The critical point is that attention to such internal features of the self when making global self-judgments may be seen as both inappropriate and unnatural (Kitayama & Markus, 1995), thereby leading to more conservative self-evaluations on a measurement instrument such as the NGSE scale.

In the present study, the hypothesis that Arabic linguistic codes can activate cultural norms requiring modesty of thought and expression is tested by administering the NGSE scale in either English or Arabic to female college students who reside in the Eastern Province of Saudi Arabia

and whose primary language is Arabic and their secondary language is English. Saudi Arabia ranks high in the collectivistic category (Hofstede, 2001), as it demonstrates a high degree of clinging to traditional customs and social values (Long, 2005) that shape human relationships both within and outside a person's own group and that lead to close, long-term and loyal commitment to his/her group (Caldwell-Harris & Aycicegi, 2006; Hofstede & Hofstede, 2005). The choice of female students was motivated by the fact that, although the Quran's call for modesty is aimed at both genders, traditional collectivistic customs of Saudi Arabia treat women as the primary recipients of onerous restrictions of movement, thought and affect which are intended to guard their modesty and thus preserve their "purity" (al-Hashimi, 1996; Al-Olayan & Karande, 2000; Luqmani, Yavas, & Quraeshi, 1989; Syed, 2010). Important to note though is that modesty is not necessarily motivated by religious fervor, but rather it is a social requirement to which women are expected to conform to express cultural integrity (i.e., loyalty to local traditions and customs) and affirm their citizenship (Sobh, Belk, & Gressell, 2010). As such, Saudi women are the ideal testing ground for hypotheses predicting the activation of cultural mind-sets from linguistic codes.

If dispositions towards modesty are activated by reading the statements of the NGSE in Arabic, lower self-efficacy scores will be observed with the Arabic version than with the original English version of the scale. Subjective estimates of the valence (positive versus negative) and intensity of the emotions experienced when responding to the NGSE statements are expected to offer a window into the emotions that may shape self-efficacy scores. If modesty norms are activated by the Arabic version of the NGSE scale, higher self-efficacy scores will be associated with less positive and more temperate estimates of the emotions experienced (i.e., negative correlations). In the English version of the scale, however, higher self-efficacy may be associated with more positive and intense estimates of the emotions experienced (positive correlations), as the essential values of individualism allegedly triggered by this language do not comprise modesty. It is noteworthy to mention though that the Arabic text has the potential to activate two mutually complementary forces. As the first language of the participants, it can activate stronger emotions than English, whereas as the language linked to a collectivistic mind-set, it can activate restrictions in the expression of emotions. If both forces are active, estimates of the emotions experienced by participants in response to the NGSE scale may be attenuated, thereby weakening or even eliminating any potential relationship with self-efficacy scores. These hypotheses are tested with the methodology described below.

### 3. Method

#### 3.1 Participants

Two-hundred and ninety-nine female college students from Prince Mohammad Bin Fahd University (PMU), who reside in the Eastern Region of the Kingdom, participated in the study (age range: 18-25). Students reported Arabic as the first language and English as the second language. In this sample, the former is the language largely spoken at home and in informal settings outside the home, whereas the latter is currently the required primary medium of instruction at PMU. The average age of acquisition at which participants reported learning English is 9.60 ( $SD = 4.30$ ). Whereas both languages have benefited from formal instruction, students' exposure to English has been more limited in range and scope, and thus more dependent on formal school settings than Arabic. In fact, a large percentage of students reported that school was the setting where learning of English first occurred (92%), albeit other settings tended to exist as well, often currently with school-based instruction, such as at home (35%) via tutoring, internet and TV, and through interactions with peers and relatives (14%). Participants were enrolled in different core classes which emphasize written, oral and professional communication, critical thinking, and problem solving. All classes were taught in English. Insufficient data led to the exclusion from the analyses of six additional participants.

### 3.2 Materials and Procedures

Students were given a 10-page booklet containing two self-report measures, the New General Self-Efficacy Scale (NGSE; Chen et al., 2001) and a reaction questionnaire for each of the eight statements of the NGSE, and an English vocabulary test (Shipley, 1941). The NGSE scale was selected over other scales of general self-efficacy for its desirable psychometric properties (Chen, et al., 2001), and for the absence of data from the collectivistic Arabic culture of Saudi Arabia. The reaction questionnaire contained at the top of each page not only one of the eight statements of the NGSE, but also a question regarding how the statement made the respondent feel and a question about what came to mind when the respondent read the statement. The question regarding feelings was followed by two pictorial assessment scales of the Self-Assessment Manikin (Bradley & Lang, 1994), one measuring the valence dimension and the other the arousal dimension of the emotions experienced by respondents. SAM displays each dimension through a simplified graphical representation of a humanoid who evolves along a continuous 9-point scale. The valence dimension ranges from a smiling, happy figure to a frowning, unhappy figure, whereas the arousal dimension ranges from an excited, wide-eyed figure to a relaxed, sleepy figure. The respondent's task was to place an 'X' over any of the figures in each scale, or between any two figures. The question regarding what came to mind when the respondent read the selected statement on the top of the page was displayed at the bottom of the page with three empty lines for the respondent to fill. The data of the latter are not discussed here.

There were two language versions of the booklet in which both the NGSE and the reaction questionnaire were written in either Arabic or English. The independent contribution of three translators was sought to ensure the accuracy and naturalness of the Arabic translation. A consensus model was adopted to achieve the goal of a cultural-sensitive adaptation of the scale rather than a mere translation (Scholz, et al., 2002). In each class, students were randomly assigned to the Arabic and English version of the booklet. The booklet was presented to students as a self-awareness tool. Each student was encouraged to respond to all statements and/or questions on each page of the booklet. No name was to appear on any of the pages of the booklet, but booklets contained a number on the top of the first page. Students were asked to keep a record of this number if they were interested in their individualized scores. Within two weeks from the completion of the activity, students were given a mini lecture on self-efficacy and its consequences on performance (i.e., group debriefing). During the lecture, literature that describes this construct and its implications was made available, the main results of the investigation were discussed, and general questions were answered. To preserve confidentiality, students were given the opportunity to obtain and discuss their personal self-efficacy scores in a private setting where additional questions could be answered. Students had to remember the number at the top of the booklet they completed to receive their scores as their names were not linked to any specific booklets.

### 4. Results

Descriptive statistics regarding the variables examined in the present study are reported in Table 1. To ensure that differences in language proficiency did not affect differences in students' responses to the NGSE scale and reaction questionnaire, vocabulary scores were submitted to a one-way analysis of variance (ANOVA) with language (Arabic versus English) as the factor. Participants assigned to the Arabic and the English booklets did not differ in English proficiency,  $F(1, 297) < 1$ , *ns* ( $M = 13.10$ ,  $SD = 7.53$ ; and  $M = 16.38$ ,  $SD = 8.67$ , respectively).

As indicated earlier, the main purpose of the present study was to examine whether participants' responses to the NGSE scale (Chen et al., 2001) and their emotive reactions to the items of the scale differed between the English version and the Arabic version. Thus, separate one-way

ANOVAs were conducted on the NGSE, valence, and arousal scores. The Arabic version of the NGSE scale consistently produced lower scores than its English counterpart,  $F(1, 297) = 776.09$ ,  $MSE = .277$ ,  $p < .05$ . Similarly, the Arabic version of the arousal scale yielded lower scores than its English counterpart,  $F(1, 297) = 11.15$ ,  $MSE = 3.66$ ,  $p < .05$ . However, no significant differences were found when the scores of the valence scale were analyzed,  $F(1, 297) < 1$ ,  $ns$ .

Pearson correlation coefficient was used to determine whether valence and arousal scores could predict self-efficacy scores (as measured by the NGSE scale). When assessment measures were presented in English, the higher the NGSE scores, the higher both the valence and the arousal scores,  $r = +.50$ ,  $n = 144$ ,  $p < .05$ , and  $r = +.19$ ,  $n = 144$ ,  $p < .05$ , respectively. Important to note though is that valence accounted for 25% of the variance of the NGSE measure, whereas arousal accounted for a rather negligible portion of the same variance (3.42%). Valence and arousal scores were also positively correlated,  $r = +.37$ ,  $n = 144$ ,  $p < .05$ . In contrast, when assessment measures were presented in Arabic, the higher the NGSE scores, the lower were the valence scores,  $r = -.59$ ,  $n = 155$ ,  $p < .05$ . Valence accounted for 35% of the variance of the NGSE measure. No other correlation was found to be significant,  $r < +.07$ ,  $n = 155$ ,  $ns$  (NGSE and arousal scores), and  $r < +.07$ ,  $n = 155$ ,  $ns$  (valence and arousal scores).

Chen et al. (2001) reported that the NGSE scale has desirable psychometric properties, including being unidimensional, internally consistent, reliable, and different in content from scales which, although also based on a person's ability to introspect and self-evaluate (Judge et al., 1997), assess other dimensions of human existence (e.g., self-esteem, which is a less motivational and more affective construct than self-efficacy; Gardner & Pierce, 1998). To determine whether participants' responses in the present study preserved the original unidimensionality and internal consistency of the scale, a principal component analysis (PCA) was performed on the self-efficacy scores of the eight statements of the NGSE inventory. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .94, which indicated that the sample was adequate, whereas the Bartlett's test of sphericity was 1809.60 ( $p < .001$ ), which indicated that the correlations between statements were sufficiently large to be appropriate for PCA (Field, 2009). A one-factor solution was found with all statements exhibiting factors loadings ranging from .77 to .89. Extracted commonalities ranged from .60 to .79. The proportion of variance accounted for by the isolated factor was 71%. Thus, the results of PCA replicated those obtained in the earlier study by Chen et al., which also reported a one-factor solution, thereby confirming the ability of the scale to capture self-efficacy as a unitary construct reflecting an undifferentiated belief in one's abilities.

## 5. Discussion

The hypothesis that Arabic linguistic codes would activate cultural norms requiring modesty of thought and expression was supported by the findings that the NGSE scores of the English version were significantly higher than those of the Arabic version. Although there was no evidence that Arabic, the first language of the respondents, fostered more negative emotional reactions (as measured by the valence dimension of the SAM scale) than English, arousal was reported to be higher in response to the English version of the NGSE than in response to the Arabic version. The less automaticity of the second language (Dewaele & Qaddourah, 2015) might be responsible for the higher reported arousal to the English statements of the NGSE scale. However, even if respondents' first language had triggered condemnation (i.e., negative valence) and more intense emotions than the second language, as findings of research on bilingualism and cultural mind-sets would predict (Anooshian & Hertel, 1994; Harris, Aycicegi, & Gleason, 2003; Na & Choi, 2009), modesty norms might have prevented respondents from consciously acknowledging or expressing such emotional reactions. In the case of arousal, such norms could have merely prohibited the expression or acknowledgement of physiological

changes related to sympathetic activity of the nervous system, or inhibited the phenomenon itself (as suggested by the significantly lower arousal scores of the Arabic version). Whether participants merely attempted to conceal the phenomenon, engaged in inhibitory activities, or did neither could not be determined through the self-report measures used in the present investigation.

The presence or absence of overall differences in reported emotion as a function of language used is much less revealing than language-specific correlations between NGSE scores and reported emotions. In fact, evidence supporting the notion that modesty norms were activated was found in the nature of the correlations between NGSE scores and either valence or arousal scores. For the English version, more positive and, to a lesser degree, more intense emotional reactions predicted higher NGSE scores, thereby suggesting that English permitted or even promoted respondents' expression and conscious acknowledgement of the individualistic, self-confident approach to life exemplified by the statements of the NGSE. In contrast, for the Arabic version, not only more negative emotional reactions predicted higher NGSE scores, but also no significant relationship of such scores with arousal was found, suggesting inhibition of negative feelings, or mere reticence to express or acknowledge such feelings. Interestingly, the modest correlation of arousal and NGSE scores in the English version along with the absence of a correlation in the Arabic version indicate that NGSE statements did not induce such a strong sympathetic activation to be noticed by participants. These findings, taken together, seem to lend support to the notion that the higher arousal scores of the English version arose mostly from the effort respondents devoted to process a language that is less natural (i.e., automatic) than Arabic.

One might ask whether the influence of modesty norms, albeit embedded in the Islamic culture of Saudi Arabia (see Syed, 2010), depends on the extent to which participants identify with the culture of Saudi Arabia compared to the culture expressed by the language in which the curriculum is taught in college (i.e., English). Spontaneous comments made during debriefing by participating students point to their recognition of the construct of modesty enshrined in the Quran, which defines appropriate conduct (e.g., limit the expression of emotions) and corresponding desirable disposition (Syed, 2010). Although comments illustrate that most participants were aware of the constraints it places on the expression of the individualistic self, some participants also mentioned spontaneously the relationship between language choice and cultural mind-set, thereby suggesting that languages are flexible vehicles of human expression deployed within the boundaries of the cultural and societal customs selected by the speaker (Ritchie & Bhatia, 2013; Sachdev, Giles, & Pauwels, 2013).

It is undeniable that a key limitation of the current study is that information regarding cultural and religious conformity was collected from individual students informally only after the administration of the scale and reaction questionnaire (i.e., during debriefing). As a result, the potential link between students' degrees of conformity and either self-efficacy scores or emotive responses could not be tested via statistical means. Yet, although attitudinal indices of conformity were not collected and directly linked to self-efficacy scores, participants' extensive exposure to the Saudi culture from a young age could be inferred from spontaneous comments and classroom observations regarding family of origin, residence, and compliance with the dress code of Saudi Arabia ingrained in the Islamic doctrine. Future research will have to determine whether, in addition to language, degree of attitudinal conformity rather than behavioral compliance (as exemplified by observance of dress codes) might modulate the relationship between self-efficacy and emotional valence uncovered in the present investigation. Age of acquisition is another interesting factor that is likely to receive more attention in future research. As for conformity, information about age of acquisition of English and setting of initial learning was collected independently from information about self-efficacy and reaction

scores, thereby preventing an examination of its potential relationship with self-efficacy and the emotions that underlie it. However, it is noteworthy to point out that information about age of acquisition of English and setting(s) of initial learning illustrated a rather homogenous sample. Future research with a more heterogeneous sample will have to examine the extent to which age of acquisition and conditions of exposure to the secondary language may modulate the relationship between cultural codes of modesty and self-efficacy scores.

Of course, although female citizens of Saudi Arabia may be considered the ideal testing ground for hypotheses predicting the activation of cultural mind-sets from linguistic codes, the present investigation leaves unanswered the question of whether gender differences exist. On the one hand, the Quran's call for modesty, which is aimed at both genders, leads to the prediction of a null effect (al-Hashimi, 1996; Luqmani, et al., 1989; Syed, 2010). The prediction of faithful adherence to traditional values by both men and women may be particularly applicable to Saudi Arabia, which is known to be one of the most conservative countries of the Middle East. On the other hand, traditional collectivistic customs of Saudi Arabia, which treat women as the primary recipients of onerous restrictions of movement, thought and affect (al-Hashimi, 1996; Al-Olayan & Karande, 2000; Luqmani, et al., 1989; Syed, 2010), may lead to the contrasting prediction of gender differences whereby females may experience more intensely the code of modesty than males.

Important to note though that Saudi Arabia, as other countries in the gulf region, has faced both economic (e.g., integration into the global economy), and social forces (e.g., a large number of expatriates embracing, and thus either implicitly or openly promoting individualistic values and customs) that are seen as capable of reshaping national identities and overriding traditional collectivistic beliefs. Thus, citizens, especially young ones, are reported to experience tensions between the desire to respect traditions and the societal forces promoting change as means of integration into the global economy (Omar, 2014). Yet, most young people may try to avoid making a dichotomous choice between tradition (e.g., displays of one's modesty in both public and private spheres) and modernization (e.g., expression of individuality through fashionable body accessories and adornments; Sobh, et al., 2010). They appear to prefer to negotiate tensions through syncretism, thereby compromising through the creation of new forms of existence where glimpses of individuality co-exist with traditionally collective, social and religious identities. Visible instances of syncretism may be women's reliance on jewelries and other accessories to adorn black abayas or the new custom of wearing ornate and colorful abayas. Syncretism, which allows the coexistence of old and new values, identities, and practices, may be the underlying skill that makes it possible for Arabic and English (first and second language, respectively) to activate different cultural mind-sets (as it has been observed in the present study). When language is a choice the speaker can make in a social interaction (instead of having been imposed on him/her by a text or another person), it also conveys a wealth of information about group membership (including in-group versus out-group affiliations) and degree of desired formality, intimacy, emotional distance, etc. (Ritchie & Bhatia, 2013; Sachdev, et al., 2013). As such, it can markedly shape the ensuing interaction. Future research will have to examine the extent to which the compromise brought forth by syncretism can alter, as time goes by, traditional values, identities and conduct, thereby not only minimizing differences between contrasting cultural mind-sets, but also weakening the ability of the speaker's languages to activate such sets. Whether coexistence can bring identities, values, and practices to coalesce into a new whole unrecognizable from its two constituent parts or preserve the latter with some minor scratches (Baier, 1986), is an issue that is at the forefront of our cross-cultural studies in Saudi Arabia.



## References

- i. al-Hashimi, M., 1996. *The Ideal Muslimah: The True Islamic Personality of the Muslim Woman*. Saudi Arabia: International Islamic Publishing House.
- ii. Al-Olayan, F. & Karande, K., 2000. A content analysis of magazine advertisements from the United States and the Arab World. *Journal of Advertising*, 29(3), pp. 69-82.
- iii. Anooshian, J. & Hertel, T., 1994. *Emotionality in free recall: Language specificity in bilingual memory. Cognition and Emotion*, 8, 503-514. [Online] Available at: <http://dx.doi.org/10.1080/02699939408408956>
- iv. Baier, K., 1986. Justification in Ethics. *Nomos*, Volume 28, pp. 3-27.
- v. Bandura, A., 1977. *Self-efficacy: Toward a unifying theory of behavior change. Psychological Review*. [Online] Available at: <http://dx.doi.org/10.1037/0033-295X.84.2.191>
- vi. Bandura, A., 1997. *Self-efficacy: The exercise of control*. New York: Freeman and Company.
- vii. Bandura, A., 2001. *Social cognitive theory: An agentic perspective. Annual Review of Psychology*. [Online] Available at: <http://dx.doi.org/10.1146/annurev.psych.52.1.1>
- viii. Bandura, A., 2006. Guide for constructing self-efficacy scales. In: F. Pajares & T. Urdan, eds. *Self-efficacy beliefs of adolescents*. Greenwich, CT: Information Age, pp. 307-337.
- ix. Bond, M. & Lai, T., 1986. Embarrassment and code-switching into a second language. *Journal of Social Psychology*, Volume 126, pp. 179-186.
- x. Bradley, M. & Lang, P., 1994. *Measuring emotion: The self-assessment manikin and the semantic differential*. [Online] Available at: [http://dx.doi.org/10.1016/0005-7916\(94\)90063-9v](http://dx.doi.org/10.1016/0005-7916(94)90063-9v)
- xi. C.H.Wu, 2009. *Factor analysis of the general self-efficacy scale and its relationship with individualism/collectivism among twenty-five countries: Application of multilevel confirmatory factor analysis. Personality and individual differences*. [Online] Available at: <http://dx.doi.org/10.1016/j.paid.2009.01.025>
- xii. Caldwell-Harris, C. & Aycicegi, A., 2006. *When personality and culture clash: The psychological distress of allocentrics in an individualist culture and idiocentrics in a collectivist culture. Transcultural Psychiatry*. [Online] Available at: <http://dx.doi.org/10.1177/1363461506066982>
- xiii. Chen, G., Gully, S. & Eden, D., 2001. Validation of a new general self-efficacy scale. *Organizational research methods*, 4(1), pp. 62-83.
- xiv. D.Oyserman, Sorensen, N., Reber, R. & Chen, S., 2009. *Connecting and separating mind-sets: culture as situated cognition. Journal of Personality and Social Psychology*. [Online] Available at: <http://dx.doi.org/10.1037/a0015850>
- xv. Dewaele, J. & Pavlenko, A., 2002. *Emotional vocabulary in interlanguage. Language Learning*. [Online] Available at: <http://dx.doi.org/10.1111/0023-8333.00185>
- xvi. Dewaele, J. & Qaddourah, I., 2015. Language choice in expressing anger among Arab-English Londoners. *Russian Journal of Linguistics*, 19(4), pp. 82-100.
- xvii. Eden, D., 1988. ygmalion, goal setting, and expectancy: Compatible ways to raise productivity. *Academy of Management Review*, Volume 13, pp. 639-652.
- xviii. Eden, D. & Zuk, Y., 1995. Seasickness as a self-fulfilling prophecy: Raising self-efficacy to boost performance at sea. *Journal of Applied Psychology*, Volume 80, pp. 628-635.
- xix. Ervin, S., 1964. *Language and TAT content in bilinguals. Journal of Abnormal and Social Psychology*. [Online] Available at: <http://dx.doi.org/10.1037/h0044803>
- xx. Field, A., 2009. *Discovering statistics using SPSS*. London: Sage Publications.

- xxi. Fiske, A., Kitayama, S., Markus, H. & R.E.Nisbett, 1998. The cultural matrix of social Psychology. In: D. Gilbert, S. Fiske & G. Lindzey, eds. *Handbook of social psychology*. Boston: Mc-Graw Hill, pp. 915-981.
- xxii. Gardner, D. & Pierce, J., 1998. *Self-esteem and self-efficacy within the organizational context*. *Group and Organization Management*, 23, 48-70.. [Online] Available at: <http://dx.doi.org/10.1177/1059601198231004>
- xxiii. Guta, H., 2011. *Do You Understand What I Mean? Politics of Language and (Re) Presentation in Qualitative Research*. Paper presented at the Seventh International Congress of Qualitative Inquiry, Champaign, IL: s.n.
- xxiv. Hackett, G. & Betz, N., 1981. A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18(3), pp. 326-339.
- xxv. Harris, C., Aycicegi, A. & J.B.Gleason, 2003. *Taboo words and reprimands elicit greater autonomic reactivity in a first language than in a second language*. *Applied Psycholinguistics*. [Online] Available at: <http://dx.doi.org/10.1017/S0142716403000286>
- xxvi. Heine, S., Lehman, D., Markus, H. & Kitayama, S., 1999. *Is there a universal need for Positive self-regard?* *Psychological Review*. [Online] Available at: <http://dx.doi.org/10.1037/0033-295X.106.4.766>
- xxvii. Hofstede, G., 2001. *Tulture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Thousand Oaks: Sage Publications.
- xxviii. Hofstede, G. & Hofsted, G., 2005. *Cultures and organizations: Software of the mind*. New York: Mc-Graw Hill.
- xxix. Jay, T., 2009. *The utility and ubiquity of taboo words*. *Perspectives on Psychological Science*. [Online] Available at: <http://dx.doi.org/10.1111/j.1745-6924.2009.01115.x>
- xxx. Kitayama, S. & Markus, H., 1995. Construal of the self as a cultural frame: Implications for internationalizing Psychology. In: N. R. Goldberger & J. B. Veroff, eds. *The culture and psychology reader*. New York: New York University Press, pp. 366-383.
- xxxi. Long, D., 2005. *Culture and customs of Saudi Arabia*. Westport, Connecticut: Greenwood Press.
- xxxii. Luqmani, M., Yavas, U. & Quraeshi, Z., 1989. *Advertising in Saudi Arabia: content and regulation*. *International Marketing Review*, 6(1). [Online] Available at: <http://dx.doi.org/10.1108/EUM0000000001503>
- xxxiii. Markus, H. & Kitayama, S., 1991. *Culture and self: Implication for cognition, emotion, and motivation*. *Psychological Review*. [Online] Available at: <http://dx.doi.org/10.1037/0033-295X.98.2.224>
- xxxiv. Müller, M., 2007. *What's in a word? Problematizing translation between languages*. *Area*. [Online] Available at: <http://dx.doi.org/10.1111/j.1475-4762.2007.00731.x>
- xxxv. Multon, K., Brown, S. & Lent, R., 1991. *Relation of self-efficacy beliefs to academic outcomes: A meta-analytic investigation*. *Journal of Counseling Psychology*, 18, 30-38. [Online] Available at: <http://dx.doi.org/10.1037/0022-0167.38.1.30>
- xxxvi. Na, J. & Choi, I., 2009. *Culture and first-person pronouns*. *Personality and Social Psychology Bulletin*. [Online] Available at: <http://dx.doi.org/10.1177/0146167209343810>
- xxxvii. Ochs, E. & Schieffelin, B., 2011. *The Theory of Language Socialization*. *The handbook of Language Specialization*. [Online] Available at: <http://dx.doi.org/10.1002/9781444342901.ch1>
- xxxviii. Omar, G., 2014. *What happened to the Saudis?*. Riyadh, Saudi Arabia: Dar Al Manahel.
- xxxix. Oyserman, D., Coon, H. & Kimmelmeier, M., 2002. *Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses*. *Psychological bulletin*. [Online] Available at: <http://dx.doi.org/10.1037/0033-2909.128.1.3>
- xl. Pajares, F., 1997. Current directions in self-efficacy research. *Advances in Motivation and Achievement*, 10(149), pp. 1-49.

- xli. Pajares, F. & Kranzler, J., 1995. *Self-efficacy beliefs and general mental ability in mathematical problem-solving*. *Contemporary Educational Psychology*, 20, 426–443. [Online] Available at: <http://dx.doi.org/10.1006/ceps.1995.1029>
- xlii. Pavlenko, A., 2004. *Stop doing that, ia komu skazala!?: Language choice and emotions in parent–child communication*. *Journal of Multilingual and Multicultural Development*, 25(2/3), 179–203. [Online] Available at: <http://dx.doi.org/10.1080/01434630408666528>
- xliii. Phillips, H., 1960. Problem of translation and meaning in field work. In: R. Adams & J. Preiss, eds. *Human organisation research: Field relations and techniques*. Homewood: Dorsey, pp. 290-307.
- xliv. Pulakos, E., Arad, S., Donovan, M. & Plamondon, K., 2000. *Adaptability in the workplace: Development of a taxonomy of adaptive performance*. *Journal of Applied Psychology*. [Online] Available at: <http://dx.doi.org/10.1037/0021-9010.85.4.612>
- xlv. Ritchie, W. & Bhatia, T., 2013. Social and psychological factors in language mixing. In: T. K. Bhatia & W. C. Ritchie, eds. *The Handbook of Bilingualism and Multilingualism*. Chichester, UK: John, Wiley & Sons, pp. 375-390.
- xlvi. Sachdev, I., Giles, H. & Pauwels, A., 2013. Accommodating multilinguality. In: T. K. Bhatia & W. Ritchie, eds. *The Handbook of Bilingualism and Multilingualism*. Chichester: John Wiley & Sons, pp. 391-416.
- xlvii. Scholz, U., Doña, B., Sud, S. & Schwarzer, R., 2002. *Is general self-efficacy a universal construct? Psychometric findings from 25 countries*. *European journal of psychological assessment*. [Online] Available at: <http://dx.doi.org/10.1027//1015-5759.18.3.242>
- xlviii. Schrauf, R., 2000. *Bilingual autobiographical memory: Experimental studies and clinical cases*. *Culture and Psychology*, 6, 387–417. [Online] Available at: <http://dx.doi.org/10.1177/1354067X0064001>
- xlix. Schunk, D., 1989. *Self-efficacy and achievement behaviors*. *Educational Psychology Review*. [Online] Available at: <http://dx.doi.org/10.1007/BF01320134>
- l. Schwarzer, R. & Jerusalem, M., 1995. Generalized Self-Efficacy Scale. In: J. Weinman, S. Wright & M. Johnston, eds. *Measures in health psychology: A user's portfolio. Causal and control beliefs*. Windsor: NFER-NELSON., pp. 35-37.
- li. Shelton, S., 1990. Developing the construct of general self-efficacy. *Psychological Reports*, Volume 66, pp. 987-994.
- lii. Shipley, W., 1940. A self-administering scale for measuring intellectual impairment and deterioration. *Journal of Psychology*, Volume 9, pp. 371-377.
- liii. Siegel, R., Galassi, J. & W.B.Ware, 1985. *A comparison of two models for predicting mathematics performance: Social learning versus math aptitude-anxiety*. *Journal of Counselling Psychology*. [Online] Available at: <http://dx.doi.org/10.1037/0022-0167.32.4.531>
- liv. Sobh, R., Belk, R. & Gressell, J., 2010. The scented winds of change: conflicting notions of modesty and vanity among young Qatari and Emirati women. *Advances in Consumer Research*, Volume 37, pp. 905-906.
- lv. Stajkovic, A. & F.Luthans, 1998. *Self-efficacy and work-related performance: A meta-analysis*. *Psychological Bulletin*. [Online] Available at: <http://dx.doi.org/10.1037/0033-2909.124.2.240>
- lvi. Suh, E., Diener, E., Oishi, S. & Triandis, H., 1998. *The shifting basis of life satisfaction judgments across cultures: Emotions versus norms*. *Journal of Personality and Social Psychology*. [Online] Available at: <http://dx.doi.org/10.1037/0022-3514.74.2.482>
- lvii. Syed, J., 2010. *An historical perspective on Islamic modesty and its implications for female employment. Equality, Diversity and Inclusion: An International Journal*, 29(2), 150- 166. [Online] Available at: <http://dx.doi.org/10.1108/02610151011024475>
- lviii. Triandis, H., 1989. *The self and social behavior in differing cultural contexts*. *Psychological Review*. [Online] Available at: <http://dx.doi.org/10.1037/0033-295X.96.3.506>

- lix. Zimmerman, B., 1995. Self-efficacy and educational development. In: A. Bandura, ed. *Self-efficacy in changing societies*. New York: Cambridge University Press, pp. 202-231.
- lx. Zimmerman, B., 2000. *Self-Efficacy: An Essential Motive to Learn. Contemporary Educational Psychology*. [Online] Available at: [doi:10.1006/ceps.1999.1016](https://doi.org/10.1006/ceps.1999.1016)
- lxi. Zimmerman, B. & Bandura, A., 1994. Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal*, Volume 31, pp. 845-862.
- lxii. Zimmerman, B., Bandura, A. & Martinez-Pons, M., 1992. *Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. American Educational Research Journal*, 29, 663–676.. [Online] Available at: <http://dx.doi.org/10.3102/00028312029003663>

### APPENDIX

Table 1: *Descriptive Statistics*

Scale	Language	Mean	Standard Deviation	Range
NGSE	Arabic	2.18	.44	1-5
	English	3.88 +1.70*	.61	
Valence	Arabic	6.95	1.00	1-9
	English	6.93 +0.02	1.23	
Arousal	Arabic	4.80	1.85	1-9
	English	5.54 -0.74*	1.98	

\* Difference significant at the .05 level